

About O-Pile®

The Certified O-Pile® System is an innovative and rapidly growing construction method that use pipes to create foundations, barriers, and retaining walls. The system uses steel pipes with welded PilePro® connectors to form a continuous pipe sheet pile wall. This approach offers a cost-effective solution with exceptional strength and durability.

There are three key reasons engineers and designers often prefer the O-Pile® system over other sheet pile or concrete options:

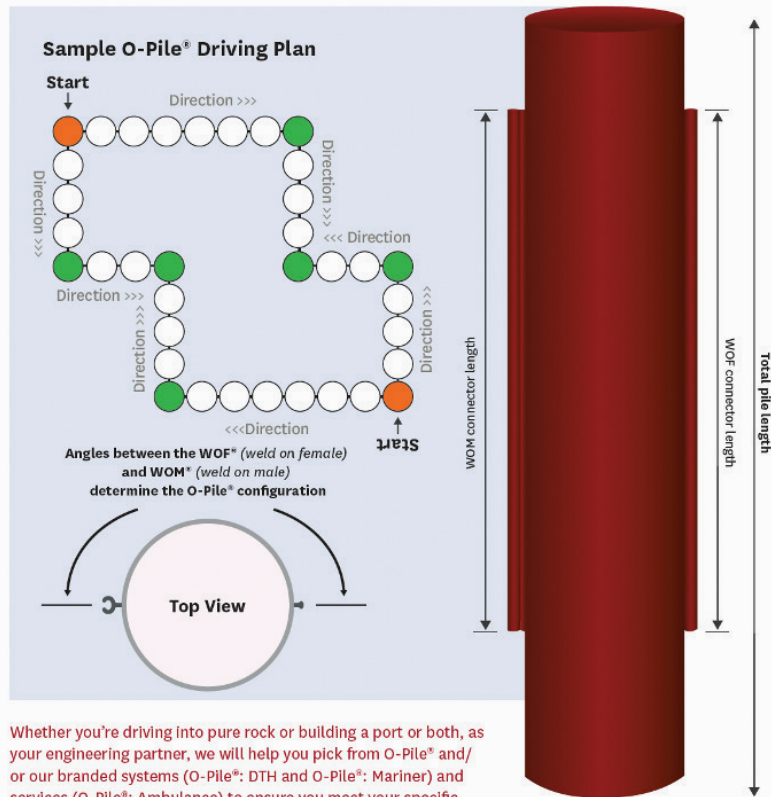
- O-Pile® systems offer superior load-bearing geometry, resulting in a higher strength-to-weight ratio and impressive section modulus values, making them more effective at resisting high bending moments.
- The surcharge capacity of O-Pile® is typically much higher than that of combined OZ and IZ sheet piles, enabling O-Pile® systems to support greater vertical forces while minimizing deflection.
- The interlocking capacity of the O-Pile® system is exceptionally robust, with testing showing strength of over 19 kips/in (3400 kN/m). See sheet-pile/o-pile.com for details.

O-Pile® systems are stronger, more cost-effective, and easier to install compared to other combined wall sheet pile systems such as an OZ (made with pipes and z sheet pile) or an IZ (made with I-Beams and Z sheet pile.)

Unlike the limited number of factories that produce Z- and U-shaped sheet piles, pipe manufacturing facilities are widespread globally. As a result, we can most often source locally produced pipes to create your Certified O-Pile® system, eliminating the added costs of transportation and importation fees.

The Certified O-Pile® System

A Certified O-Pile® System guarantees the authenticity and integrity of the O-Pile® plaque. It ensures the components meet the high-quality standards of all Sheet Pile LLC products and benefit from the expertise and professionalism of the brand's global network of specialists. All certified systems include test reports with an official seal, confirming their authenticity at the time of purchase and ensuring proper functionality. Additionally, you are covered by an international product warranty that guarantees load-bearing capacity, corrosion resistance, and connector interlocking performance.



Whether you're driving into pure rock or building a port or both, as your engineering partner, we will help you pick from O-Pile® and/or our branded systems (O-Pile®: DTH and O-Pile®: Mariner) and services (O-Pile®: Ambulance) to ensure you meet your specific project needs.

Certified O-Pile® systems also come with patent and intellectual property protection against infringement claims from others.

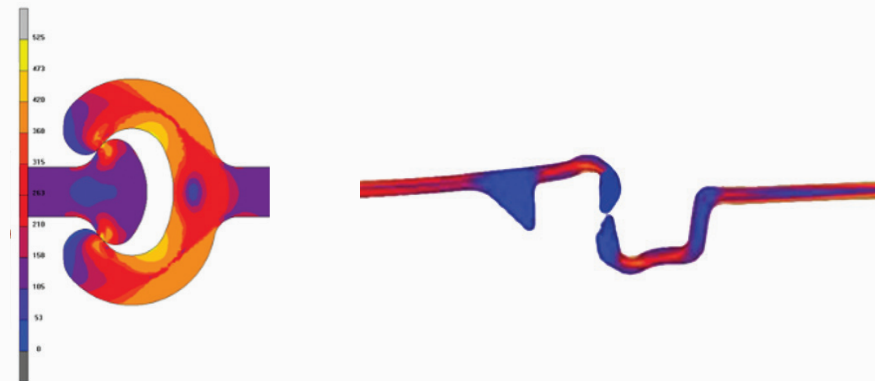
O-Pile® Attributes

1. Bending Moment Capacity (BMC)

O-Pile® systems typically have a higher strength to weight ratio when compared combined sheet pile walls as they can be made using high strength coiled steel, which exceeds the capabilities of hot rolled sheet pile, and allows for a larger Bending Moment Capacity. For example, O-Pile® is available in X80 to provide 80,000 yield strength, whereas hot rolled sheet piling is limited to less than 65,000 and typically uses steel with a yield strength of 50,000. The selection of the steel grade has a marked impact on the structural resistance of the pile wall. Selecting stronger steel grades such as X70 or X80 often allow for the use of piles with reduced diameters and wall thickness.

2. Strong Efficient Connection.

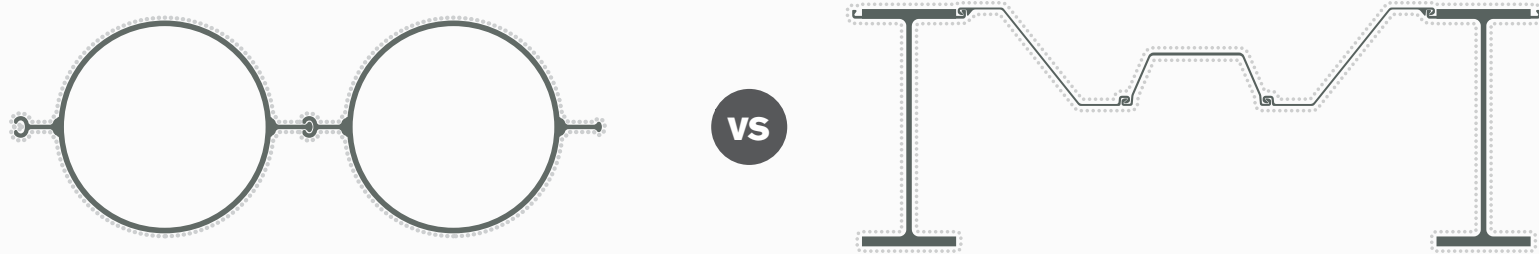
PilePro Connectors: WOM (weld on male) and WOF (weld on female) have an interlocking strength of 19.5 kips/inch (3418 kN/m); Figure 1 shows the high pull-out resistance of the connection, which is more than 4 times stronger than typical Larssen hot rolled sheet pile.



A WOM/WOF® has a high pull out capacity of 19.5 kips/inch (3418 kN/m) compared to a Larssen 4.57 kips/inch (801 kN/m).

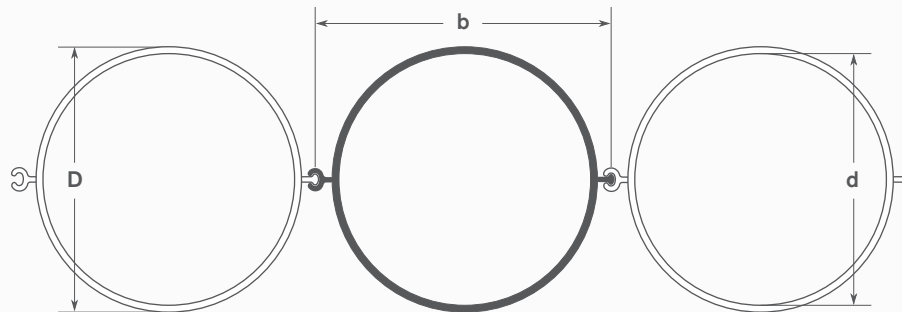
3. Superior Geometry for Durability

The geometry of O-Pile® results in minimal exposed surfaces, which presents distinct advantages over other sheet pile types. The interior of the pipe can be either capped or filled with concrete to prevent interior corrosion, leaving only the exterior face exposed to potentially corrosive elements. This minimal amount of surface area requiring the application of corrosion protection can result in a notable cost savings. Figure 2 illustrates the contrasting corrosion exposure between beam king pile and O-Pile®.



4. Exceptional Strength

O-Pile® systems do not account for the load capacity of the joining connectors, allowing them to be separately calculated for strength, with the full thickness considered sacrificial.



$$Jy = \frac{\pi}{64} \times \frac{D^4 - d^4}{b}$$

$$Wy = \frac{Jy \times 2}{b \times D}$$

$$WOM = 12.5 \text{ kg/m}$$

$$A = \frac{\pi}{4} \times (D^2 - d^2)$$

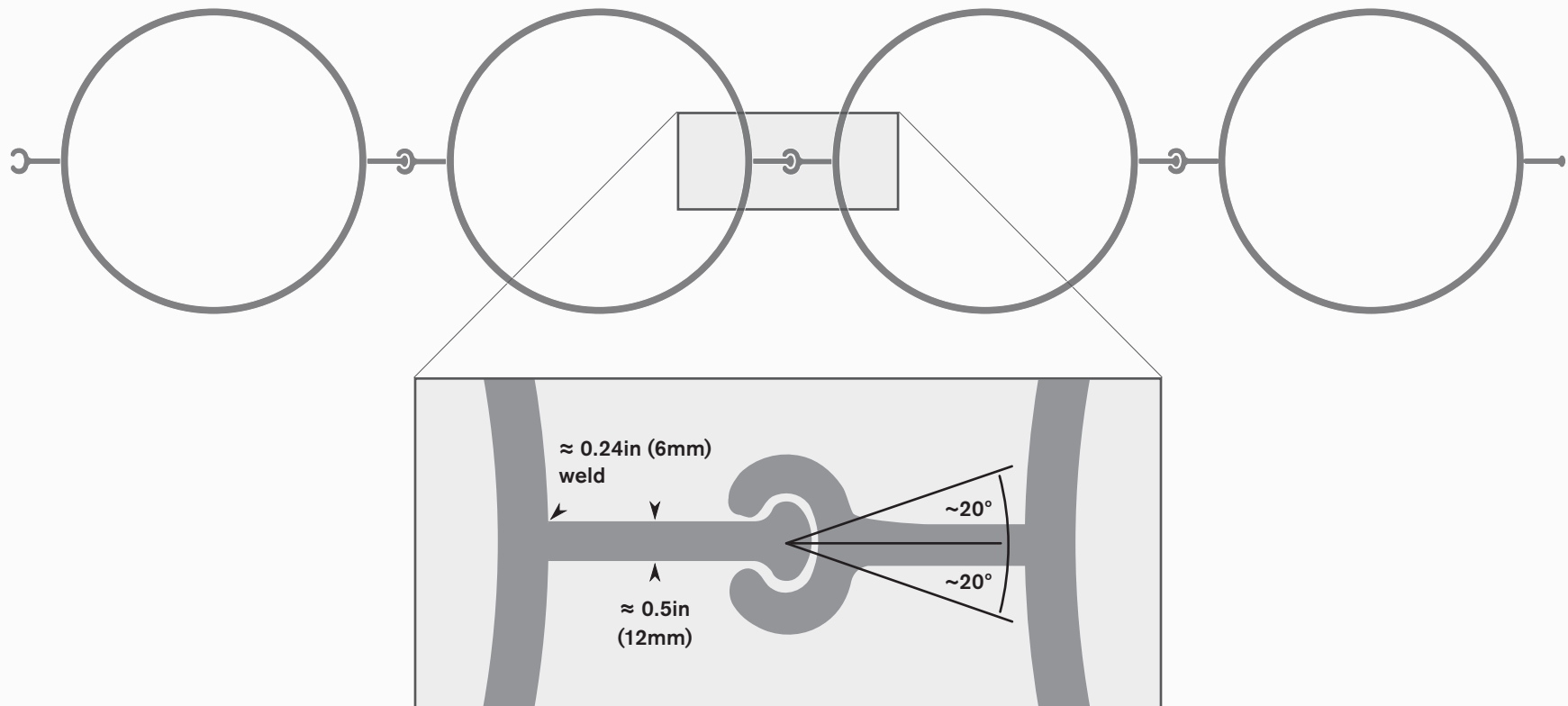
$$G_{pipe} = A \times 0.785$$

$$G = \frac{G_{pipe} + 12.5 + 11.2}{b}$$

$$WOF = 11.2 \text{ kg/m}$$

5. Positional Flexibility

Each WOF/WOM connection provides 20 degrees of rotation to ease placement.

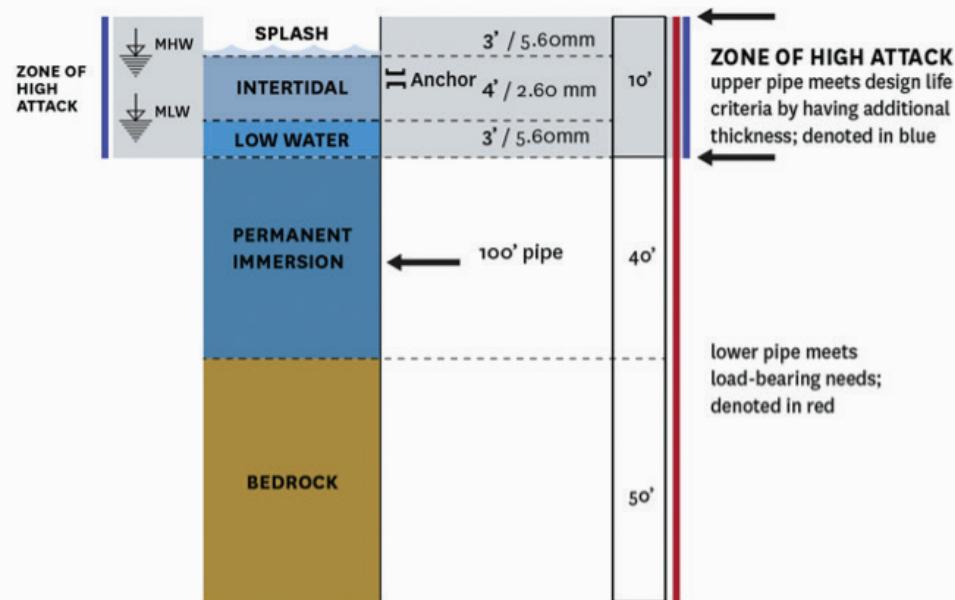


6. Variable Pipe Thickness

O-Pile® offers adjustable pipe thickness, enabling you to customize each pipe with the thickness needed to match your structural load and durability requirements, all while maintaining optimal safety. The ability to adjust thickness as needed — adding where necessary and reducing where not — ensures the most efficient and cost-effective use of steel. Varying the pipe thickness of O-Pile® targets design life and the use of sacrificial thickness exactly where you need it — in the “Zone of High Attack.”

For example, with a 100' pipe, the thickness of the upper 10' of pipe (zone of high attack) can be increased to stay well within the corrosion allowance, while the bottom 90' of the pipe can be dialed-down to meet the load bearing needs (see figure below).

Leveraging O-Pile®'s variable thickness can also eliminate the need for additional coatings, special steel grades, or cathodic protection.



7. Ease of Installation

Installing O-Pile® is often less challenging than installing than with an OZ or IZ combined sheet pile because O-Pile®'s are supported throughout the process. Installation using WOF/WOM connections are simplified by using a template and the panel installation method. The installation of the O-Pile® section is similar to driving Z or U type sheet pile template. At no stage is there a pipe pile entirely unsupported throughout its length as it is driven to grade. Each pipe is supported by adjacent pipes with a small lead ahead of the rest, ensuring accurate wall alignment.

8. O-Pile® paired with WADIT System = Watertight wall

WADIT is the globally proven sheet pile interlock sealant. WADIT (short for WASSERDICHT, German for waterproof) is an environmentally friendly sealant that was developed to deliver robust water-stopping protection. WADIT is available for use anywhere with any type of sheet pile, including O-Pile®. The WADIT system can be utilized before driving sheet pile, in the middle interlock of already paired sheet pile, and after the sheet pile has already been installed.

The Certified O-Pile® system is always delivered with WADIT sealant applied in the WOF, serving as a corrosion inhibitor within the connecting elements.

9. O-Pile®: DTH (Down the Hole) Drilling

A Certified O-Pile®: DTH system pairs the superior quality of O-Pile® with state-of-the-art DTH drilling technology, allowing its systems to be driven into any ground or rock strata at levels of productivity not achieved before. With a Certified O-Pile®: DTH system, predictable and quantifiable installation is possible in difficult driving conditions like bed rock or job sites with heavy debris.

The Certified O-Pile®: DTH system is installed with the centric drilling method using ring bits of a larger diameter than standard bits. The ring bit drills a hole larger than the pile to accommodate the WOF/ WOM connectors. Diameter from 10" (323mm) to 42" (914.4mm), ranging from a wide range of diameter pipe can be installed using O-Pile®: DTH.

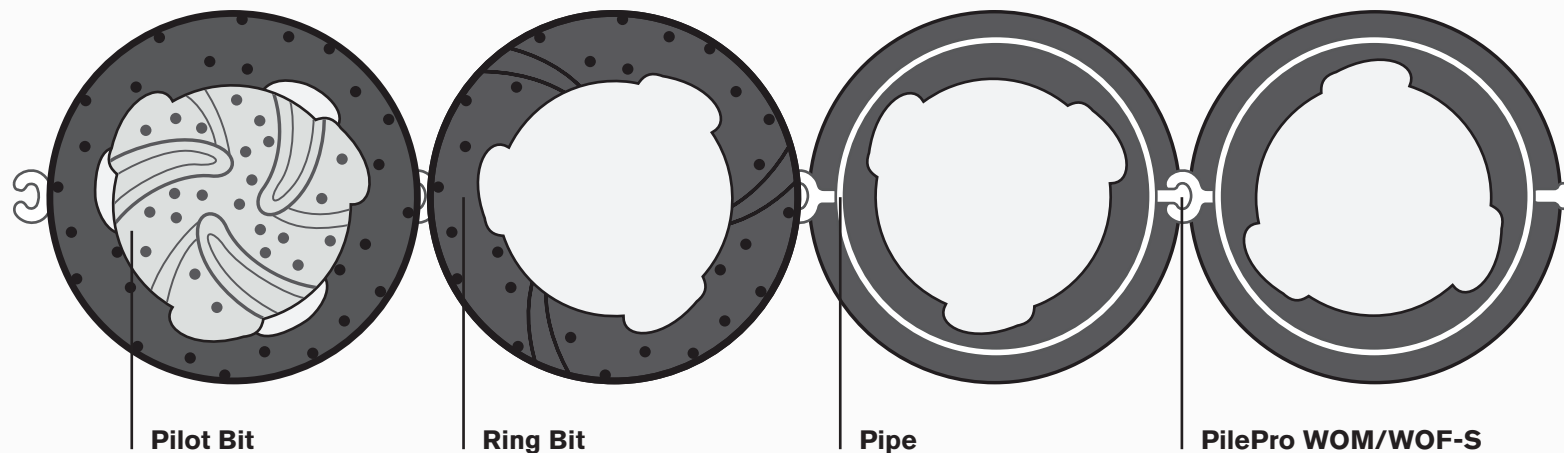
Development of new DTH techniques, especially the introduction of new air control bits, is making DTH drilling safer and more environmentally friendly than ever before. Using DTH in urban areas and in sensitive ground is now possible; plus, there is no danger of overdrilling or air escaping, which could otherwise cause settlement to existing structures.

DTH drilling has been used in post glacial soils of Norway, boulders of Sweden, granite of Finland, deep bed rock of Hong Kong, through heavy structure in Macau, and tunnels in Virginia.

Every Certified O-Pile® system is delivered with the ring bits attached and ready for use in conjunction with your pilot bit.

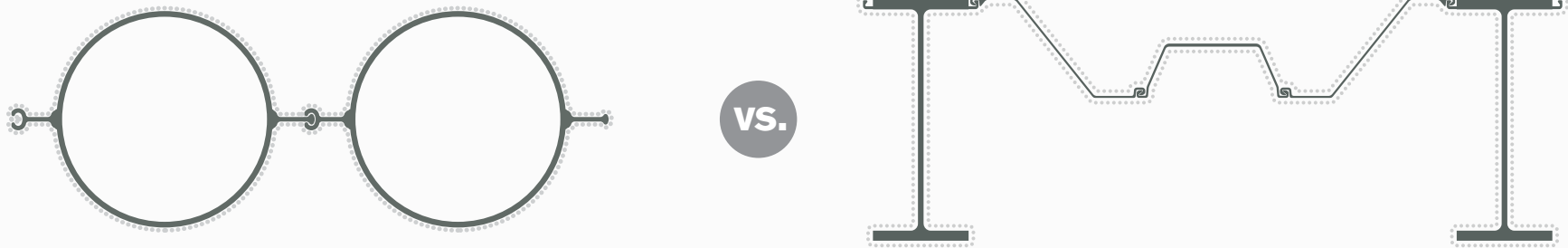
DTH-O-Pile

The only SSP system that can be driven through solid rock.



Contiguous Sheet Pile: O-Pile®

O-Pile® is a pipe or tube section with attached connectors so that one entire section can be driven into the next to form a continuous steel wall with a similar load-bearing element, sometimes with varying diameters of pipes/tubes.



O-Pile® is a dynamic, cost-effective, contiguous Pipe Sheet Pile® system that allows you to drive predictably into pure rock, if necessary, as well as dial in your corrosion and bending moment needs separately. O-Pile® is versatile and readily available, as you can use your local pipe plant or supply — no need to bring the majority of the steel from Luxembourg anymore.

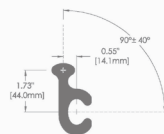
Whether you're driving into pure rock or building a port or both, as your engineering partner, we will help you pick from a wide array of O-Pile® systems to ensure you meet your specific project needs.



O-Pile®

sheet-pile.com/o-pile

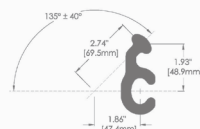
PilePro® Sheet Pile Connectors



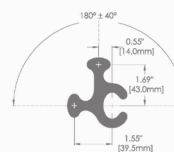
PZ 90



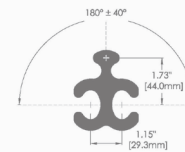
Colt



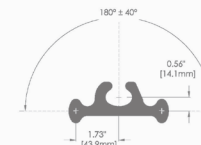
Cobra



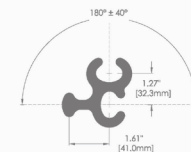
PZ Tee



Joker



Bullhead

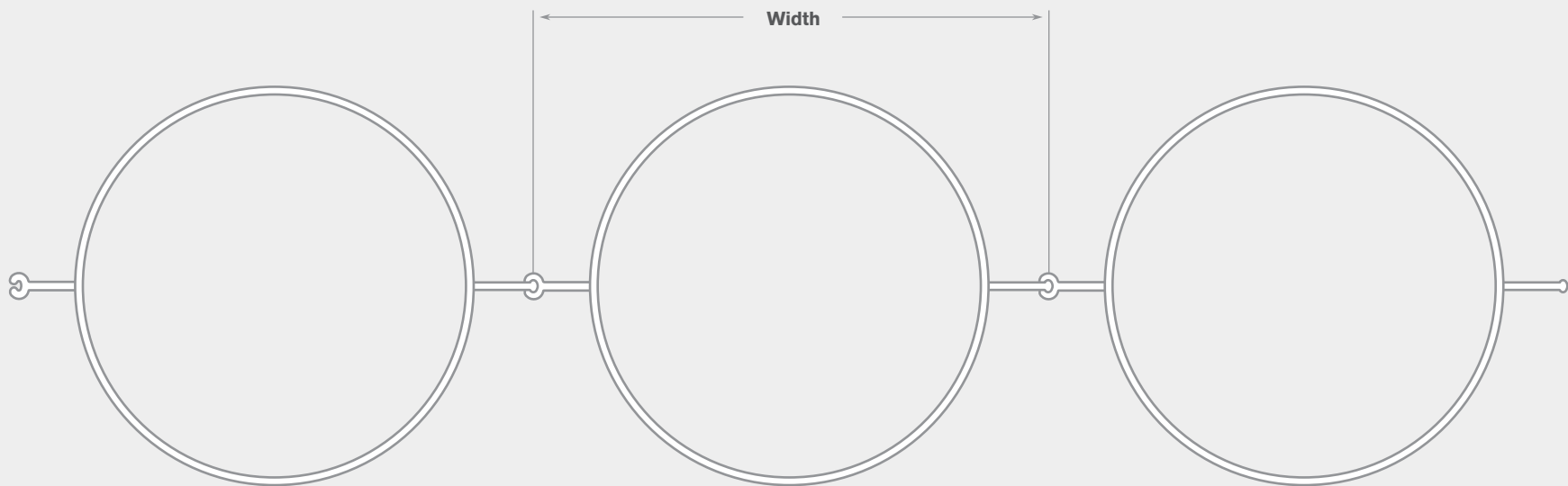


PZT-S

Sheet Pile LLC is the owner and assignee of US 7,390,145, related to these connectors.

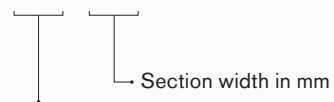


Configuration A



SECTION NAME:

101 - 978



Section modulus (elastic) in $\text{cm}^3/\text{m} \div 100$

These are examples from a large variety of possible O-Pile solutions.

Please configure your own system on sheet-pile.com/o-pile

Sheet Pile LLC is the owner and assignee of numerous patents and trademarks related to the O-Pile® system, including, but not limited to, United States Patent Nos. 8,088,469, 8,323,765, and 7,935,406.

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
13-308	O	9.6	0.394	12.13	25	36.43	42.18	47.93	20	0.472	2.5	120	104	124.8	135.2	107.1	129.8	144.8	229.3
		244.1	10	308.1	1342.2	177.89	205.96	234.02	3413	12	64	16381.9	462.7	555.3	601.5	476.5	577.2	644.3	1020.1
16-308	O	9.6	0.472	12.13	29.2	42.26	48.74	55.21	20	0.472	2.5	140.4	121.8	146.1	158.3	125.4	151.9	169.5	268.4
		244.1	12	308.1	1571.1	206.33	237.96	269.58	3413	12	64	19174.9	541.6	649.9	704.1	557.7	675.6	754.1	1194
19-388	O	12.8	0.375	15.27	34.4	35.75	41.16	46.58	20	0.472	2.5	219.5	143.5	172.2	186.5	147.7	179	199.8	316.3
		323.8	9.525	387.85	1851.3	174.53	200.97	227.42	3413	12	64	29977.6	638.2	765.9	829.7	657.2	796.1	888.6	1407
23-808	O	20	0.375	31.81	42	29.52	34.41	39.3	20	0.472	11.8	420	175	210	227.5	180.2	218.3	243.7	385.8
		508	9.525	808	2258.2	144.12	168	191.89	3413	12	300	57359.1	778.5	934.2	1012	801.7	971	1084	1716.3
24-775	O	20	0.375	30.51	43.8	30.26	35.19	40.12	20	0.472	10.5	437.9	182.5	219	237.2	187.9	227.6	254.1	402.3
		508	9.525	775	2354.4	147.76	171.83	195.9	3413	12	267	59801.5	811.6	974	1055.1	835.8	1012.4	1130.1	1789.3
24-808	O	20	0.394	31.81	44	30.68	35.72	40.75	20	0.472	11.8	439.7	183.2	219.9	238.2	188.7	228.5	255.1	403.9
		508	10	808	2364.2	149.78	174.38	198.97	3413	12	300	60049.8	815	978	1059.5	839.3	1016.6	1134.8	1796.8
24-763	O	20	0.375	30.02	44.5	30.45	35.35	40.26	20	0.472	10	445.1	185.5	222.5	241.1	191	231.3	258.2	408.9
		508	9.525	762.5	2393	148.65	172.6	196.56	3413	12	254.5	60781.8	825	989.9	1072.4	849.5	1029	1148.6	1818.7
24-470	O	16	0.375	18.52	45.5	36.23	41.54	46.85	20	0.472	2.5	364.2	189.7	227.6	246.6	195.3	236.6	264.1	418.2
		406.4	9.525	470.4	2447.6	176.88	202.81	228.73	3413	12	64	49735.8	843.8	1012.5	1096.9	868.9	1052.5	1174.9	1860.2
25-741	O	20	0.375	29.17	45.8	30.99	35.93	40.86	20	0.472	9.2	458	190.8	229	248.1	196.5	238	265.7	420.7
		508	9.525	741	2462.4	151.31	175.41	199.5	3413	12	233	62545.4	848.9	1018.7	1103.6	874.2	1058.8	1182	1871.4
25-775	O	20	0.394	30.51	45.8	31.47	36.55	41.64	20	0.472	10.5	458.5	191	229.2	248.3	196.7	238.3	266	421.1
		508	10	775	2464.8	153.67	178.48	203.29	3413	12	267	62606.8	849.7	1019.7	1104.6	875	1059.9	1183.1	1873.3
25-763	O	20	0.394	30.02	46.6	31.67	36.73	41.79	20	0.472	10	466	194.2	233	252.4	199.9	242.2	270.3	428
		508	10	762.5	2505.2	154.65	179.35	204.06	3413	12	254.5	63633.1	863.7	1036.4	1122.7	889.4	1077.3	1202.5	1904
26-470	O	16	0.394	18.52	47.6	37.81	43.31	48.82	20	0.472	2.5	381	198.4	238.1	258	204.4	247.5	276.3	437.5
		406.4	10	470.4	2560.6	184.58	211.48	238.37	3413	12	64	52031.9	882.7	1059.3	1147.6	909	1101.1	1229.1	1946.1
26-711	O	20	0.375	27.99	47.7	31.82	36.8	41.78	20	0.472	8	477.3	198.9	238.7	258.6	204.8	248.1	276.9	438.5
		508	9.525	711	2566.3	155.34	179.67	204	3413	12	203	65184.4	884.7	1061.6	1150.1	911	1103.5	1231.8	1950.4
26-859	O	22	0.375	33.81	47.9	30.05	34.94	39.82	20	0.472	11.8	527.4	199.8	239.7	259.7	205.7	249.2	278.1	440.4
		558.8	9.525	858.8	2577.6	146.71	170.57	194.43	3413	12	300	72019.5	888.6	1066.3	1155.2	915.1	1108.4	1237.3	1959

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
26-741	O	20	0.394	29.17	47.9	32.26	37.35	42.44	20	0.472	9.2	479.5	199.8	239.7	259.7	205.7	249.2	278.2	440.5
		508	10	741	2577.9	157.48	182.36	207.23	3413	12	233	65479.4	888.7	1066.5	1155.3	915.2	1108.5	1237.4	1959.2
26-808	O	20	0.438	31.81	48.5	33.39	38.76	44.14	20	0.472	11.8	485.4	202.3	242.7	262.9	208.3	252.3	281.6	445.9
		508	11.112	808	2609.9	163.01	189.26	215.5	3413	12	300	66290.6	899.7	1079.7	1169.6	926.5	1122.2	1252.7	1983.5
27-688	O	20	0.375	27.09	49.3	32.01	36.88	41.74	20	0.472	7.1	493.3	205.5	246.6	267.2	211.7	256.4	286.2	453.1
		508	9.525	688	2652.1	156.31	180.05	203.78	3413	12	180	67363.6	914.3	1097.1	1188.6	941.5	1140.4	1273	2015.6
27-826	O	22	0.375	32.51	49.9	30.77	35.69	40.62	20	0.472	10.5	548.5	207.8	249.3	270.1	213.9	259.1	289.3	458
		558.8	9.525	825.8	2680.7	150.23	174.27	198.3	3413	12	267	74897.5	924.1	1108.9	1201.4	951.6	1152.7	1286.7	2037.3
27-711	O	20	0.394	27.99	50	33.13	38.28	43.43	20	0.472	8	499.7	208.2	249.9	270.7	214.4	259.7	289.9	459
		508	10	711	2686.7	161.78	186.91	212.05	3413	12	203	68242.3	926.2	1111.4	1204.1	953.8	1155.3	1289.6	2041.9
27-859	O	22	0.394	33.81	50.3	31.25	36.29	41.33	20	0.472	11.8	553.6	209.7	251.7	272.6	216	261.6	292	462.3
		558.8	10	858.8	2706	152.59	177.19	201.79	3413	12	300	75605.7	932.9	1119.4	1212.7	960.6	1163.6	1298.9	2056.6
27-775	O	20	0.438	30.51	50.6	34.3	39.73	45.17	20	0.472	10.5	506.1	210.9	253.1	274.1	217.2	263	293.6	464.9
		508	11.112	775	2721	167.46	193.99	220.52	3413	12	267	69113.3	938	1125.6	1219.4	966	1170	1306.1	2068
27-813	O	22	0.375	32.02	50.6	30.95	35.85	40.75	20	0.472	10	556.9	210.9	253.1	274.2	217.2	263.1	293.7	465
		558.8	9.525	813.3	2721.9	151.1	175.03	198.95	3413	12	254.5	76048.6	938.3	1126	1219.8	966.3	1170.4	1306.5	2068.6
28-763	O	20	0.438	30.02	51.4	34.55	39.96	45.38	20	0.472	10	514.4	214.3	257.2	278.6	220.7	267.3	298.4	472.5
		508	11.112	762.5	2765.6	168.66	195.12	221.58	3413	12	254.5	70246.3	953.4	1144.1	1239.4	981.8	1189.2	1327.5	2101.9
28-688	O	20	0.394	27.09	51.6	33.38	38.41	43.44	20	0.472	7.1	516.4	215.2	258.2	279.7	221.6	268.4	299.6	474.4
		508	10	688	2776.5	162.96	187.53	212.1	3413	12	180	70523.6	957.2	1148.6	1244.3	985.7	1193.9	1332.7	2110.2
28-792	O	22	0.375	31.17	52	31.47	36.4	41.33	20	0.472	9.2	572	216.7	260	281.7	223.1	270.3	301.7	477.7
		558.8	9.525	791.8	2795.8	153.66	177.72	201.78	3413	12	233	78113.6	963.8	1156.6	1252.9	992.5	1202.2	1342	2124.8
28-808	O	20	0.472	31.81	52.1	35.54	41.18	46.83	20	0.472	11.8	521.4	217.3	260.7	282.4	223.7	271	302.5	479
		508	12	808	2803.5	173.52	201.08	228.64	3413	12	300	71208	966.5	1159.8	1256.4	995.2	1205.5	1345.7	2130.6
28-826	O	22	0.394	32.51	52.3	32.02	37.1	42.18	20	0.472	10.5	575.8	218.1	261.7	283.5	224.6	272	303.7	480.8
		558.8	10	825.8	2814.1	156.35	181.15	205.95	3413	12	267	78627	970.1	1164.2	1261.2	999	1210.1	1350.8	2138.7
28-521	O	18	0.375	20.52	52.4	36.45	41.71	46.97	20	0.472	2.5	471.7	218.4	262.1	283.9	224.9	272.4	304.1	481.5
		457.2	9.525	521.2	2817.9	177.95	203.64	229.33	3413	12	64	64417.7	971.4	1165.7	1262.9	1000.4	1211.7	1352.6	2141.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
28-470	O	16	0.438	18.52	52.5	41.49	47.46	53.42	20	0.472	2.5	419.9	218.7	262.4	284.3	225.2	272.8	304.5	482.2
		406.4	11.112	470.4	2822	202.56	231.7	260.84	3413	12	64	57343.8	972.9	1167.4	1264.7	1001.8	1213.5	1354.6	2144.7
28-741	O	20	0.438	29.17	52.9	35.21	40.67	46.14	20	0.472	9.2	529.3	220.6	264.7	286.7	227.1	275.1	307.1	486.2
		508	11.112	741	2845.8	171.91	198.58	225.25	3413	12	233	72284.4	981.1	1177.3	1275.4	1010.3	1223.7	1366	2162.8
29-813	O	22	0.394	32.02	53.1	32.22	37.28	42.34	20	0.472	10	584.6	221.4	265.7	287.9	228	276.2	308.3	488.2
		558.8	10	813.3	2857.4	157.31	182.02	206.72	3413	12	254.5	79835.4	985.1	1182.1	1280.6	1014.4	1228.7	1371.5	2171.6
29-762	O	22	0.375	29.99	54	32.26	37.23	42.21	20	0.472	8	594.5	225.2	270.2	292.8	231.9	280.9	313.6	496.5
		558.8	9.525	761.8	2905.9	157.51	181.79	206.06	3413	12	203	81189.7	1001.8	1202.1	1302.3	1031.6	1249.5	1394.8	2208.5
29-910	O	24	0.375	35.81	54.2	30.52	35.4	40.29	20	0.472	11.8	650.8	226	271.2	293.8	232.7	281.9	314.7	498.2
		609.6	9.525	909.6	2916	149.01	172.85	196.69	3413	12	300	88879.3	1005.3	1206.3	1306.8	1035.2	1253.9	1399.7	2216.2
29-775	O	20	0.472	30.51	54.4	36.54	42.26	47.97	20	0.472	10.5	543.6	226.5	271.8	294.5	233.3	282.5	315.4	499.4
		508	12	775	2922.8	178.41	206.31	234.22	3413	12	267	74240.1	1007.6	1209.1	1309.9	1037.6	1256.8	1403	2221.4
29-792	O	22	0.394	31.17	54.6	32.78	37.87	42.96	20	0.472	9.2	600.5	227.5	273	295.7	234.2	283.7	316.7	501.5
		558.8	10	791.8	2935	160.04	184.9	209.75	3413	12	233	82003.2	1011.8	1214.2	1315.3	1041.9	1262	1408.8	2230.6
29-521	O	18	0.394	20.52	54.9	38.06	43.52	48.99	20	0.472	2.5	493.7	228.6	274.3	297.1	235.4	285.1	318.2	503.9
		457.2	10	521.2	2949.2	185.82	212.5	239.17	3413	12	64	67418.3	1016.7	1220	1321.7	1047	1268.1	1415.6	2241.4
30-808	O	20	0.5	31.81	55	37.23	43.09	48.94	20	0.472	11.8	549.6	229	274.8	297.7	235.8	285.6	318.8	504.8
		508	12.7	808	2954.7	181.78	210.37	238.96	3413	12	300	75048.6	1018.6	1222.3	1324.2	1048.9	1270.5	1418.2	2245.5
30-711	O	20	0.438	27.99	55.2	36.21	41.75	47.28	20	0.472	8	551.7	229.9	275.8	298.8	236.7	286.7	320	506.7
		508	11.112	711	2965.9	176.81	203.82	230.84	3413	12	203	75334.4	1022.5	1227	1329.2	1052.9	1275.3	1423.6	2254.1
30-763	O	20	0.472	30.02	55.3	36.83	42.53	48.23	20	0.472	10	552.6	230.2	276.3	299.3	237.1	287.2	320.6	507.6
		508	12	762.5	2970.8	179.8	207.65	235.5	3413	12	254.5	75457.2	1024.1	1229	1331.4	1054.6	1277.4	1426	2257.8
30-739	O	22	0.375	29.09	55.7	32.46	37.32	42.18	20	0.472	7.1	613	232.2	278.7	301.9	239.1	289.6	323.3	511.9
		558.8	9.525	738.8	2996.3	158.48	182.2	205.92	3413	12	180	83717.3	1032.9	1239.5	1342.8	1063.7	1288.4	1438.2	2277.2
30-608	O	20	0.375	23.94	55.8	34.9	39.96	45.02	20	0.472	3.9	558.2	232.6	279.1	302.4	239.5	290.1	323.8	512.7
		508	9.525	608	3001.1	170.41	195.12	219.82	3413	12	100	76227.2	1034.6	1241.5	1345	1065.4	1290.5	1440.5	2280.8
30-877	O	24	0.375	34.51	56.3	31.22	36.13	41.05	20	0.472	10.5	675.4	234.5	281.4	304.8	241.5	292.5	326.5	517
		609.6	9.525	876.6	3025.8	152.41	176.42	200.42	3413	12	267	92225.2	1043.1	1251.7	1356	1074.1	1301.1	1452.4	2299.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
30-470	O	16	0.472	18.52	56.3	44.41	50.74	57.08	20	0.472	2.5	450.5	234.6	281.5	305	241.6	292.6	326.7	517.2
		406.4	12	470.4	3027.4	216.83	247.75	278.67	3413	12	64	61515.8	1043.6	1252.4	1356.7	1074.7	1301.8	1453.1	2300.8
31-762	O	22	0.394	29.99	56.7	33.62	38.76	43.9	20	0.472	8	624.1	236.4	283.7	307.3	243.5	294.9	329.2	521.2
		558.8	10	761.8	3050.6	164.15	189.25	214.36	3413	12	203	85232.5	1051.6	1262	1367.1	1082.9	1311.7	1464.3	2318.4
31-910	O	24	0.394	35.81	56.8	31.76	36.8	41.84	20	0.472	11.8	681.7	236.7	284	307.7	243.7	295.2	329.6	521.8
		609.6	10	909.6	3054.2	155.09	179.69	204.29	3413	12	300	93092.6	1052.9	1263.5	1368.8	1084.2	1313.3	1466	2321.2
31-741	O	20	0.472	29.17	56.9	37.56	43.31	49.07	20	0.472	9.2	568.6	236.9	284.3	308	244	295.5	329.9	522.3
		508	12	741	3057	183.36	211.47	239.58	3413	12	233	77646.5	1053.8	1264.6	1370	1085.2	1314.5	1467.3	2323.3
31-688	O	20	0.438	27.09	57	36.56	41.99	47.42	20	0.472	7.1	570.1	237.5	285.1	308.8	244.6	296.3	330.7	523.7
		508	11.112	688	3065.1	178.49	205	231.52	3413	12	180	77852.9	1056.6	1268	1373.6	1088.1	1318	1471.2	2329.5
31-864	O	24	0.375	34.02	57.1	31.39	36.29	41.18	20	0.472	10	685.1	237.9	285.5	309.3	245	296.7	331.2	524.4
		609.6	9.525	864.1	3069.5	153.26	177.16	201.06	3413	12	254.5	93559.3	1058.2	1269.8	1375.6	1089.7	1319.9	1473.4	2332.8
31-775	O	20	0.5	30.51	57.3	38.31	44.24	50.18	20	0.472	10.5	573	238.7	286.5	310.4	245.8	297.8	332.4	526.3
		508	12.7	775	3080.5	187.02	216	244.98	3413	12	267	78244.2	1062	1274.3	1380.5	1093.6	1324.6	1478.6	2341.2
31-763	O	20	0.5	30.02	58.2	38.62	44.55	50.47	20	0.472	10	582.4	242.7	291.2	315.4	249.9	302.7	337.9	534.9
		508	12.7	762.5	3131	188.55	217.5	246.44	3413	12	254.5	79526.9	1079.4	1295.2	1403.2	1111.5	1346.3	1502.9	2379.5
31-608	O	20	0.394	23.94	58.4	36.44	41.7	46.95	20	0.472	3.9	584.4	243.5	292.2	316.5	250.7	303.7	339	536.8
		508	10	608	3141.9	177.94	203.59	229.23	3413	12	100	79803	1083.1	1299.7	1408	1115.4	1351	1508.1	2387.8
31-739	O	22	0.394	29.09	58.5	33.86	38.89	43.93	20	0.472	7.1	643.6	243.8	292.5	316.9	251	304.1	339.4	537.4
		558.8	10	738.8	3145.5	165.32	189.9	214.47	3413	12	180	87886	1084.4	1301.3	1409.7	1116.7	1352.6	1509.9	2390.6
31-843	O	24	0.375	33.17	58.6	31.89	36.82	41.74	20	0.472	9.2	702.6	244	292.8	317.1	251.2	304.3	339.7	537.8
		609.6	9.525	842.6	3147.9	155.72	179.75	203.77	3413	12	233	95946.6	1085.2	1302.2	1410.7	1117.5	1353.6	1511	2392.4
32-877	O	24	0.394	34.51	58.9	32.51	37.59	42.66	20	0.472	10.5	707.4	245.6	294.7	319.3	252.9	306.4	342	541.5
		609.6	10	876.6	3169.2	158.72	183.52	208.31	3413	12	267	96597.1	1092.5	1311	1420.3	1125.1	1362.8	1521.2	2408.6
32-711	O	20	0.472	27.99	59.3	38.66	44.5	50.34	20	0.472	8	592.6	246.9	296.3	321	254.3	308	343.8	544.3
		508	12	711	3185.9	188.75	217.26	245.77	3413	12	203	80922.8	1098.3	1318	1427.8	1131	1370	1529.2	2421.3
32-470	O	16	0.5	18.52	59.3	46.71	53.33	59.95	20	0.472	2.5	474.3	247	296.4	321.1	254.4	308.1	343.9	544.6
		406.4	12.7	470.4	3187.3	228.04	260.36	292.68	3413	12	64	64765.6	1098.8	1318.5	1428.4	1131.5	1370.5	1529.9	2422.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
32-572	O	20	0.375	22.52	59.3	36.63	41.85	47.07	20	0.472	2.5	593.3	247.2	296.7	321.4	254.6	308.4	344.2	545
		508	9.525	572	3189.9	178.84	204.33	229.83	3413	12	64	81024.7	1099.7	1319.6	1429.6	1132.4	1371.7	1531.2	2424.4
32-859	O	22	0.472	33.81	59.7	36.31	41.97	47.64	20	0.472	11.8	657.2	249	298.7	323.6	256.4	310.5	346.6	548.8
		558.8	12	858.8	3212.3	177.26	204.94	232.62	3413	12	300	89751.9	1107.4	1328.9	1439.6	1140.4	1381.3	1541.9	2441.4
32-864	O	24	0.394	34.02	59.8	32.7	37.76	42.82	20	0.472	10	717.6	249.2	299	323.9	256.6	310.8	346.9	549.3
		609.6	10	864.1	3215	159.66	184.36	209.06	3413	12	254.5	97994.4	1108.3	1330	1440.8	1141.3	1382.5	1543.2	2443.4
32-741	O	20	0.5	29.17	59.9	39.4	45.39	51.38	20	0.472	9.2	599.3	249.7	299.6	324.6	257.1	311.4	347.7	550.5
		508	12.7	741	3221.8	192.37	221.6	250.84	3413	12	233	81834.4	1110.7	1332.8	1443.9	1143.7	1385.4	1546.5	2448.6
33-521	O	18	0.438	20.52	60.5	41.82	47.75	53.69	20	0.472	2.5	544.6	252.1	302.6	327.8	259.6	314.5	351.1	555.8
		457.2	11.112	521.2	3253.3	204.19	233.16	262.13	3413	12	64	74369.8	1121.5	1345.8	1458	1154.9	1398.9	1561.6	2472.5
33-813	O	24	0.375	31.99	60.7	32.65	37.61	42.57	20	0.472	8	728.5	253	303.6	328.9	260.5	315.5	352.2	557.7
		609.6	9.525	812.6	3264.1	159.41	183.64	207.87	3413	12	203	99488.8	1125.2	1350.3	1462.8	1158.7	1403.5	1566.8	2480.7
33-688	O	20	0.472	27.09	61.2	39.09	44.83	50.58	20	0.472	7.1	612.4	255.2	306.2	331.7	262.8	318.3	355.3	562.5
		508	12	688	3292.4	190.83	218.89	246.94	3413	12	180	83628	1135	1362	1475.5	1168.8	1415.8	1580.4	2502.3
33-808	O	20	0.562	31.81	61.2	41.05	47.38	53.72	20	0.472	11.8	612.5	255.2	306.2	331.7	262.8	318.3	355.3	562.6
		508	14.288	808	3292.7	200.42	231.35	262.27	3413	12	300	83635.5	1135.1	1362.2	1475.7	1168.9	1415.9	1580.5	2502.5
33-843	O	24	0.394	33.17	61.3	33.24	38.33	43.42	20	0.472	9.2	735.9	255.5	306.6	332.2	263.1	318.7	355.8	563.3
		609.6	10	842.6	3297.1	162.28	187.13	211.98	3413	12	233	100494.9	1136.6	1364	1477.6	1170.5	1417.7	1582.6	2505.8
33-572	O	20	0.394	22.52	62.1	38.27	43.69	49.12	20	0.472	2.5	621.2	258.8	310.6	336.5	266.5	322.8	360.4	570.6
		508	10	572	3339.6	186.84	213.34	239.83	3413	12	64	84825.6	1151.3	1381.5	1496.7	1185.6	1436	1603	2538.1
33-826	O	22	0.472	32.51	62.1	37.28	43.01	48.75	20	0.472	10.5	683.5	258.9	310.7	336.6	266.6	322.9	360.5	570.8
		558.8	12	825.8	3340.7	182	210.01	238.01	3413	12	267	93338.5	1151.7	1382	1497.2	1185.9	1436.5	1603.5	2538.9
34-711	O	20	0.5	27.99	62.5	40.58	46.66	52.74	20	0.472	8	624.5	260.2	312.3	338.3	268	324.6	362.3	573.7
		508	12.7	711	3357.8	198.14	227.82	257.5	3413	12	203	85287.3	1157.6	1389.1	1504.8	1192	1443.8	1611.7	2551.9
34-790	O	24	0.375	31.09	62.5	32.85	37.7	42.56	20	0.472	7.1	749.8	260.3	312.4	338.4	268.1	324.7	362.5	573.9
		609.6	9.525	789.6	3359.1	160.38	184.08	207.79	3413	12	180	102386.8	1158	1389.6	1505.4	1192.5	1444.4	1612.4	2553
34-659	O	22	0.375	25.94	62.5	35.18	40.22	45.26	20	0.472	3.9	687.5	260.4	312.5	338.5	268.2	324.8	362.6	574.1
		558.8	9.525	658.8	3360.2	171.76	196.37	220.99	3413	12	100	93883.4	1158.4	1390.1	1505.9	1192.9	1444.9	1612.9	2553.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
34-910	O	24	0.438	35.81	62.8	34.67	40.08	45.48	20	0.472	11.8	753.4	261.6	313.9	340.1	269.4	326.3	364.2	576.7
		609.6	11.112	909.6	3375.4	169.29	195.67	222.04	3413	12	300	102881.3	1163.6	1396.3	1512.7	1198.3	1451.4	1620.2	2565.3
34-859	O	22	0.5	33.81	63	38.06	43.95	49.84	20	0.472	11.8	693	262.5	315	341.2	270.3	327.4	365.5	578.7
		558.8	12.7	858.8	3386.9	185.85	214.6	243.36	3413	12	300	94628.7	1167.6	1401.1	1517.8	1202.3	1456.3	1625.7	2574
34-813	O	22	0.472	32.02	63.1	37.55	43.28	49.01	20	0.472	10	694	262.9	315.5	341.7	270.7	327.9	366	579.5
		558.8	12	813.3	3392	183.36	211.31	239.27	3413	12	254.5	94773.1	1169.4	1403.2	1520.2	1204.2	1458.6	1628.2	2577.9
34-813	O	24	0.394	31.99	63.6	34.04	39.18	44.32	20	0.472	8	763.1	265	317.9	344.4	272.8	330.5	368.9	584.1
		609.6	10	812.6	3418.8	166.22	191.3	216.37	3413	12	203	104205	1178.6	1414.3	1532.2	1213.7	1470.1	1641	2598.3
34-775	O	20	0.562	30.51	63.9	42.29	48.72	55.15	20	0.472	10.5	638.5	266.1	319.3	345.9	274	331.9	370.4	586.5
		508	14.288	775	3432.9	206.46	237.87	269.28	3413	12	267	87196.8	1183.5	1420.2	1538.5	1218.7	1476.2	1647.8	2609
35-608	O	20	0.438	23.94	64.5	40.04	45.75	51.45	20	0.472	3.9	645.1	268.8	322.6	349.4	276.8	335.3	374.3	592.6
		508	11.112	608	3468.4	195.52	223.36	251.2	3413	12	100	88096.7	1195.7	1434.8	1554.4	1231.3	1491.4	1664.8	2636
35-688	O	20	0.5	27.09	64.5	41.07	47.07	53.06	20	0.472	7.1	645.4	268.9	322.7	349.6	276.9	335.4	374.4	592.9
		508	12.7	688	3470	200.54	229.8	259.07	3413	12	180	88138.5	1196.2	1435.5	1555.1	1231.9	1492.1	1665.6	2637.2
35-792	O	22	0.472	31.17	64.8	38.26	44.03	49.81	20	0.472	9.2	712.9	270	324	351	278.1	336.8	376	595.3
		558.8	12	791.8	3484.1	186.79	214.99	243.19	3413	12	233	97346.5	1201.1	1441.3	1561.4	1236.9	1498.2	1672.4	2647.9
35-763	O	20	0.562	30.02	64.9	42.67	49.1	55.53	20	0.472	10	649	270.4	324.5	351.5	278.5	337.3	376.5	596.2
		508	14.288	762.5	3489.2	208.31	239.72	271.14	3413	12	254.5	88626.2	1202.9	1443.4	1563.7	1238.7	1500.4	1674.8	2651.8
35-521	O	18	0.472	20.52	65	44.81	51.11	57.42	20	0.472	2.5	584.7	270.7	324.8	351.9	278.7	337.6	376.9	596.7
		457.2	12	521.2	3492.5	218.77	249.56	280.36	3413	12	64	79839.5	1204	1444.8	1565.2	1239.9	1501.8	1676.4	2654.3
35-877	O	24	0.438	34.51	65.1	35.53	40.98	46.44	20	0.472	10.5	781.7	271.4	325.7	352.9	279.5	338.6	377.9	598.4
		609.6	11.112	876.6	3502.4	173.46	200.09	226.73	3413	12	267	106754.3	1207.4	1448.9	1569.6	1243.4	1506	1681.2	2661.9
35-790	O	24	0.394	31.09	65.4	34.28	39.32	44.35	20	0.472	7.1	785.3	272.7	327.2	354.5	280.8	340.1	379.7	601.1
		609.6	10	789.6	3518.4	167.38	191.96	216.54	3413	12	180	107240.4	1212.9	1455.5	1576.8	1249	1512.9	1688.8	2674
35-826	O	22	0.5	32.51	65.5	39.11	45.07	51.04	20	0.472	10.5	720.6	273	327.6	354.9	281.1	340.5	380.1	601.8
		558.8	12.7	825.8	3522.2	190.93	220.06	249.18	3413	12	267	98410.2	1214.2	1457.1	1578.5	1250.4	1514.5	1690.7	2676.9
35-659	O	22	0.394	25.94	65.6	36.75	41.99	47.23	20	0.472	3.9	721.7	273.4	328.1	355.4	281.5	341	380.6	602.7
		558.8	10	658.8	3527.5	179.43	205	230.57	3413	12	100	98558.2	1216.1	1459.3	1580.9	1252.3	1516.8	1693.2	2680.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
35-470	O	16	0.562	18.52	65.9	51.88	59.15	66.41	20	0.472	2.5	527.3	274.6	329.5	357	282.8	342.5	382.4	605.4
		406.4	14.288	470.4	3543.5	253.3	288.78	324.26	3413	12	64	72004.1	1221.6	1465.9	1588.1	1257.9	1523.7	1700.9	2693.1
36-864	O	24	0.438	34.02	66.1	35.76	41.2	46.65	20	0.472	10	793.1	275.4	330.4	358	283.6	343.5	383.4	607.1
		609.6	11.112	864.1	3553.1	174.61	201.18	227.75	3413	12	254.5	108298.6	1224.9	1469.9	1592.4	1261.4	1527.8	1705.5	2700.4
36-623	O	22	0.375	24.52	66.1	36.78	41.97	47.16	20	0.472	2.5	727.2	275.5	330.6	358.1	283.7	343.6	383.5	607.3
		558.8	9.525	622.8	3554.4	179.58	204.91	230.24	3413	12	64	99310.1	1225.3	1470.4	1592.9	1261.8	1528.4	1706.1	2701.3
36-813	O	22	0.5	32.02	66.5	39.41	45.37	51.33	20	0.472	10	731.7	277.2	332.6	360.3	285.4	345.7	385.9	611
		558.8	12.7	813.3	3576.3	192.43	221.52	250.61	3413	12	254.5	99922.7	1232.9	1479.5	1602.8	1269.6	1537.8	1716.6	2718
36-741	O	20	0.562	29.17	66.8	43.56	50.07	56.58	20	0.472	9.2	667.8	278.3	333.9	361.7	286.5	347.1	387.4	613.4
		508	14.288	741	3590.5	212.7	244.48	276.25	3413	12	233	91197.7	1237.8	1485.3	1609.1	1274.6	1543.9	1723.4	2728.7
36-1011	O	28	0.375	39.81	66.9	31.32	36.2	41.07	20	0.472	11.8	936	278.6	334.3	362.1	286.9	347.5	387.9	614.1
		711.2	9.525	1011.2	3594.3	152.92	176.73	200.53	3413	12	300	127813.5	1239.1	1486.9	1610.8	1276	1545.6	1725.3	2731.7
36-762	O	22	0.472	29.99	67.4	39.31	45.17	51.02	20	0.472	8	740.9	280.7	336.8	364.8	289	350.1	390.8	618.7
		558.8	12	761.8	3621.3	191.95	220.53	249.11	3413	12	203	101180	1248.4	1498.1	1622.9	1285.6	1557.2	1738.2	2752.2
36-808	O	20	0.625	31.81	67.4	44.84	51.65	58.46	20	0.472	11.8	674.1	280.9	337	365.1	289.2	350.3	391.1	619.2
		508	15.875	808	3624.2	218.94	252.18	285.42	3413	12	300	92053.5	1249.4	1499.3	1624.2	1286.6	1558.4	1739.6	2754.4
36-910	O	24	0.472	35.81	67.5	36.99	42.68	48.37	20	0.472	11.8	810	281.2	337.5	365.6	289.6	350.8	391.6	620
		609.6	12	909.6	3629	180.58	208.37	236.16	3413	12	300	110611.3	1251	1501.3	1626.4	1288.3	1560.5	1741.9	2758
36-843	O	24	0.438	33.17	67.8	36.38	41.86	47.34	20	0.472	9.2	813.3	282.4	338.9	367.1	290.8	352.2	393.2	622.6
		609.6	11.112	842.6	3643.8	177.61	204.38	231.14	3413	12	233	111062	1256.1	1507.4	1633	1293.5	1566.8	1749	2769.3
37-792	O	22	0.5	31.17	68.3	40.17	46.18	52.19	20	0.472	9.2	751.6	284.7	341.6	370.1	293.2	355.1	396.4	627.6
		558.8	12.7	791.8	3673.4	196.1	225.47	254.84	3413	12	233	102635.9	1266.4	1519.6	1646.3	1304.1	1579.6	1763.3	2791.8
37-521	O	18	0.5	20.52	68.4	47.15	53.76	60.36	20	0.472	2.5	615.9	285.1	342.2	370.7	293.6	355.7	397	628.6
		457.2	12.7	521.2	3679.2	230.23	262.46	294.68	3413	12	64	84106.4	1268.4	1522	1648.9	1306.1	1582.1	1766	2796.2
37-572	O	20	0.438	22.52	68.6	42.09	48	53.9	20	0.472	2.5	685.7	285.7	342.9	371.4	294.2	356.4	397.8	629.9
		508	11.112	572	3686.7	205.52	234.36	263.19	3413	12	64	93641.2	1270.9	1525.1	1652.2	1308.8	1585.3	1769.6	2801.9
37-978	O	28	0.375	38.51	69.1	31.97	36.88	41.78	20	0.472	10.5	967.5	288	345.5	374.3	296.5	359.2	400.9	634.8
		711.2	9.525	978.2	3715.6	156.1	180.05	204	3413	12	267	132125.3	1280.9	1537.1	1665.2	1319	1597.7	1783.5	2823.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
37-608	O	20	0.472	23.94	69.3	42.91	48.97	55.03	20	0.472	3.9	693	288.7	346.5	375.4	297.3	360.2	402	636.5
		508	12	608	3725.7	209.48	239.07	268.66	3413	12	100	94631.7	1284.4	1541.2	1669.7	1322.6	1602	1788.3	2831.5
37-623	O	22	0.394	24.52	69.4	38.44	43.84	49.23	20	0.472	2.5	763.4	289.2	347	375.9	297.8	360.7	402.6	637.5
		558.8	10	622.8	3731.4	187.69	214.04	240.39	3413	12	64	104255.2	1286.4	1543.6	1672.3	1324.6	1604.5	1791.1	2835.9
37-739	O	22	0.472	29.09	69.5	39.73	45.5	51.27	20	0.472	7.1	764	289.4	347.3	376.2	298	361	402.9	638
		558.8	12	738.8	3734.1	193.99	222.15	250.31	3413	12	180	104329.9	1287.3	1544.7	1673.5	1325.6	1605.7	1792.4	2837.9
37-710	O	24	0.375	27.94	69.5	35.42	40.44	45.47	20	0.472	3.9	834.3	289.7	347.6	376.6	298.3	361.3	403.3	638.6
		609.6	9.525	709.6	3737.9	172.92	197.45	221.98	3413	12	100	113929.8	1288.6	1546.3	1675.2	1326.9	1607.3	1794.2	2840.8
37-711	O	20	0.562	27.99	69.6	44.92	51.54	58.16	20	0.472	8	696	290	348	377	298.6	361.7	403.8	639.3
		508	14.288	711	3742	219.33	251.66	283.99	3413	12	203	95045.7	1290	1548	1677	1328.4	1609	1796.1	2843.9
38-966	O	28	0.375	38.02	70	32.14	37.02	41.91	20	0.472	10	980.1	291.7	350	379.2	300.4	363.8	406.1	643
		711.2	9.525	965.7	3763.7	156.91	180.77	204.62	3413	12	254.5	133835.6	1297.5	1557	1686.7	1336.1	1618.4	1806.6	2860.4
38-877	O	24	0.472	34.51	70	37.93	43.68	49.44	20	0.472	10.5	840.5	291.8	350.2	379.4	300.5	364	406.3	643.4
		609.6	12	876.6	3765.6	185.17	213.27	241.37	3413	12	267	114775.3	1298.1	1557.8	1687.6	1336.8	1619.2	1807.5	2861.9
38-1011	O	28	0.394	39.81	70	32.63	37.67	42.71	20	0.472	11.8	980.7	291.9	350.2	379.4	300.5	364	406.4	643.4
		711.2	10	1011.2	3765.9	159.33	183.94	208.55	3413	12	300	133917.1	1298.3	1557.9	1687.7	1336.9	1619.4	1807.7	2862.1
38-813	O	24	0.438	31.99	70.3	37.3	42.84	48.39	20	0.472	8	843.3	292.8	351.4	380.7	301.5	365.2	407.7	645.5
		609.6	11.112	812.6	3778.3	182.11	209.18	236.24	3413	12	203	115162.2	1302.5	1563	1693.3	1341.3	1624.7	1813.6	2871.5
38-775	O	20	0.625	30.51	70.3	46.24	53.17	60.1	20	0.472	10.5	702.8	292.8	351.4	380.7	301.5	365.3	407.7	645.6
		508	15.875	775	3778.5	225.77	259.6	293.42	3413	12	267	95973.2	1302.6	1563.1	1693.4	1341.4	1624.7	1813.7	2871.6
38-762	O	22	0.5	29.99	71	41.3	47.4	53.5	20	0.472	8	781.2	295.9	355.1	384.7	304.7	369.1	412	652.3
		558.8	12.7	761.8	3818.1	201.63	231.42	261.21	3413	12	203	106677.8	1316.2	1579.5	1711.1	1355.4	1641.8	1832.7	2901.8
38-864	O	24	0.472	34.02	71.1	38.2	43.94	49.69	20	0.472	10	852.6	296.1	355.3	384.9	304.9	369.3	412.2	652.7
		609.6	12	864.1	3820.1	186.5	214.55	242.6	3413	12	254.5	116435.6	1316.9	1580.3	1712	1356.1	1642.6	1833.6	2903.2
38-910	O	24	0.5	35.81	71.2	38.8	44.72	50.64	20	0.472	11.8	854.3	296.6	355.9	385.6	305.5	370	413	653.9
		609.6	12.7	909.6	3827.4	189.46	218.36	247.26	3413	12	300	116657.9	1319.4	1583.3	1715.3	1358.7	1645.8	1837.1	2908.8
38-763	O	20	0.625	30.02	71.4	46.69	53.62	60.56	20	0.472	10	714.3	297.6	357.2	386.9	306.5	371.2	414.4	656.2
		508	15.875	762.5	3840.4	227.94	261.8	295.67	3413	12	254.5	97546.5	1323.9	1588.7	1721.1	1363.3	1651.4	1843.4	2918.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
38-944	O	28	0.375	37.17	71.6	32.6	37.51	42.42	20	0.472	9.2	1002.4	298.3	358	387.8	307.2	372.1	415.4	657.7
		711.2	9.525	944.2	3849.4	159.19	183.15	207.12	3413	12	233	136883.1	1327	1592.4	1725.1	1366.5	1655.2	1847.7	2925.5
39-688	O	20	0.562	27.09	71.9	45.56	52.11	58.67	20	0.472	7.1	719.3	299.7	359.6	389.6	308.6	373.8	417.3	660.7
		508	14.288	688	3867.1	222.43	254.44	286.44	3413	12	180	98223.1	1333.1	1599.7	1733.1	1372.8	1662.8	1856.2	2939
39-790	O	24	0.438	31.09	72.3	37.63	43.09	48.54	20	0.472	7.1	867.9	301.3	361.6	391.8	310.3	375.9	419.6	664.3
		609.6	11.112	789.6	3888.3	183.74	210.36	236.99	3413	12	180	118516.7	1340.5	1608.5	1742.6	1380.4	1672	1866.4	2955.1
39-470	O	16	0.625	18.52	72.4	57.01	64.92	72.83	20	0.472	2.5	579	301.5	361.9	392	310.5	376.1	419.9	664.8
		406.4	15.875	470.4	3890.9	278.35	316.96	355.57	3413	12	64	79062.4	1341.3	1609.6	1743.7	1381.3	1673.1	1867.6	2957.1
39-978	O	28	0.394	38.51	72.4	33.33	38.4	43.48	20	0.472	10.5	1013.7	301.7	362	392.2	310.7	376.3	420.1	665.1
		711.2	10	978.2	3893	162.73	187.51	212.29	3413	12	267	138434.9	1342.1	1610.5	1744.7	1382	1674	1868.6	2958.7
39-710	O	24	0.394	27.94	72.8	37.01	42.24	47.46	20	0.472	3.9	873.8	303.4	364.1	394.4	312.4	378.5	422.5	668.9
		609.6	10	709.6	3915	180.71	206.22	231.72	3413	12	100	119330.6	1349.7	1619.6	1754.6	1389.8	1683.5	1879.2	2975.4
39-843	O	24	0.472	33.17	72.9	38.87	44.67	50.46	20	0.472	9.2	874.4	303.6	364.3	394.7	312.6	378.7	422.7	669.3
		609.6	12	842.6	3917.5	189.8	218.09	246.37	3413	12	233	119406.6	1350.5	1620.6	1755.7	1390.7	1684.5	1880.4	2977.3
39-608	O	20	0.5	23.94	73	45.15	51.49	57.84	20	0.472	3.9	730.3	304.3	365.2	395.6	313.4	379.6	423.7	670.9
		508	12.7	608	3926.6	220.46	251.42	282.38	3413	12	100	99735.7	1353.6	1624.4	1759.7	1393.9	1688.4	1884.8	2984.2
39-739	O	22	0.5	29.09	73.2	41.78	47.8	53.82	20	0.472	7.1	805.5	305.1	366.1	396.6	314.2	380.6	424.8	672.6
		558.8	12.7	738.8	3937	203.98	233.38	262.79	3413	12	180	109998.8	1357.2	1628.7	1764.4	1397.6	1692.9	1889.7	2992.1
39-674	O	24	0.375	26.52	73.2	36.91	42.07	47.23	20	0.472	2.5	878.9	305.2	366.2	396.7	314.3	380.6	424.9	672.8
		609.6	9.525	673.6	3937.6	180.21	205.4	230.59	3413	12	64	120018.7	1357.4	1628.9	1764.7	1397.9	1693.2	1890.1	2992.6
39-1062	O	30	0.375	41.81	73.3	31.66	36.54	41.41	20	0.472	11.8	1099.1	305.3	366.4	396.9	314.4	380.8	425.1	673.1
		762	9.525	1062	3939.3	154.59	178.39	202.18	3413	12	300	150088.5	1358	1629.6	1765.4	1398.5	1693.9	1890.9	2993.9
39-966	O	28	0.394	38.02	73.3	33.51	38.57	43.63	20	0.472	10	1026.9	305.6	366.7	397.3	314.7	381.2	425.5	673.7
		711.2	10	965.7	3943.4	163.62	188.32	213.01	3413	12	254.5	140226.8	1359.4	1631.3	1767.3	1399.9	1695.7	1892.8	2997
40-741	O	20	0.625	29.17	73.5	47.7	54.73	61.75	20	0.472	9.2	735	306.3	367.5	398.1	315.4	382	426.4	675.2
		508	15.875	741	3951.8	232.9	267.2	301.5	3413	12	233	100376.8	1362.4	1634.8	1771.1	1402.9	1699.3	1896.9	3003.4
40-572	O	20	0.472	22.52	73.7	45.13	51.42	57.7	20	0.472	2.5	736.6	306.9	368.3	399	316	382.8	427.3	676.6
		508	12	572	3960.1	220.37	251.05	281.74	3413	12	64	100587.6	1365.2	1638.3	1774.8	1405.8	1702.9	1900.9	3009.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
40-877	O	24	0.5	34.51	73.9	39.81	45.8	51.8	20	0.472	10.5	886.4	307.8	369.3	400.1	316.9	383.9	428.6	678.5
		609.6	12.7	876.6	3971.4	194.39	223.64	252.89	3413	12	267	121049.5	1369.1	1642.9	1779.8	1409.9	1707.7	1906.3	3018.3
40-914	O	28	0.375	35.99	73.9	33.3	38.24	43.19	20	0.472	8	1035.3	308.1	369.7	400.5	317.3	384.3	429	679.3
		711.2	9.525	914.2	3975.7	162.58	186.73	210.87	3413	12	203	141375	1370.6	1644.7	1781.7	1411.4	1709.5	1908.3	3021.5
40-864	O	24	0.5	34.02	74.9	40.11	46.1	52.08	20	0.472	10	899.3	312.2	374.7	405.9	321.5	389.5	434.8	688.4
		609.6	12.7	864.1	4028.9	195.84	225.07	254.29	3413	12	254.5	122800.6	1388.9	1666.7	1805.6	1430.3	1732.4	1933.9	3062
40-944	O	28	0.394	37.17	75	34.01	39.09	44.18	20	0.472	9.2	1050.2	312.6	375.1	406.3	321.9	389.9	435.2	689.1
		711.2	10	944.2	4033.2	166.05	190.88	215.7	3413	12	233	143419.8	1390.4	1668.5	1807.5	1431.8	1734.3	1935.9	3065.2
41-813	O	24	0.472	31.99	75.6	39.89	45.75	51.62	20	0.472	8	906.7	314.8	377.8	409.3	324.2	392.7	438.3	694
		609.6	12	812.6	4062.2	194.75	223.39	252.04	3413	12	203	123814.9	1400.4	1680.5	1820.5	1442.1	1746.7	1949.8	3087.2
41-1029	O	30	0.375	40.51	75.6	32.29	37.19	42.1	20	0.472	10.5	1134.3	315.1	378.1	409.6	324.5	393	438.7	694.6
		762	9.525	1029	4065.7	157.67	181.6	205.53	3413	12	267	154901.8	1401.6	1681.9	1822.1	1443.3	1748.2	1951.5	3089.9
41-891	O	28	0.375	35.09	75.9	33.49	38.34	43.19	20	0.472	7.1	1062	316.1	379.3	410.9	325.5	394.2	440.1	696.8
		711.2	9.525	891.2	4078.3	163.52	187.2	210.88	3413	12	180	145023.6	1405.9	1687.1	1827.7	1447.8	1753.7	1957.6	3099.5
41-521	O	18	0.562	20.52	76.2	52.45	59.71	66.97	20	0.472	2.5	685.6	317.4	380.9	412.7	326.9	395.9	442	699.8
		457.2	14.288	521.2	4095.8	256.08	291.54	327	3413	12	64	93630.5	1412	1694.4	1835.6	1454	1761.2	1966	3112.8
41-1017	O	30	0.375	40.02	76.6	32.46	37.34	42.22	20	0.472	10	1148.3	319	382.8	414.7	328.5	397.9	444.1	703.2
		762	9.525	1016.5	4115.7	158.46	182.3	206.14	3413	12	254.5	156806.7	1418.8	1702.6	1844.5	1461.1	1769.7	1975.5	3127.9
41-711	O	20	0.625	27.99	76.6	49.23	56.39	63.55	20	0.472	8	766.1	319.2	383	414.9	328.7	398.1	444.4	703.7
		508	15.875	711	4118.6	240.37	275.34	310.3	3413	12	203	104612.1	1419.8	1703.8	1845.8	1462.1	1771	1976.9	3130.1
41-674	O	24	0.394	26.52	76.7	38.59	43.96	49.33	20	0.472	2.5	920.5	319.6	383.6	415.5	329.1	398.7	445	704.7
		609.6	10	673.6	4124.3	188.42	214.64	240.86	3413	12	64	125708.1	1421.8	1706.2	1848.3	1464.1	1773.4	1979.7	3134.5
41-1062	O	30	0.394	41.81	76.8	33.01	38.05	43.09	20	0.472	11.8	1151.7	319.9	383.9	415.9	329.4	399	445.4	705.3
		762	10	1062	4128	161.15	185.76	210.37	3413	12	300	157276.8	1423.1	1707.7	1850	1465.4	1775	1981.4	3137.3
41-843	O	24	0.5	33.17	76.8	40.84	46.88	52.92	20	0.472	9.2	922.2	320.2	384.2	416.3	329.7	399.4	445.8	705.9
		609.6	12.7	842.6	4131.7	199.39	228.87	258.36	3413	12	233	125934	1424.4	1709.2	1851.7	1466.8	1776.6	1983.2	3140.1
42-1011	O	28	0.438	39.81	77.5	35.7	41.12	46.55	20	0.472	11.8	1084.6	322.8	387.4	419.6	332.4	402.6	449.5	711.7
		711.2	11.112	1011.2	4165.2	174.31	200.79	227.27	3413	12	300	148116.1	1435.9	1723.1	1866.7	1478.7	1791.1	1999.3	3165.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
42-914	O	28	0.394	35.99	77.5	34.75	39.88	45	20	0.472	8	1084.7	322.8	387.4	419.7	332.4	402.7	449.5	711.7
		711.2	10	914.2	4165.5	169.67	194.7	219.73	3413	12	203	148126.2	1436	1723.2	1866.8	1478.8	1791.2	1999.5	3165.8
42-859	O	22	0.625	33.81	77.5	45.99	52.86	59.74	20	0.472	11.8	852.7	323	387.6	419.9	332.6	402.9	449.7	712
		558.8	15.875	858.8	4167.5	224.52	258.11	291.7	3413	12	300	116438.6	1436.7	1724	1867.7	1479.4	1792	2000.4	3167.3
42-572	O	20	0.5	22.52	77.6	47.52	54.11	60.69	20	0.472	2.5	776.3	323.5	388.2	420.5	333.1	403.5	450.4	713.1
		508	12.7	572	4173.7	232.04	264.18	296.33	3413	12	64	106012.7	1438.8	1726.6	1870.5	1481.7	1794.7	2003.4	3172
42-790	O	24	0.472	31.09	77.8	40.3	46.08	51.87	20	0.472	7.1	933.1	324	388.8	421.2	333.6	404.1	451.1	714.3
		609.6	12	789.6	4180.5	196.74	224.99	253.25	3413	12	180	127421.5	1441.2	1729.4	1873.5	1484.1	1797.6	2006.6	3177.2
42-659	O	22	0.472	25.94	77.9	43.34	49.4	55.46	20	0.472	3.9	856.8	324.5	389.4	421.9	334.2	404.8	451.9	715.5
		558.8	12	658.8	4187.5	211.58	241.17	270.76	3413	12	100	116999	1443.6	1732.3	1876.7	1486.6	1800.6	2010	3182.5
42-995	O	30	0.375	39.17	78.2	32.9	37.81	42.71	20	0.472	9.2	1173.1	325.9	391	423.6	335.6	406.4	453.7	718.4
		762	9.525	995	4204.6	160.65	184.6	208.54	3413	12	233	160195	1449.5	1739.4	1884.3	1492.6	1808	2018.2	3195.5
43-688	O	20	0.625	27.09	79.2	50.01	57.12	64.24	20	0.472	7.1	791.7	329.9	395.8	428.8	339.7	411.4	459.3	727.2
		508	15.875	688	4256.3	244.19	278.91	313.63	3413	12	180	108109.3	1467.3	1760.8	1907.5	1511	1830.2	2043	3234.8
43-1029	O	30	0.394	40.51	79.2	33.68	38.75	43.83	20	0.472	10.5	1188.7	330.2	396.2	429.2	340	411.8	459.7	727.9
		762	10	1029	4260.4	164.43	189.21	213.98	3413	12	267	162320.7	1468.7	1762.5	1909.3	1512.4	1832	2045	3237.9
43-808	O	20	0.75	31.81	79.4	52.35	60.1	67.85	20	0.472	11.8	793.7	330.7	396.9	429.9	340.6	412.5	460.5	729.1
		508	19.05	808	4267.4	255.62	293.44	331.27	3413	12	300	108391.6	1471.1	1765.4	1912.5	1514.9	1835	2048.3	3243.2
43-910	O	24	0.562	35.81	79.5	42.91	49.35	55.78	20	0.472	11.8	953.5	331.1	397.3	430.4	340.9	413	461	729.9
		609.6	14.288	909.6	4272.1	209.52	240.93	272.33	3413	12	300	130212.2	1472.7	1767.3	1914.6	1516.6	1837	2050.6	3246.8
43-891	O	28	0.394	35.09	79.5	34.98	40.02	45.05	20	0.472	7.1	1112.7	331.2	397.4	430.5	341	413.1	461.1	730.1
		711.2	10	891.2	4273	170.79	195.38	219.97	3413	12	180	151949.1	1473.1	1767.7	1915	1516.9	1837.4	2051.1	3247.5
43-813	O	24	0.5	31.99	79.7	41.92	48.05	54.17	20	0.472	8	956.2	332	398.4	431.6	341.9	414.1	462.3	732
		609.6	12.7	812.6	4284.2	204.69	234.58	264.46	3413	12	203	130583.3	1476.9	1772.3	1920	1520.9	1842.2	2056.4	3256
43-1113	O	32	0.375	43.81	79.7	31.97	36.84	41.72	20	0.472	11.8	1276	332.3	398.7	432	342.2	414.5	462.7	732.5
		812.8	9.525	1112.8	4287.5	156.12	179.89	203.67	3413	12	300	174245.1	1478.1	1773.7	1921.5	1522.1	1843.6	2058	3258.5
43-978	O	28	0.438	38.51	80.1	36.5	41.97	47.44	20	0.472	10.5	1121.2	333.7	400.4	433.8	343.6	416.2	464.6	735.7
		711.2	11.112	978.2	4305.8	178.21	204.93	231.64	3413	12	267	153112.9	1484.4	1781.2	1929.7	1528.5	1851.5	2066.8	3272.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
43-1017	O	30	0.394	40.02	80.2	33.86	38.91	43.97	20	0.472	10	1203.3	334.2	401.1	434.5	344.2	416.9	465.4	736.9
		762	10	1016.5	4312.8	165.31	190	214.69	3413	12	254.5	164316.8	1486.8	1784.1	1932.8	1531	1854.5	2070.1	3277.7
43-710	O	24	0.438	27.94	80.5	40.74	46.43	52.12	20	0.472	3.9	965.7	335.3	402.4	435.9	345.3	418.3	466.9	739.2
		609.6	11.112	709.6	4326.7	198.91	226.69	254.48	3413	12	100	131878.2	1491.6	1789.9	1939.1	1536	1860.5	2076.8	3288.3
43-826	O	22	0.625	32.51	80.6	47.34	54.34	61.33	20	0.472	10.5	886.7	335.9	403.1	436.6	345.9	419	467.7	740.5
		558.8	15.875	825.8	4334	231.15	265.3	299.45	3413	12	267	121091.6	1494.1	1792.9	1942.3	1538.6	1863.6	2080.3	3293.8
43-965	O	30	0.375	37.99	80.6	33.57	38.51	43.45	20	0.472	8	1209.6	336	403.2	436.8	346	419.1	467.8	740.7
		762	9.525	965	4335.3	163.91	188.03	212.14	3413	12	203	165175.1	1494.5	1793.5	1942.9	1539	1864.2	2080.9	3294.8
44-966	O	28	0.438	38.02	81.1	36.72	42.18	47.64	20	0.472	10	1135.7	338	405.6	439.4	348.1	421.6	470.6	745.2
		711.2	11.112	965.7	4361.5	179.31	205.96	232.62	3413	12	254.5	155094.7	1503.6	1804.3	1954.6	1548.3	1875.4	2093.5	3314.7
44-608	O	20	0.562	23.94	81.4	50.23	57.2	64.18	20	0.472	3.9	813.9	339.1	407	440.9	349.2	423	472.2	747.6
		508	14.288	608	4375.9	245.24	279.3	313.36	3413	12	100	111147.2	1508.5	1810.2	1961.1	1553.4	1881.6	2100.4	3325.7
44-813	O	22	0.625	32.02	81.9	47.78	54.78	61.78	20	0.472	10	900.4	341	409.3	443.4	351.2	425.4	474.9	751.9
		558.8	15.875	813.3	4400.6	233.26	267.46	301.66	3413	12	254.5	122952.7	1517.1	1820.5	1972.2	1562.2	1892.3	2112.3	3344.5
44-995	O	30	0.394	39.17	82	34.34	39.42	44.5	20	0.472	9.2	1229.3	341.5	409.8	443.9	351.6	425.9	475.4	752.8
		762	10	995	4406	167.65	192.46	217.28	3413	12	233	167867.3	1518.9	1822.7	1974.6	1564.1	1894.6	2114.9	3348.5
44-790	O	24	0.5	31.09	82	42.39	48.44	54.49	20	0.472	7.1	984.1	341.7	410	444.2	351.9	426.2	475.8	753.3
		609.6	12.7	789.6	4409	206.97	236.5	266.03	3413	12	180	134387	1520	1823.9	1975.9	1565.2	1895.9	2116.3	3350.9
44-659	O	22	0.5	25.94	82.1	45.63	51.98	58.32	20	0.472	3.9	903.3	342.2	410.6	444.8	352.4	426.8	476.4	754.3
		558.8	12.7	658.8	4415	222.78	253.77	284.76	3413	12	100	123356.3	1522	1826.4	1978.6	1567.3	1898.5	2119.2	3355.4
44-1080	O	32	0.375	42.51	82.2	32.59	37.48	42.38	20	0.472	10.5	1315	342.4	410.9	445.2	352.6	427.1	476.8	754.9
		812.8	9.525	1079.8	4418.6	159.1	183	206.91	3413	12	267	179570.3	1523.2	1827.9	1980.2	1568.6	1900	2120.9	3358.1
44-623	O	22	0.472	24.52	82.4	45.41	51.68	57.94	20	0.472	2.5	906.3	343.3	411.9	446.3	353.5	428.2	478	756.8
		558.8	12	622.8	4429.6	221.7	252.3	282.9	3413	12	64	123762	1527	1832.4	1985.1	1572.5	1904.7	2126.2	3366.5
44-877	O	24	0.562	34.51	82.5	44.08	50.6	57.13	20	0.472	10.5	989.4	343.5	412.3	446.6	353.8	428.5	478.3	757.4
		609.6	14.288	876.6	4432.9	215.2	247.06	278.91	3413	12	267	135114.1	1528.2	1833.8	1986.6	1573.7	1906.1	2127.8	3369
44-942	O	30	0.375	37.09	82.6	33.76	38.61	43.46	20	0.472	7.1	1239.1	344.2	413	447.4	354.4	429.3	479.2	758.8
		762	9.525	942	4441.2	164.83	188.5	212.17	3413	12	180	169208.1	1531	1837.2	1990.3	1576.6	1909.7	2131.8	3375.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
44-775	O	20	0.75	30.51	82.8	54.07	61.98	69.89	20	0.472	10.5	827.5	344.8	413.8	448.2	355.1	430.1	480.1	760.1
		508	19.05	775	4449.1	264.01	302.61	341.22	3413	12	267	113007	1533.8	1840.5	1993.9	1579.4	1913.1	2135.6	3381.3
45-944	O	28	0.438	37.17	83	37.3	42.79	48.29	20	0.472	9.2	1161.6	345.7	414.9	449.4	356	431.2	481.4	762.2
		711.2	11.112	944.2	4460.8	182.09	208.92	235.76	3413	12	233	158626.4	1537.8	1845.4	1999.2	1583.6	1918.1	2141.2	3390.2
45-1067	O	32	0.375	42.02	83.1	32.74	37.62	42.5	20	0.472	10	1330.4	346.4	415.7	450.4	356.8	432.1	482.4	763.8
		812.8	9.525	1067.3	4470.3	159.86	183.68	207.51	3413	12	254.5	181673.4	1541.1	1849.3	2003.4	1587	1922.2	2145.7	3397.4
45-811	O	28	0.375	31.94	83.3	35.8	40.8	45.8	20	0.472	3.9	1166.7	347.2	416.7	451.4	357.6	433.1	483.5	765.5
		711.2	9.525	811.2	4480.5	174.8	199.2	223.6	3413	12	100	159325.7	1544.6	1853.5	2008	1590.6	1926.6	2150.6	3405.2
45-1011	O	28	0.472	39.81	83.3	38.14	43.87	49.6	20	0.472	11.8	1166.9	347.3	416.7	451.5	357.6	433.2	483.5	765.6
		711.2	12	1011.2	4481	186.22	214.19	242.16	3413	12	300	159344.3	1544.8	1853.7	2008.2	1590.8	1926.8	2150.9	3405.6
45-1113	O	32	0.394	43.81	83.6	33.34	38.38	43.43	20	0.472	11.8	1337.2	348.2	417.9	452.7	358.6	434.4	484.9	767.7
		812.8	10	1112.8	4493.4	162.8	187.41	212.02	3413	12	300	182613.2	1549.1	1858.9	2013.8	1595.2	1932.2	2156.8	3415
45-864	O	24	0.562	34.02	83.6	44.44	50.96	57.49	20	0.472	10	1003.7	348.5	418.2	453.1	358.9	434.7	485.3	768.3
		609.6	14.288	864.1	4497	216.96	248.82	280.69	3413	12	254.5	137068.6	1550.3	1860.3	2015.4	1596.4	1933.7	2158.6	3417.7
45-521	O	18	0.625	20.52	83.8	57.71	65.63	73.54	20	0.472	2.5	753.9	349	418.8	453.7	359.4	435.3	485.9	769.4
		457.2	15.875	521.2	4503.3	281.74	320.41	359.07	3413	12	64	102945.3	1552.5	1862.9	2018.2	1598.7	1936.4	2161.6	3422.5
45-792	O	22	0.625	31.17	84.1	48.76	55.85	62.93	20	0.472	9.2	924.8	350.3	420.4	455.4	360.7	436.9	487.8	772.3
		558.8	15.875	791.8	4520.1	238.05	272.66	307.27	3413	12	233	126291.3	1558.2	1869.9	2025.7	1604.6	1943.6	2169.6	3435.3
45-763	O	20	0.75	30.02	84.1	54.65	62.58	70.51	20	0.472	10	841.1	350.5	420.5	455.6	360.9	437.1	488	772.6
		508	19.05	762.5	4522	266.8	305.53	344.25	3413	12	254.5	114859.6	1558.9	1870.7	2026.6	1605.3	1944.5	2170.6	3436.7
45-965	O	30	0.394	37.99	84.5	35.05	40.17	45.29	20	0.472	8	1267.5	352.1	422.5	457.7	362.6	439.2	490.2	776.2
		762	10	965	4542.9	171.13	196.14	221.15	3413	12	203	173086	1566.1	1879.3	2036	1612.7	1953.5	2180.6	3452.6
45-470	O	16	0.75	18.52	84.6	67.14	76.32	85.49	20	0.472	2.5	676.9	352.6	423.1	458.3	363.1	439.8	490.9	777.3
		406.4	19.05	470.4	4549.3	327.81	372.61	417.41	3413	12	64	92441.8	1568.3	1882	2038.8	1615	1956.2	2183.7	3457.5
46-674	O	24	0.438	26.52	84.8	42.52	48.38	54.24	20	0.472	2.5	1017.3	353.2	423.9	459.2	363.8	440.6	491.8	778.7
		609.6	11.112	673.6	4558	207.59	236.21	264.82	3413	12	64	138926.4	1571.3	1885.6	2042.7	1618.1	1959.9	2187.8	3464
46-1046	O	32	0.375	41.17	84.9	33.18	38.08	42.97	20	0.472	9.2	1357.7	353.6	424.3	459.6	364.1	441	492.3	779.5
		812.8	9.525	1045.8	4562.2	161.98	185.9	209.82	3413	12	233	185408.3	1572.8	1887.3	2044.6	1619.6	1961.8	2189.9	3467.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
46-1062	O	30	0.438	41.81	84.9	36.14	41.57	47.01	20	0.472	11.8	1274.2	354	424.7	460.1	364.5	441.5	492.8	780.3
		762	11.112	1062	4567.1	176.46	202.98	229.51	3413	12	300	174007.5	1574.5	1889.4	2046.8	1621.3	1963.9	2192.2	3471
46-914	O	28	0.438	35.99	85.7	38.14	43.7	49.25	20	0.472	8	1199.7	357.1	428.5	464.2	367.7	445.4	497.2	787.2
		711.2	11.112	914.2	4607.2	186.24	213.34	240.44	3413	12	203	163831.8	1588.3	1905.9	2064.8	1635.6	1981.1	2211.5	3501.5
46-843	O	24	0.562	33.17	85.8	45.27	51.87	58.46	20	0.472	9.2	1029.3	357.4	428.9	464.6	368.1	445.8	497.6	787.9
		609.6	14.288	842.6	4611.7	221.04	253.23	285.43	3413	12	233	140566.1	1589.8	1907.8	2066.8	1637.2	1983.1	2213.6	3504.9
46-1080	O	32	0.394	42.51	86.1	34	39.07	44.14	20	0.472	10.5	1378.1	358.9	430.7	466.5	369.6	447.6	499.7	791.2
		812.8	10	1079.8	4630.8	165.98	190.75	215.52	3413	12	267	188194.1	1596.4	1915.7	2075.3	1643.9	1991.2	2222.8	3519.4
46-978	O	28	0.472	38.51	86.2	39.02	44.81	50.6	20	0.472	10.5	1206.2	359	430.8	466.7	369.7	447.8	499.8	791.4
		711.2	12	978.2	4632.2	190.53	218.78	247.04	3413	12	267	164719.9	1596.9	1916.3	2075.9	1644.4	1991.8	2223.4	3520.4
46-1164	O	34	0.375	45.81	86.3	32.26	37.13	41.99	20	0.472	11.8	1466.7	359.5	431.4	467.3	370.2	448.4	500.5	792.5
		863.6	9.525	1163.6	4638.5	157.5	181.27	205.03	3413	12	300	200292.2	1599.1	1918.9	2078.8	1646.7	1994.6	2226.5	3525.3
47-572	O	20	0.562	22.52	86.5	52.92	60.18	67.44	20	0.472	2.5	865.1	360.5	432.6	468.6	371.2	449.6	501.9	794.7
		508	14.288	572	4651.3	258.37	293.81	329.25	3413	12	64	118142.5	1603.5	1924.2	2084.5	1651.2	2000	2232.6	3535
47-710	O	24	0.472	27.94	86.5	43.7	49.77	55.83	20	0.472	3.9	1038.3	360.5	432.6	468.7	371.2	449.7	502	794.8
		609.6	12	709.6	4651.8	213.39	242.98	272.57	3413	12	100	141786.9	1603.7	1924.4	2084.7	1651.4	2000.3	2232.9	3535.4
47-741	O	20	0.75	29.17	86.6	55.89	63.94	71.99	20	0.472	9.2	865.5	360.6	432.8	468.8	371.4	449.8	502.1	795
		508	19.05	741	4653.2	272.89	312.19	351.48	3413	12	233	118192.2	1604.1	1925	2085.4	1651.9	2000.9	2233.6	3536.5
47-942	O	30	0.394	37.09	86.6	35.27	40.31	45.35	20	0.472	7.1	1298.4	360.7	432.8	468.9	371.4	449.9	502.2	795.1
		762	10	942	4653.9	172.22	196.81	221.41	3413	12	180	177312.1	1604.4	1925.2	2085.7	1652.1	2001.2	2233.9	3536.9
47-623	O	22	0.5	24.52	86.9	47.83	54.4	60.97	20	0.472	2.5	955.5	361.9	434.3	470.5	372.7	451.5	504	797.9
		558.8	12.7	622.8	4670.2	233.55	265.62	297.7	3413	12	64	130486.7	1610	1932	2093	1657.9	2008.2	2241.7	3549.4
47-1067	O	32	0.394	42.02	87.1	34.17	39.23	44.28	20	0.472	10	1394.3	363.1	435.7	472	373.9	452.9	505.5	800.5
		812.8	10	1067.3	4685	166.83	191.52	216.21	3413	12	254.5	190398.2	1615.1	1938.1	2099.6	1663.2	2014.5	2248.8	3560.6
47-775	O	28	0.375	30.52	87.2	37.12	42.23	47.34	20	0.472	2.5	1220.9	363.4	436	472.4	374.2	453.2	505.9	801.1
		711.2	9.525	775.2	4688.5	181.22	206.19	231.16	3413	12	64	166724.7	1616.3	1939.6	2101.2	1664.4	2016.1	2250.5	3563.3
47-966	O	28	0.472	38.02	87.3	39.28	45.06	50.84	20	0.472	10	1221.8	363.6	436.4	472.7	374.5	453.6	506.3	801.7
		711.2	12	965.7	4692.1	191.78	220	248.22	3413	12	254.5	166852	1617.6	1941.1	2102.8	1665.7	2017.6	2252.2	3566

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
47-811	O	28	0.394	31.94	87.3	37.44	42.64	47.84	20	0.472	3.9	1222.4	363.8	436.6	473	374.6	453.8	506.6	802.1
		711.2	10	811.2	4694.4	182.79	208.19	233.59	3413	12	100	166934.2	1618.4	1942	2103.9	1666.5	2018.6	2253.3	3567.8
47-1016	O	32	0.375	39.99	87.4	33.82	38.75	43.68	20	0.472	8	1397.8	364	436.8	473.2	374.9	454	506.8	802.5
		812.8	9.525	1015.8	4696.9	165.12	189.19	213.27	3413	12	203	190884	1619.2	1943.1	2105	1667.4	2019.7	2254.5	3569.7
47-762	O	22	0.625	29.99	87.4	50.23	57.45	64.66	20	0.472	8	961.2	364.1	436.9	473.3	374.9	454.2	507	802.7
		558.8	15.875	761.8	4698.1	245.23	280.47	315.71	3413	12	203	131264.7	1619.6	1943.5	2105.5	1667.8	2020.2	2255.1	3570.5
47-910	O	24	0.625	35.81	87.6	47	53.94	60.89	20	0.472	11.8	1051.2	365	438	474.5	375.9	455.3	508.2	804.6
		609.6	15.875	909.6	4709.5	229.47	263.37	297.27	3413	12	300	143545.5	1623.5	1948.2	2110.6	1671.9	2025.1	2260.6	3579.2
47-1029	O	30	0.438	40.51	87.7	36.92	42.39	47.87	20	0.472	10.5	1315.1	365.3	438.4	474.9	376.2	455.7	508.6	805.3
		762	11.112	1029	4713.6	180.24	206.99	233.74	3413	12	267	179587.9	1625	1949.9	2112.4	1673.3	2026.8	2262.5	3582.3
47-891	O	28	0.438	35.09	87.9	38.46	43.93	49.4	20	0.472	7.1	1230.7	366.3	439.5	476.2	377.2	456.9	510	807.5
		711.2	11.112	891.2	4726.1	187.78	214.5	241.21	3413	12	180	168059.9	1629.3	1955.1	2118	1677.8	2032.2	2268.5	3591.8
47-1011	O	28	0.5	39.81	87.9	40.06	46.03	52	20	0.472	11.8	1231.3	366.4	439.7	476.4	377.4	457.1	510.2	807.9
		711.2	12.7	1011.2	4728.3	195.6	224.74	253.88	3413	12	300	168138.8	1630	1956	2119	1678.6	2033.2	2269.6	3593.5
48-1017	O	30	0.438	40.02	88.8	37.13	42.6	48.07	20	0.472	10	1331.3	369.8	443.8	480.7	380.8	461.3	514.9	815.2
		762	11.112	1016.5	4771.6	181.3	208	234.69	3413	12	254.5	181796.4	1644.9	1973.9	2138.4	1693.9	2051.8	2290.3	3626.4
48-1131	O	34	0.375	44.51	88.8	32.85	37.74	42.64	20	0.472	10.5	1509.5	370	444	481	381	461.5	515.1	815.6
		863.6	9.525	1130.6	4773.9	160.39	184.28	208.17	3413	12	267	206138.3	1645.8	1974.9	2139.5	1694.7	2052.8	2291.5	3628.2
48-1046	O	32	0.394	41.17	88.9	34.63	39.71	44.79	20	0.472	9.2	1422.9	370.6	444.7	481.7	381.6	462.2	515.9	816.9
		812.8	10	1045.8	4781.3	169.09	193.9	218.71	3413	12	233	194312.5	1648.3	1978	2142.8	1697.4	2056	2295	3633.8
48-813	O	24	0.562	31.99	88.9	46.52	53.22	59.92	20	0.472	8	1067.3	370.6	444.7	481.8	381.6	462.3	516	817
		609.6	14.288	812.6	4782	227.15	259.84	292.53	3413	12	203	145755.6	1648.5	1978.2	2143.1	1697.6	2056.3	2295.4	3634.3
48-944	O	28	0.472	37.17	89.3	39.91	45.73	51.55	20	0.472	9.2	1249.7	371.9	446.3	483.5	383	463.9	517.8	819.9
		711.2	12	944.2	4799	194.85	223.28	251.71	3413	12	233	170651.3	1654.4	1985.3	2150.7	1703.6	2063.6	2303.5	3647.2
48-993	O	32	0.375	39.09	89.4	34	38.85	43.69	20	0.472	7.1	1430.2	372.4	446.9	484.2	383.5	464.6	518.6	821.1
		812.8	9.525	992.8	4805.8	166.01	189.67	213.34	3413	12	180	195306.2	1656.7	1988.1	2153.7	1706	2066.5	2306.8	3652.4
48-608	O	20	0.625	23.94	89.6	55.27	62.88	70.48	20	0.472	3.9	895.8	373.3	447.9	485.2	384.4	465.6	519.7	822.9
		508	15.875	608	4816.3	269.85	306.99	344.12	3413	12	100	122334.2	1660.4	1992.4	2158.5	1709.8	2071	2311.8	3660.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
48-1118	O	34	0.375	44.02	89.8	33	37.88	42.76	20	0.472	10	1526.4	374.1	448.9	486.4	385.3	466.6	520.9	824.8
		863.6	9.525	1118.1	4827.3	161.14	184.94	208.75	3413	12	254.5	208442.9	1664.2	1997	2163.4	1713.7	2075.7	2317.1	3668.7
48-739	O	22	0.625	29.09	90.1	50.99	58.16	65.33	20	0.472	7.1	991.2	375.4	450.5	488.1	386.6	468.3	522.7	827.7
		558.8	15.875	738.8	4844.4	248.93	283.96	318.98	3413	12	180	135351.2	1670	2004	2171	1719.7	2083.1	2325.3	3681.7
48-711	O	20	0.75	27.99	90.2	57.77	66	74.22	20	0.472	8	902	375.8	451	488.6	387	468.8	523.3	828.6
		508	19.05	711	4849.6	282.05	322.22	362.4	3413	12	203	123179.2	1671.8	2006.2	2173.4	1721.6	2085.3	2327.8	3685.7
49-862	O	30	0.375	33.94	90.3	35.96	40.95	45.93	20	0.472	3.9	1354.1	376.1	451.4	489	387.3	469.2	523.7	829.2
		762	9.525	862	4853.3	175.57	199.92	224.27	3413	12	100	184911.8	1673.1	2007.7	2175.1	1722.9	2086.9	2329.6	3688.5
49-1164	O	34	0.394	45.81	90.4	33.65	38.69	43.73	20	0.472	11.8	1537.3	376.8	452.1	489.8	388	470	524.6	830.7
		863.6	10	1163.6	4861.8	164.3	188.92	213.53	3413	12	300	209932.1	1676	2011.2	2178.9	1725.9	2090.6	2333.7	3695
49-995	O	30	0.438	39.17	90.7	37.68	43.19	48.69	20	0.472	9.2	1360	377.8	453.3	491.1	389	471.2	526	832.9
		762	11.112	995	4874.7	183.99	210.85	237.71	3413	12	233	185724.6	1680.5	2016.6	2184.6	1730.5	2096.1	2339.8	3704.7
49-877	O	24	0.625	34.51	90.9	48.32	55.37	62.43	20	0.472	10.5	1090.7	378.7	454.5	492.3	390	472.4	527.3	834.9
		609.6	15.875	876.6	4886.8	235.91	270.35	304.79	3413	12	267	148949.3	1684.7	2021.6	2190.1	1734.8	2101.3	2345.7	3714
49-978	O	28	0.5	38.51	90.9	41.01	47.04	53.08	20	0.472	10.5	1272.8	378.8	454.6	492.4	390.1	472.5	527.4	835.1
		711.2	12.7	978.2	4887.8	200.22	229.69	259.15	3413	12	267	173811.1	1685	2022	2190.5	1735.2	2101.8	2346.2	3714.7
49-674	O	24	0.472	26.52	91.1	45.64	51.89	58.14	20	0.472	2.5	1093.8	379.8	455.7	493.7	391.1	473.7	528.8	837.3
		609.6	12	673.6	4900.4	222.84	253.36	283.88	3413	12	64	149364.6	1689.4	2027.2	2196.2	1739.6	2107.2	2352.2	3724.3
49-710	O	24	0.5	27.94	91.3	46.04	52.39	58.74	20	0.472	3.9	1095	380.2	456.3	494.3	391.5	474.3	529.4	838.2
		609.6	12.7	709.6	4906.1	224.77	255.78	286.79	3413	12	100	149537.8	1691.3	2029.6	2198.7	1741.7	2109.6	2354.9	3728.6
49-859	O	22	0.75	33.81	91.3	53.81	61.67	69.53	20	0.472	11.8	1004.3	380.4	456.5	494.5	391.7	474.5	529.7	838.7
		558.8	19.05	858.8	4908.6	262.73	301.1	339.46	3413	12	300	137145.5	1692.2	2030.6	2199.8	1742.5	2110.7	2356.1	3730.5
49-775	O	28	0.394	30.52	91.4	38.83	44.16	49.49	20	0.472	2.5	1279.2	380.7	456.9	494.9	392	474.9	530.1	839.3
		711.2	10	775.2	4912.4	189.58	215.6	241.61	3413	12	64	174686.5	1693.5	2032.2	2201.6	1743.9	2112.4	2358	3733.5
49-1062	O	30	0.472	41.81	91.4	38.64	44.38	50.13	20	0.472	11.8	1371.2	380.9	457.1	495.1	392.2	475.1	530.3	839.7
		762	12	1062	4914.6	188.64	216.69	244.73	3413	12	300	187245.8	1694.2	2033.1	2202.5	1744.7	2113.3	2359	3735.1
49-790	O	24	0.562	31.09	91.5	47.12	53.76	60.4	20	0.472	7.1	1098.4	381.4	457.7	495.8	392.8	475.7	531	840.8
		609.6	14.288	789.6	4921.3	230.08	262.5	294.92	3413	12	180	150001.3	1696.6	2035.9	2205.5	1747.1	2116.2	2362.2	3740.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
49-1097	O	34	0.375	43.17	91.5	33.42	38.32	43.21	20	0.472	9.2	1556.3	381.5	457.7	495.9	392.8	475.8	531.1	840.9
		863.6	9.525	1096.6	4921.9	163.18	187.08	210.98	3413	12	233	212529.6	1696.8	2036.1	2205.8	1747.3	2116.4	2362.5	3740.7
49-1016	O	32	0.394	39.99	91.6	35.32	40.44	45.56	20	0.472	8	1464.9	381.5	457.8	495.9	392.9	475.8	531.2	841
		812.8	10	1015.8	4922.5	172.43	197.43	222.42	3413	12	203	200051.2	1697	2036.4	2206.1	1747.5	2116.7	2362.8	3741.1
50-966	O	28	0.5	38.02	92.1	41.29	47.32	53.35	20	0.472	10	1289.3	383.7	460.5	498.8	395.1	478.6	534.3	845.9
		711.2	12.7	965.7	4951.1	201.6	231.04	260.49	3413	12	254.5	176060.9	1706.8	2048.2	2218.9	1757.6	2129	2376.5	3762.8
50-914	O	28	0.472	35.99	92.2	40.84	46.73	52.62	20	0.472	8	1290.7	384.1	461	499.4	395.6	479.1	534.8	846.8
		711.2	12	914.2	4956.5	199.42	228.17	256.92	3413	12	203	176251.4	1708.7	2050.4	2221.3	1759.5	2131.3	2379.1	3766.9
50-864	O	24	0.625	34.02	92.2	48.74	55.8	62.87	20	0.472	10	1106.5	384.2	461	499.5	395.6	479.2	535	847
		609.6	15.875	864.1	4957.5	237.96	272.45	306.94	3413	12	254.5	151104	1709	2050.8	2221.7	1759.9	2131.7	2379.6	3767.7
50-1113	O	32	0.438	43.81	92.5	36.54	41.98	47.42	20	0.472	11.8	1479.9	385.4	462.5	501	396.9	480.7	536.6	849.6
		812.8	11.112	1112.8	4972.8	178.41	204.98	231.54	3413	12	300	202093.8	1714.3	2057.2	2228.6	1765.3	2138.3	2386.9	3779.3
50-1214	O	36	0.375	47.81	92.9	32.52	37.39	42.25	20	0.472	11.8	1671.3	386.9	464.3	502.9	398.4	482.6	538.7	852.9
		914.4	9.525	1214.4	4992	158.78	182.53	206.28	3413	12	300	228232	1720.9	2065.1	2237.2	1772.1	2146.5	2396.1	3793.9
50-1131	O	34	0.394	44.51	93.1	34.28	39.36	44.43	20	0.472	10.5	1582.2	387.8	465.3	504.1	399.3	483.7	539.9	854.9
		863.6	10	1130.6	5003.7	167.39	192.15	216.91	3413	12	267	216059.6	1725	2070	2242.5	1776.3	2151.6	2401.8	3802.8
50-688	O	20	0.75	27.09	93.2	58.84	67.05	75.26	20	0.472	7.1	932.2	388.4	466.1	504.9	400	484.5	540.8	856.3
		508	19.05	688	5011.7	287.26	327.36	367.47	3413	12	180	127297.1	1727.7	2073.3	2246	1779.2	2155	2405.6	3808.9
50-965	O	30	0.438	37.99	93.5	38.5	44.05	49.61	20	0.472	8	1402.3	389.5	467.4	506.4	401.1	485.9	542.4	858.8
		762	11.112	965	5026.2	187.98	215.09	242.21	3413	12	203	191498.4	1732.7	2079.3	2252.5	1784.3	2161.3	2412.6	3819.9
50-993	O	32	0.394	39.09	93.7	35.54	40.57	45.61	20	0.472	7.1	1498.9	390.3	468.4	507.4	402	486.9	543.5	860.5
		812.8	10	992.8	5036.6	173.5	198.1	222.7	3413	12	180	204685.7	1736.3	2083.5	2257.2	1788	2165.7	2417.5	3827.8
51-1118	O	34	0.394	44.02	94.1	34.45	39.51	44.57	20	0.472	10	1599.9	392.1	470.5	509.8	403.8	489.1	546	864.5
		863.6	10	1118.1	5059.6	168.21	192.9	217.59	3413	12	254.5	218475.1	1744.2	2093.1	2267.5	1796.2	2175.6	2428.6	3845.3
51-1067	O	34	0.375	41.99	94.1	34.04	38.97	43.89	20	0.472	8	1600.1	392.2	470.6	509.8	403.9	489.2	546.1	864.6
		863.6	9.525	1066.6	5060.4	166.2	190.25	214.3	3413	12	203	218507.4	1744.5	2093.4	2267.9	1796.4	2176	2429	3845.9
51-944	O	28	0.5	37.17	94.2	41.97	48.04	54.12	20	0.472	9.2	1318.6	392.4	470.9	510.2	404.1	489.5	546.4	865.2
		711.2	12.7	944.2	5063.8	204.89	234.58	264.26	3413	12	233	180069.9	1745.7	2094.8	2269.4	1797.7	2177.4	2430.6	3848.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
51-826	O	30	0.375	32.52	94.2	37.2	42.3	47.39	20	0.472	2.5	1413.1	392.5	471	510.3	404.2	489.6	546.5	865.4
		762	9.525	826	5064.9	181.63	206.51	231.39	3413	12	64	192970.9	1746	2095.3	2269.9	1798	2177.9	2431.1	3849.3
51-1029	O	30	0.472	40.51	94.3	39.49	45.29	51.09	20	0.472	10.5	1415.1	393.1	471.7	511	404.8	490.3	547.3	866.6
		762	12	1029	5072.2	192.81	221.13	249.45	3413	12	267	193250.7	1748.6	2098.3	2273.2	1800.6	2181	2434.7	3854.9
51-843	O	24	0.625	33.17	94.6	49.68	56.83	63.97	20	0.472	9.2	1134.7	394	472.8	512.2	405.7	491.5	548.6	868.6
		609.6	15.875	842.6	5084	242.58	277.47	312.35	3413	12	233	154959.6	1752.6	2103.2	2278.4	1804.8	2186.1	2440.3	3863.8
51-891	O	28	0.472	35.09	94.6	41.23	47.05	52.87	20	0.472	7.1	1324	394	472.8	512.3	405.8	491.5	548.6	868.7
		711.2	12	891.2	5084.4	201.3	229.71	258.11	3413	12	180	180800	1752.8	2103.3	2278.6	1804.9	2186.3	2440.5	3864.1
51-862	O	30	0.394	33.94	94.6	37.61	42.81	48	20	0.472	3.9	1418.9	394.1	473	512.4	405.9	491.6	548.8	868.9
		762	10	862	5085.8	183.64	209	234.36	3413	12	100	193768	1753.3	2103.9	2279.2	1805.4	2186.9	2441.2	3865.2
51-826	O	22	0.75	32.51	94.9	55.48	63.49	71.51	20	0.472	10.5	1044.4	395.6	474.7	514.3	407.4	493.5	550.8	872.2
		558.8	19.05	825.8	5104.7	270.89	310.01	349.13	3413	12	267	142626	1759.8	2111.7	2287.7	1812.2	2195	2450.3	3879.6
51-572	O	20	0.625	22.52	95.2	58.28	66.21	74.13	20	0.472	2.5	952.2	396.8	476.1	515.8	408.6	494.9	552.4	874.7
		508	15.875	572	5119.4	284.54	323.25	361.95	3413	12	64	130033.6	1764.9	2117.8	2294.3	1817.4	2201.4	2457.3	3890.8
51-1080	O	32	0.438	42.51	95.3	37.29	42.78	48.26	20	0.472	10.5	1525.1	397.2	476.6	516.3	409	495.4	553	875.6
		812.8	11.112	1079.8	5124.8	182.07	208.85	235.63	3413	12	267	208270.1	1766.7	2120	2296.7	1819.3	2203.6	2459.9	3894.8
51-1181	O	36	0.375	46.51	95.4	33.09	37.98	42.87	20	0.472	10.5	1718	397.7	477.2	517	409.5	496	553.7	876.7
		914.4	9.525	1181.4	5131.4	161.57	185.45	209.32	3413	12	267	234607.2	1769	2122.8	2299.7	1821.6	2206.5	2463.1	3899.9
51-1017	O	30	0.472	40.02	95.5	39.74	45.53	51.33	20	0.472	10	1432.5	397.9	477.5	517.3	409.8	496.3	554.1	877.3
		762	12	1016.5	5134.6	194.03	222.32	250.6	3413	12	254.5	195627.2	1770.1	2124.1	2301.1	1822.8	2207.9	2464.6	3902.3
51-910	O	24	0.688	35.81	95.6	51.06	58.51	65.97	20	0.472	11.8	1147.2	398.3	478	517.8	410.2	496.9	554.6	878.2
		609.6	17.462	909.6	5139.8	249.31	285.7	322.08	3413	12	300	156661.2	1771.9	2126.3	2303.4	1824.6	2210.1	2467.1	3906.2
51-942	O	30	0.438	37.09	95.8	38.81	44.29	49.77	20	0.472	7.1	1436.6	399	478.9	518.8	410.9	497.7	555.6	879.7
		762	11.112	942	5148.9	189.48	216.23	242.98	3413	12	180	196174.1	1775	2130	2307.5	1827.9	2214	2471.5	3913.2
52-1097	O	34	0.394	43.17	96	34.9	39.98	45.06	20	0.472	9.2	1631.2	399.8	479.8	519.8	411.7	498.7	556.7	881.4
		863.6	10	1096.6	5158.8	170.39	195.2	220	3413	12	233	222758.5	1778.4	2134.1	2312	1831.4	2218.3	2476.2	3920.7
52-674	O	24	0.5	26.52	96.1	48.1	54.66	61.21	20	0.472	2.5	1153.6	400.5	480.7	520.7	412.5	499.6	557.7	883
		609.6	12.7	673.6	5168.3	234.83	266.85	298.87	3413	12	64	157529.7	1781.7	2138	2316.2	1834.7	2222.4	2480.8	3927.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
52-1044	O	34	0.375	41.09	96.2	34.22	39.07	43.91	20	0.472	7.1	1635.4	400.8	481	521.1	412.8	500	558.1	883.6
		863.6	9.525	1043.6	5171.9	167.08	190.73	214.39	3413	12	180	223323.1	1783	2139.5	2317.8	1836	2223.9	2482.5	3930.7
52-813	O	22	0.75	32.02	96.4	56.04	64.08	72.11	20	0.472	10	1060.5	401.7	482	522.2	413.7	501	559.3	885.6
		558.8	19.05	813.3	5183.2	273.61	312.85	352.09	3413	12	254.5	144818.1	1786.8	2144.2	2322.9	1840	2228.8	2487.9	3939.2
52-1067	O	32	0.438	42.02	96.4	37.5	42.98	48.45	20	0.472	10	1543	401.8	482.2	522.4	413.8	501.2	559.5	885.8
		812.8	11.112	1067.3	5184.8	183.11	209.84	236.56	3413	12	254.5	210709.3	1787.4	2144.9	2323.6	1840.6	2229.5	2488.7	3940.4
52-1169	O	36	0.375	46.02	96.5	33.24	38.12	42.99	20	0.472	10	1736.4	401.9	482.3	522.5	413.9	501.3	559.6	886.1
		914.4	9.525	1168.9	5186.3	162.3	186.09	209.89	3413	12	254.5	237116.1	1787.9	2145.5	2324.3	1841.1	2230.1	2489.4	3941.6
52-1062	O	30	0.5	41.81	96.5	40.6	46.59	52.58	20	0.472	11.8	1447.1	402	482.4	522.6	413.9	501.4	559.7	886.2
		762	12.7	1062	5186.9	198.23	227.47	256.72	3413	12	300	197619.6	1788.1	2145.7	2324.5	1841.3	2230.4	2489.7	3942
52-811	O	28	0.438	31.94	96.6	41.26	46.94	52.62	20	0.472	3.9	1352	402.4	482.9	523.1	414.4	501.9	560.3	887.1
		711.2	11.112	811.2	5192.2	201.46	229.19	256.93	3413	12	100	184633.9	1789.9	2147.9	2326.9	1843.2	2232.6	2492.2	3946.1
52-913	O	32	0.375	35.94	97.2	36.1	41.08	46.05	20	0.472	3.9	1555.5	405.1	486.1	526.6	417.1	505.3	564	893
		812.8	9.525	912.8	5227	176.26	200.56	224.86	3413	12	100	212423.3	1801.9	2162.3	2342.5	1855.6	2247.6	2508.9	3972.5
52-914	O	28	0.5	35.99	97.3	42.97	49.12	55.28	20	0.472	8	1361.9	405.3	486.4	526.9	417.4	505.6	564.4	893.6
		711.2	12.7	914.2	5230	209.79	239.83	269.88	3413	12	203	185979	1803	2163.6	2343.9	1856.7	2248.9	2510.4	3974.8
52-1214	O	36	0.394	47.81	97.3	33.93	38.98	44.02	20	0.472	11.8	1751.9	405.5	486.6	527.2	417.6	505.8	564.7	894
		914.4	10	1214.4	5232.7	165.68	190.3	214.92	3413	12	300	239239.1	1803.9	2164.7	2345.1	1857.6	2250.1	2511.7	3976.9
52-995	O	30	0.472	39.17	97.6	40.35	46.18	52.02	20	0.472	9.2	1463.5	406.5	487.8	528.5	418.6	507.1	566	896.2
		762	12	995	5245.5	196.99	225.48	253.96	3413	12	233	199854.3	1808.3	2170	2350.8	1862.2	2255.6	2517.8	3986.6
53-813	O	24	0.625	31.99	98.1	51.1	58.37	65.63	20	0.472	8	1176.6	408.6	490.3	531.1	420.7	509.6	568.9	900.7
		609.6	15.875	812.6	5271.7	249.48	284.97	320.45	3413	12	203	160680.5	1817.3	2180.8	2362.5	1871.4	2266.8	2530.4	4006.5
53-521	O	18	0.75	20.52	98.2	68.1	77.32	86.54	20	0.472	2.5	883.7	409.1	491	531.9	421.3	510.3	569.7	902
		457.2	19.05	521.2	5279.2	332.5	377.5	422.51	3413	12	64	120681.8	1819.9	2183.9	2365.9	1874.1	2270	2534	4012.2
53-1147	O	36	0.375	45.17	98.3	33.65	38.54	43.43	20	0.472	9.2	1768.9	409.5	491.4	532.3	421.7	510.7	570.1	902.7
		914.4	9.525	1147.4	5283.4	164.27	188.16	212.04	3413	12	233	241559.2	1821.4	2185.7	2367.8	1875.6	2271.9	2536.1	4015.4
53-1011	O	28	0.562	39.81	98.3	44.4	50.91	57.42	20	0.472	11.8	1375.9	409.5	491.4	532.3	421.7	510.8	570.1	902.7
		711.2	14.288	1011.2	5283.7	216.79	248.58	280.37	3413	12	300	187886.7	1821.5	2185.8	2367.9	1875.7	2272	2536.2	4015.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
53-1046	O	32	0.438	41.17	98.4	38.03	43.54	49.05	20	0.472	9.2	1574.7	410.1	492.1	533.1	422.3	511.5	571	904.1
		812.8	11.112	1045.8	5291.4	185.7	212.59	239.48	3413	12	233	215041.1	1824.1	2189	2371.4	1878.4	2275.3	2539.9	4021.4
53-1067	O	34	0.394	41.99	98.7	35.56	40.68	45.79	20	0.472	8	1677.1	411.1	493.3	534.4	423.3	512.7	572.3	906.2
		863.6	10	1066.6	5303.9	173.62	198.6	223.57	3413	12	203	229024	1828.5	2194.2	2377	1882.9	2280.7	2545.9	4031
53-826	O	30	0.394	32.52	98.7	38.93	44.24	49.55	20	0.472	2.5	1480.8	411.3	493.6	534.7	423.6	513.1	572.7	906.8
		762	10	826	5307.4	190.06	215.99	241.92	3413	12	64	202213.1	1829.7	2195.6	2378.6	1884.1	2282.2	2547.6	4033.6
53-792	O	22	0.75	31.17	99	57.25	65.39	73.54	20	0.472	9.2	1089.3	412.6	495.1	536.4	424.9	514.7	574.5	909.6
		558.8	19.05	791.8	5323.9	279.5	319.29	359.08	3413	12	233	148750.3	1835.4	2202.4	2386	1890	2289.3	2555.5	4046.2
53-877	O	24	0.688	34.51	99.2	52.53	60.12	67.7	20	0.472	10.5	1190.4	413.3	496	537.3	425.6	515.6	575.5	911.2
		609.6	17.462	876.6	5333.3	256.5	293.51	330.52	3413	12	267	162558.7	1838.6	2206.3	2390.2	1893.3	2293.3	2560	4053.3
53-1265	O	38	0.375	49.81	99.5	32.76	37.62	42.49	20	0.472	11.8	1889.8	414.4	497.3	538.8	426.8	516.9	577	913.6
		965.2	9.525	1265.2	5347.5	159.95	183.69	207.43	3413	12	300	258071.5	1843.5	2212.2	2396.5	1898.4	2299.4	2566.8	4064.1
54-1113	O	32	0.472	43.81	99.6	39.09	44.85	50.6	20	0.472	11.8	1592.8	414.8	497.8	539.2	427.2	517.4	577.6	914.5
		812.8	12	1112.8	5352.3	190.84	218.95	247.07	3413	12	300	217517.1	1845.1	2214.2	2398.7	1900.1	2301.5	2569.1	4067.7
54-1029	O	30	0.5	40.51	99.6	41.52	47.57	53.63	20	0.472	10.5	1493.5	414.9	497.8	539.3	427.2	517.5	577.7	914.6
		762	12.7	1029	5353.2	202.71	232.26	261.82	3413	12	267	203957.2	1845.5	2214.5	2399.1	1900.4	2301.9	2569.5	4068.4
54-891	O	28	0.5	35.09	99.8	43.41	49.5	55.59	20	0.472	7.1	1397	415.8	498.9	540.5	428.2	518.6	578.9	916.6
		711.2	12.7	891.2	5365	211.94	241.68	271.41	3413	12	180	190778.7	1849.5	2219.4	2404.4	1904.6	2306.9	2575.2	4077.4
54-1181	O	36	0.394	46.51	100	34.55	39.62	44.69	20	0.472	10.5	1800.8	416.9	500.2	541.9	429.3	520	580.4	919
		914.4	10	1181.4	5378.9	168.67	193.43	218.19	3413	12	267	245921.8	1854.3	2225.2	2410.6	1909.5	2312.9	2581.9	4087.9
54-1164	O	34	0.438	45.81	100.1	36.91	42.35	47.8	20	0.472	11.8	1701.7	417.1	500.5	542.2	429.5	520.2	580.7	919.5
		863.6	11.112	1163.6	5381.8	180.19	206.79	233.4	3413	12	300	232384	1855.3	2226.3	2411.9	1910.5	2314.2	2583.2	4090.1
54-965	O	30	0.472	37.99	100.6	41.25	47.14	53.04	20	0.472	8	1509	419.2	503	544.9	431.6	522.8	583.6	924.1
		762	12	965	5408.6	201.38	230.18	258.97	3413	12	203	206067.4	1864.5	2237.5	2423.9	1920.1	2325.7	2596.1	4110.5
54-864	O	24	0.688	34.02	100.6	53.02	60.62	68.21	20	0.472	10	1207.6	419.3	503.2	545.1	431.8	523	583.8	924.4
		609.6	17.462	864.1	5410.4	258.85	295.95	333.05	3413	12	254.5	164910.3	1865.2	2238.2	2424.7	1920.7	2326.5	2597	4111.9
54-1017	O	30	0.5	40.02	100.8	41.79	47.84	53.89	20	0.472	10	1511.9	420	504	546	432.5	523.8	584.8	925.9
		762	12.7	1016.5	5419	204.05	233.58	263.12	3413	12	254.5	206465.3	1868.1	2241.8	2428.6	1923.8	2330.2	2601.1	4118.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
54-1044	O	34	0.394	41.09	100.8	35.77	40.81	45.85	20	0.472	7.1	1714.1	420.1	504.1	546.1	432.6	524	585	926.2
		863.6	10	1043.6	5420.8	174.66	199.26	223.86	3413	12	180	234071.5	1868.8	2242.5	2429.4	1924.4	2331	2602	4119.8
54-790	O	24	0.625	31.09	100.9	51.83	59.06	66.29	20	0.472	7.1	1210.9	420.5	504.5	546.6	433	524.4	585.4	926.9
		609.6	15.875	789.6	5425.2	253.07	288.36	323.65	3413	12	180	165360.9	1870.3	2244.3	2431.4	1926	2332.8	2604.1	4123.2
54-1117	O	36	0.375	43.99	100.9	34.24	39.16	44.08	20	0.472	8	1816.4	420.5	504.6	546.6	433	524.5	585.4	926.9
		914.4	9.525	1117.4	5425.3	167.19	191.21	215.24	3413	12	203	248044.6	1870.3	2244.4	2431.4	1926	2332.9	2604.1	4123.2
54-659	O	22	0.625	25.94	101	55.95	63.59	71.23	20	0.472	3.9	1111.5	421	505.2	547.3	433.6	525.2	586.2	928.2
		558.8	15.875	658.8	5432.6	273.19	310.49	347.78	3413	12	100	151787.3	1872.8	2247.4	2434.7	1928.6	2336	2607.7	4128.8
54-775	O	28	0.438	30.52	101.1	42.83	48.66	54.49	20	0.472	2.5	1414.8	421.1	505.3	547.4	433.6	525.2	586.3	928.3
		711.2	11.112	775.2	5433.3	209.12	237.58	266.03	3413	12	64	193208.2	1873.1	2247.7	2435	1928.8	2336.3	2608	4129.3
54-1169	O	36	0.394	46.02	101.1	34.71	39.77	44.83	20	0.472	10	1820.1	421.3	505.6	547.7	433.9	525.5	586.6	928.8
		914.4	10	1168.9	5436.4	169.48	194.17	218.86	3413	12	254.5	248551.6	1874.1	2249	2436.4	1929.9	2337.6	2609.5	4131.7
54-877	O	32	0.375	34.52	101.2	37.28	42.35	47.43	20	0.472	2.5	1619.4	421.7	506.1	548.2	434.3	526	587.2	929.7
		812.8	9.525	876.8	5441.6	182	206.79	231.59	3413	12	64	221145.1	1875.9	2251.1	2438.7	1931.8	2339.9	2611.9	4135.6
54-1016	O	32	0.438	39.99	101.3	38.82	44.38	49.94	20	0.472	8	1621.2	422.2	506.6	548.9	434.8	526.6	587.8	930.8
		812.8	11.112	1015.8	5447.6	189.54	216.67	243.8	3413	12	203	221392	1878	2253.6	2441.4	1933.9	2342.5	2614.9	4140.2
55-978	O	28	0.562	38.51	101.6	45.5	52.09	58.69	20	0.472	10.5	1422.3	423.3	508	550.3	435.9	528	589.4	933.2
		711.2	14.288	978.2	5461.9	222.13	254.33	286.54	3413	12	267	194225.1	1882.9	2259.5	2447.8	1939	2348.6	2621.7	4151
55-710	O	24	0.562	27.94	101.9	51.3	58.31	65.32	20	0.472	3.9	1222.3	424.4	509.3	551.7	437	529.4	590.9	935.6
		609.6	14.288	709.6	5476.1	250.48	284.71	318.94	3413	12	100	166912.3	1887.8	2265.4	2454.2	1944	2354.7	2628.5	4161.9
55-913	O	32	0.394	35.94	101.9	37.77	42.95	48.14	20	0.472	3.9	1630.2	424.5	509.5	551.9	437.2	529.5	591.1	935.9
		812.8	10	912.8	5478	184.4	209.72	235.04	3413	12	100	222624.9	1888.5	2266.2	2455	1944.7	2355.5	2629.4	4163.3
55-1232	O	38	0.375	48.51	102.1	33.32	38.2	43.09	20	0.472	10.5	1940.4	425.5	510.6	553.2	438.2	530.8	592.5	938.1
		965.2	9.525	1232.2	5490.7	162.66	186.52	210.37	3413	12	267	264983	1892.9	2271.4	2460.7	1949.2	2361	2635.6	4173
55-1080	O	32	0.472	42.51	102.6	39.91	45.73	51.54	20	0.472	10.5	1641.5	427.5	513	555.7	440.2	533.2	595.2	942.4
		812.8	12	1079.8	5515.9	194.88	223.26	251.64	3413	12	267	224164.7	1901.5	2281.8	2472	1958.1	2371.8	2647.6	4192.1
55-966	O	28	0.562	38.02	102.9	45.84	52.43	59.03	20	0.472	10	1440.7	428.8	514.5	557.4	441.5	534.8	597	945.3
		711.2	14.288	965.7	5532.6	223.79	256.01	288.23	3413	12	254.5	196739.2	1907.3	2288.8	2479.5	1964.1	2379	2655.6	4204.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
55-762	O	22	0.75	29.99	102.9	59.05	67.37	75.69	20	0.472	8	1132.2	428.9	514.6	557.5	441.6	534.9	597.1	945.4
		558.8	19.05	761.8	5533.6	288.31	328.93	369.56	3413	12	203	154608.2	1907.6	2289.2	2479.9	1964.4	2379.4	2656.1	4205.5
55-995	O	30	0.5	39.17	103	42.44	48.54	54.64	20	0.472	9.2	1544.6	429.1	514.9	557.8	441.8	535.2	597.4	945.9
		762	12.7	995	5536.1	207.23	236.99	266.76	3413	12	233	210926.6	1908.5	2290.2	2481.1	1965.3	2380.5	2657.3	4207.5
55-1147	O	36	0.394	45.17	103	35.14	40.22	45.3	20	0.472	9.2	1854.2	429.2	515.1	558	442	535.4	597.6	946.2
		914.4	10	1147.4	5538.3	171.58	196.38	221.18	3413	12	233	253209	1909.2	2291.1	2482	1966.1	2381.4	2658.4	4209.1
55-1131	O	34	0.438	44.51	103	37.63	43.12	48.61	20	0.472	10.5	1751.4	429.3	515.1	558	442	535.4	597.7	946.3
		863.6	11.112	1130.6	5538.8	183.74	210.55	237.36	3413	12	267	239166.8	1909.4	2291.3	2482.3	1966.3	2381.7	2658.6	4209.5
55-1094	O	36	0.375	43.09	103	34.42	39.26	44.1	20	0.472	7.1	1854.6	429.3	515.2	558.1	442.1	535.5	597.7	946.4
		914.4	9.525	1094.4	5539.3	168.05	191.69	215.34	3413	12	180	253257.5	1909.6	2291.5	2482.5	1966.5	2381.9	2658.9	4209.9
55-942	O	30	0.472	37.09	103.1	41.62	47.45	53.28	20	0.472	7.1	1545.8	429.4	515.3	558.2	442.2	535.6	597.9	946.6
		762	12	942	5540.6	203.22	231.68	260.15	3413	12	180	211098.7	1910.1	2292.1	2483.1	1966.9	2382.5	2659.5	4210.9
55-1220	O	38	0.375	48.02	103.2	33.46	38.33	43.2	20	0.472	10	1960.3	429.9	515.9	558.9	442.7	536.2	598.6	947.7
		965.2	9.525	1219.7	5547	163.37	187.15	210.93	3413	12	254.5	267698.6	1912.3	2294.7	2485.9	1969.2	2385.2	2662.6	4215.7
55-843	O	24	0.688	33.17	103.2	54.07	61.76	69.46	20	0.472	9.2	1238.4	430	516	559	442.8	536.4	598.7	948
		609.6	17.462	842.6	5548.5	264	301.56	339.12	3413	12	233	169118.2	1912.8	2295.3	2486.6	1969.7	2385.9	2663.3	4216.9
56-910	O	24	0.75	35.81	103.5	55.11	63.06	71.02	20	0.472	11.8	1241.7	431.1	517.4	560.5	444	537.8	600.3	950.5
		609.6	19.05	909.6	5563	269.05	307.89	346.74	3413	12	300	169561.3	1917.8	2301.3	2493.1	1974.9	2392.1	2670.3	4227.9
56-993	O	32	0.438	39.09	103.7	39.12	44.61	50.09	20	0.472	7.1	1658.8	432	518.4	561.6	444.8	538.8	601.5	952.3
		812.8	11.112	992.8	5573.8	191	217.79	244.57	3413	12	180	226521	1921.5	2305.8	2498	1978.7	2396.8	2675.4	4236.1
56-1067	O	32	0.472	42.02	103.8	40.16	45.96	51.77	20	0.472	10	1660.7	432.5	519	562.2	445.4	539.5	602.2	953.4
		812.8	12	1067.3	5580.5	196.06	224.41	252.76	3413	12	254.5	226790	1923.8	2308.6	2500.9	1981.1	2399.6	2678.6	4241.2
56-811	O	28	0.472	31.94	103.9	44.3	50.36	56.43	20	0.472	3.9	1454.5	432.9	519.5	562.8	445.8	540	602.8	954.4
		711.2	12	811.2	5585.8	216.31	245.9	275.49	3413	12	100	198630.4	1925.6	2310.8	2503.3	1983	2401.9	2681.2	4245.2
56-1118	O	34	0.438	44.02	104.2	37.84	43.32	48.8	20	0.472	10	1771	434.1	520.9	564.3	447	541.4	604.4	956.9
		863.6	11.112	1118.1	5600.8	184.75	211.51	238.27	3413	12	254.5	241840.6	1930.8	2316.9	2510	1988.3	2408.3	2688.4	4256.6
56-964	O	34	0.375	37.94	104.2	36.23	41.19	46.16	20	0.472	3.9	1771.1	434.1	520.9	564.3	447	541.5	604.4	957
		863.6	9.525	963.6	5601.3	176.87	201.13	225.39	3413	12	100	241863.8	1931	2317.2	2510.3	1988.5	2408.6	2688.6	4257

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
56-1265	O	38	0.394	49.81	104.3	34.19	39.24	44.28	20	0.472	11.8	1981.1	434.5	521.3	564.8	447.4	541.9	604.9	957.8
		965.2	10	1265.2	5605.9	166.95	191.57	216.19	3413	12	300	270539.8	1932.6	2319.1	2512.3	1990.1	2410.5	2690.8	4260.5
56-862	O	30	0.438	33.94	104.7	41.48	47.15	52.83	20	0.472	3.9	1569.9	436.1	523.3	566.9	449.1	543.9	607.2	961.4
		762	11.112	862	5626.8	202.51	230.22	257.94	3413	12	100	214380.5	1939.8	2327.7	2521.7	1997.5	2419.5	2700.9	4276.4
56-1198	O	38	0.375	47.17	105	33.85	38.74	43.63	20	0.472	9.2	1995.5	437.6	525.1	568.9	450.6	545.8	609.3	964.7
		965.2	9.525	1198.2	5646.5	165.28	189.14	213.01	3413	12	233	272502.1	1946.6	2335.9	2530.5	2004.5	2428	2710.3	4291.4
56-1113	O	32	0.5	43.81	105.1	41.09	47.1	53.11	20	0.472	11.8	1681.4	437.9	525.4	569.2	450.9	546.2	609.7	965.3
		812.8	12.7	1112.8	5649.8	200.62	229.96	259.3	3413	12	300	229609.1	1947.7	2337.2	2532	2005.7	2429.4	2711.9	4293.9
57-944	O	28	0.562	37.17	105.2	46.61	53.27	59.93	20	0.472	9.2	1473.5	438.5	526.2	570.1	451.6	547	610.6	966.8
		711.2	14.288	944.2	5658.6	227.59	260.11	292.63	3413	12	233	201219	1950.7	2340.9	2535.9	2008.8	2433.2	2716.1	4300.5
57-608	O	20	0.75	23.94	105.5	65.25	74.11	82.96	20	0.472	3.9	1054.8	439.5	527.4	571.4	452.6	548.2	612	968.9
		508	19.05	608	5671.1	318.59	361.82	405.05	3413	12	100	144046.7	1955.1	2346.1	2541.6	2013.3	2438.6	2722.1	4310.1
57-1117	O	36	0.394	43.99	105.8	35.78	40.89	46.01	20	0.472	8	1904	440.7	528.9	573	453.9	549.7	613.7	971.6
		914.4	10	1117.4	5686.9	174.69	199.66	224.62	3413	12	203	260007.2	1960.5	2352.6	2548.7	2018.9	2445.4	2729.7	4322.1
57-1046	O	32	0.472	41.17	105.9	40.74	46.59	52.43	20	0.472	9.2	1694.9	441.4	529.7	573.8	454.5	550.5	614.6	973.1
		812.8	12	1045.8	5695.2	198.92	227.46	256	3413	12	233	231452.5	1963.3	2356	2552.4	2021.8	2448.9	2733.7	4328.3
57-877	O	32	0.394	34.52	106.1	39.01	44.31	49.6	20	0.472	2.5	1697.2	442	530.4	574.6	455.1	551.3	615.4	974.4
		812.8	10	876.8	5702.9	190.47	216.33	242.19	3413	12	64	231765.5	1966	2359.2	2555.8	2024.5	2452.2	2737.4	4334.2
57-1316	O	40	0.375	51.81	106.1	32.98	37.84	42.7	20	0.472	11.8	2122.3	442.1	530.6	574.8	455.3	551.5	615.6	974.7
		1016	9.525	1316	5705	161.03	184.76	208.49	3413	12	300	289812.3	1966.7	2360.1	2556.7	2025.3	2453.1	2738.4	4335.8
57-739	O	22	0.75	29.09	106.1	60.08	68.39	76.7	20	0.472	7.1	1167.4	442.2	530.6	574.9	455.4	551.6	615.7	974.9
		558.8	19.05	738.8	5705.8	293.35	333.93	374.51	3413	12	180	159421.4	1967	2360.4	2557.1	2025.6	2453.5	2738.8	4336.4
57-965	O	30	0.5	37.99	106.2	43.41	49.58	55.74	20	0.472	8	1592.6	442.4	530.9	575.1	455.6	551.8	616	975.3
		762	12.7	965	5708.2	211.94	242.05	272.16	3413	12	203	217483.9	1967.8	2361.4	2558.2	2026.4	2454.5	2740	4338.3
57-1097	O	34	0.438	43.17	106.2	38.35	43.86	49.38	20	0.472	9.2	1805.7	442.6	531.1	575.3	455.7	552	616.2	975.7
		863.6	11.112	1096.6	5710.6	187.26	214.17	241.08	3413	12	233	246582.2	1968.6	2362.4	2559.2	2027.3	2455.5	2741.1	4340
57-623	O	22	0.625	24.52	106.9	58.76	66.69	74.63	20	0.472	2.5	1175.8	445.4	534.4	579	458.6	555.5	620.1	981.8
		558.8	15.875	622.8	5746.6	286.88	325.62	364.36	3413	12	64	160561.1	1981.1	2377.3	2575.4	2040.1	2471.1	2758.4	4367.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
58-813	O	24	0.688	31.99	107	55.65	63.48	71.32	20	0.472	8	1284.1	445.9	535.1	579.6	459.2	556.2	620.8	983
		609.6	17.462	812.6	5753.3	271.69	309.95	348.21	3413	12	203	175361.8	1983.4	2380.1	2578.4	2042.4	2473.9	2761.6	4372.5
58-1232	O	38	0.394	48.51	107.1	34.79	39.86	44.93	20	0.472	10.5	2034.2	446.1	535.3	579.9	459.4	556.4	621.1	983.4
		965.2	10	1232.2	5756	169.85	194.61	219.36	3413	12	267	277785.3	1984.3	2381.2	2579.6	2043.4	2475.1	2762.9	4374.6
58-674	O	24	0.562	26.52	107.3	53.65	60.9	68.15	20	0.472	2.5	1287.6	447.1	536.5	581.2	460.4	557.7	622.5	985.6
		609.6	14.288	673.6	5768.8	261.92	297.33	332.73	3413	12	64	175832.8	1988.7	2386.5	2585.3	2047.9	2480.6	2769	4384.3
58-877	O	24	0.75	34.51	107.4	56.73	64.83	72.94	20	0.472	10.5	1288.4	447.4	536.8	581.6	460.7	558	622.9	986.3
		609.6	19.05	876.6	5772.5	276.97	316.55	356.12	3413	12	267	175944.6	1990	2388	2587	2049.2	2482.2	2770.8	4387.1
58-1168	O	38	0.375	45.99	107.7	34.43	39.34	44.26	20	0.472	8	2046.7	448.8	538.6	583.5	462.2	559.9	625	989.5
		965.2	9.525	1168.2	5791.5	168.09	192.09	216.1	3413	12	203	279500.1	1996.6	2395.9	2595.5	2056	2490.4	2779.9	4401.6
58-1214	O	36	0.438	47.81	107.8	37.24	42.7	48.15	20	0.472	11.8	1939.7	449	538.8	583.7	462.4	560.1	625.2	989.9
		914.4	11.112	1214.4	5793.6	181.83	208.46	235.1	3413	12	300	264883.1	1997.3	2396.7	2596.5	2056.7	2491.2	2780.9	4403.1
58-1164	O	34	0.472	45.81	107.8	39.5	45.27	51.04	20	0.472	11.8	1831.9	449	538.8	583.7	462.4	560.1	625.2	989.9
		863.6	12	1163.6	5793.6	192.84	221.02	249.21	3413	12	300	250167.6	1997.3	2396.7	2596.5	2056.7	2491.2	2780.9	4403.1
58-1062	O	30	0.562	41.81	107.9	45.04	51.59	58.13	20	0.472	11.8	1617.8	449.4	539.3	584.2	462.8	560.5	625.7	990.7
		762	14.288	1062	5798.7	219.9	251.86	283.82	3413	12	300	220929.4	1999	2398.8	2598.7	2058.5	2493.4	2783.4	4407
58-1094	O	36	0.394	43.09	108	35.99	41.03	46.07	20	0.472	7.1	1944	450	540	585	463.4	561.3	626.6	992.1
		914.4	10	1094.4	5806.5	175.71	200.31	224.92	3413	12	180	265471.5	2001.7	2402	2602.2	2061.3	2496.8	2787.1	4412.9
58-1220	O	38	0.394	48.02	108.2	34.95	40.01	45.06	20	0.472	10	2055	450.7	540.8	585.9	464.1	562.1	627.5	993.5
		965.2	10	1219.7	5815	170.63	195.32	220.01	3413	12	254.5	280632.1	2004.7	2405.6	2606	2064.3	2500.5	2791.2	4419.4
58-928	O	34	0.375	36.52	108.2	37.34	42.41	47.47	20	0.472	2.5	1839.9	450.9	541.1	586.2	464.4	562.5	627.9	994.1
		863.6	9.525	927.6	5818.7	182.32	207.05	231.77	3413	12	64	251250.5	2005.9	2407.1	2607.7	2065.6	2502	2793	4422.2
58-1080	O	32	0.5	42.51	108.3	41.98	48.05	54.12	20	0.472	10.5	1732.8	451.2	541.5	586.6	464.7	562.8	628.3	994.8
		812.8	12.7	1079.8	5822.5	204.96	234.6	264.24	3413	12	267	236626.2	2007.2	2408.7	2609.4	2067	2503.7	2794.8	4425.1
58-1011	O	28	0.625	39.81	108.5	48.72	55.77	62.83	20	0.472	11.8	1518.5	451.9	542.3	587.5	465.4	563.7	629.2	996.3
		711.2	15.875	1011.2	5831.3	237.89	272.31	306.74	3413	12	300	207360.6	2010.3	2412.3	2613.3	2070.1	2507.5	2799	4431.8
58-914	O	28	0.562	35.99	108.7	47.77	54.52	61.28	20	0.472	8	1521.9	452.9	543.5	588.8	466.4	565	630.6	998.5
		711.2	14.288	914.2	5844.3	233.23	266.21	299.18	3413	12	203	207822.1	2014.7	2417.7	2619.2	2074.7	2513	2805.2	4441.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
58-775	O	28	0.472	30.52	108.7	46.01	52.24	58.47	20	0.472	2.5	1522.1	453	543.6	588.9	466.5	565	630.7	998.7
		711.2	12	775.2	5845.2	224.66	255.06	285.46	3413	12	64	207854.7	2015.1	2418.1	2619.6	2075	2513.4	2805.7	4442.3
58-942	O	30	0.5	37.09	108.8	43.84	49.94	56.05	20	0.472	7.1	1631.5	453.2	543.8	589.1	466.7	565.3	631	999.1
		762	12.7	942	5847.6	214.02	243.84	273.66	3413	12	180	222794.1	2015.9	2419.1	2620.7	2075.9	2514.5	2806.9	4444.2
59-1283	O	40	0.375	50.51	108.8	33.52	38.4	43.29	20	0.472	10.5	2176.8	453.5	544.2	589.6	467	565.7	631.4	999.8
		1016	9.525	1283	5851.7	163.66	187.5	211.34	3413	12	267	297266.6	2017.3	2420.8	2622.5	2077.4	2516.2	2808.8	4447.3
59-864	O	24	0.75	34.02	108.9	57.27	65.4	73.53	20	0.472	10	1307.1	453.8	544.6	590	467.3	566.1	631.9	1000.5
		609.6	19.05	864.1	5856	279.62	319.32	359.01	3413	12	254.5	178489.8	2018.8	2422.5	2624.4	2078.9	2518.1	2810.9	4450.5
59-1016	O	32	0.472	39.99	109.1	41.61	47.51	53.42	20	0.472	8	1744.9	454.4	545.3	590.7	467.9	566.8	632.7	1001.8
		812.8	12	1015.8	5863.4	203.15	231.99	260.82	3413	12	203	238288	2021.3	2425.6	2627.7	2081.5	2521.3	2814.4	4456.2
59-964	O	34	0.394	37.94	109.2	37.91	43.09	48.26	20	0.472	3.9	1856.4	455	546	591.5	468.5	567.5	633.5	1003.1
		863.6	10	963.6	5870.9	185.08	210.36	235.65	3413	12	100	253504.6	2023.9	2428.7	2631.1	2084.2	2524.5	2818	4461.9
59-1067	O	34	0.438	41.99	109.2	39.11	44.67	50.23	20	0.472	8	1856.5	455	546	591.5	468.6	567.6	633.5	1003.1
		863.6	11.112	1066.6	5871.2	190.95	218.1	245.25	3413	12	203	253517.7	2024	2428.8	2631.2	2084.3	2524.6	2818.2	4462.1
59-826	O	30	0.438	32.52	109.2	42.96	48.77	54.59	20	0.472	2.5	1638.3	455.1	546.1	591.6	468.6	567.6	633.6	1003.3
		762	11.112	826	5872	209.74	238.13	266.53	3413	12	64	223724	2024.3	2429.2	2631.6	2084.6	2525	2818.6	4462.7
59-1067	O	32	0.5	42.02	109.6	42.25	48.31	54.38	20	0.472	10	1753.1	456.5	547.8	593.5	470.1	569.4	635.7	1006.5
		812.8	12.7	1067.3	5890.7	206.26	235.88	265.51	3413	12	254.5	239397.5	2030.7	2436.9	2640	2091.2	2533	2827.5	4476.9
59-811	O	28	0.5	31.94	109.6	46.7	53.06	59.42	20	0.472	3.9	1534.8	456.8	548.1	593.8	470.4	569.8	636	1007
		711.2	12.7	811.2	5894.1	228	259.05	290.1	3413	12	100	209593.2	2031.9	2438.3	2641.5	2092.4	2534.5	2829.2	4479.5
59-1145	O	38	0.375	45.09	109.9	34.6	39.44	44.28	20	0.472	7.1	2087.8	457.9	549.4	595.2	471.5	571.1	637.5	1009.4
		965.2	9.525	1145.2	5907.9	168.93	192.57	216.21	3413	12	180	285113.5	2036.7	2444	2647.7	2097.3	2540.4	2835.8	4490
59-1271	O	40	0.375	50.02	109.9	33.66	38.53	43.4	20	0.472	10	2198.3	458	549.6	595.4	471.6	571.2	637.7	1009.6
		1016	9.525	1270.5	5909.3	164.35	188.12	211.89	3413	12	254.5	300191.3	2037.2	2444.6	2648.3	2097.8	2541	2836.5	4491.1
59-1198	O	38	0.394	47.17	110.1	35.37	40.44	45.52	20	0.472	9.2	2091.9	458.8	550.5	596.4	472.4	572.2	638.7	1011.3
		965.2	10	1198.2	5919.3	172.67	197.46	222.26	3413	12	233	285667.7	2040.6	2448.7	2652.8	2101.4	2545.3	2841.3	4498.7
59-790	O	24	0.688	31.09	110.1	56.51	64.33	72.14	20	0.472	7.1	1321.6	458.9	550.6	596.5	472.5	572.4	638.9	1011.6
		609.6	17.462	789.6	5920.9	275.92	314.07	352.22	3413	12	180	180469.9	2041.2	2449.4	2653.5	2101.9	2546	2842	4499.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
60-1181	O	36	0.438	46.51	110.8	37.95	43.44	48.94	20	0.472	10.5	1993.9	461.5	553.9	600	475.3	575.7	642.6	1017.5
		914.4	11.112	1181.4	5955.4	185.27	212.1	238.94	3413	12	267	272282	2053.1	2463.7	2669	2114.2	2560.8	2858.6	4526.1
60-1131	O	34	0.472	44.51	110.9	40.3	46.12	51.95	20	0.472	10.5	1885.4	462.1	554.5	600.7	475.9	576.4	643.4	1018.8
		863.6	12	1130.6	5962.7	196.76	225.19	253.63	3413	12	267	257469.5	2055.6	2466.7	2672.2	2116.8	2564	2862.1	4531.7
60-1014	O	36	0.375	39.94	111.2	36.34	41.3	46.26	20	0.472	3.9	2000.8	463.2	555.8	602.1	476.9	577.7	644.9	1021.1
		914.4	9.525	1014.4	5976.2	177.43	201.64	225.86	3413	12	100	273230.5	2060.2	2472.3	2678.3	2121.5	2569.8	2868.6	4541.9
60-910	O	24	0.812	35.81	111.2	59.12	67.58	76.04	20	0.472	11.8	1334.6	463.4	556.1	602.4	477.2	578	645.2	1021.6
		609.6	20.638	909.6	5979.3	288.67	329.97	371.27	3413	12	300	182248.2	2061.3	2473.5	2679.7	2122.6	2571.1	2870.1	4544.2
60-1316	O	40	0.394	51.81	111.2	34.43	39.48	44.52	20	0.472	11.8	2225	463.5	556.2	602.6	477.3	578.2	645.4	1021.9
		1016	10	1316	5981.1	168.12	192.74	217.36	3413	12	300	303837.4	2061.9	2474.3	2680.5	2123.3	2571.9	2870.9	4545.6
60-1029	O	30	0.562	40.51	111.3	46.1	52.73	59.35	20	0.472	10.5	1669.7	463.8	556.6	603	477.6	578.5	645.8	1022.5
		762	14.288	1029	5984.6	225.08	257.43	289.79	3413	12	267	228014.6	2063.1	2475.8	2682.1	2124.5	2573.4	2872.6	4548.3
60-891	O	28	0.562	35.09	111.5	48.33	55.04	61.75	20	0.472	7.1	1561.1	464.6	557.5	604	478.5	579.5	646.9	1024.3
		711.2	14.288	891.2	5995.1	235.99	268.73	301.47	3413	12	180	213185.6	2066.7	2480.1	2686.8	2128.3	2577.9	2877.6	4556.3
60-993	O	32	0.472	39.09	111.6	41.97	47.82	53.66	20	0.472	7.1	1785.4	464.9	557.9	604.4	478.8	579.9	647.4	1025
		812.8	12	992.8	5999.2	204.93	233.46	261.98	3413	12	180	243808.4	2068.2	2481.8	2688.6	2129.7	2579.7	2879.6	4559.4
60-1044	O	34	0.438	41.09	111.6	39.4	44.89	50.39	20	0.472	7.1	1897.4	465	558.1	604.6	478.9	580.1	647.5	1025.2
		863.6	11.112	1043.6	6000.6	192.38	219.19	246.01	3413	12	180	259105	2068.6	2482.3	2689.2	2130.2	2580.2	2880.3	4560.4
60-843	O	24	0.75	33.17	111.7	58.43	66.67	74.91	20	0.472	9.2	1340.4	465.4	558.5	605	479.3	580.5	648	1026
		609.6	19.05	842.6	6005.4	285.3	325.53	365.75	3413	12	233	183044.1	2070.3	2484.3	2691.4	2131.9	2582.3	2882.6	4564.1
60-1249	O	40	0.375	49.17	111.8	34.04	38.93	43.81	20	0.472	9.2	2236.1	465.9	559	605.6	479.7	581.1	648.6	1027
		1016	9.525	1249	6011	166.2	190.05	213.9	3413	12	233	305358.7	2072.2	2486.7	2693.9	2133.9	2584.7	2885.3	4568.4
60-1046	O	32	0.5	41.17	111.8	42.87	48.99	55.1	20	0.472	9.2	1789.1	465.9	559.1	605.7	479.8	581.1	648.7	1027.1
		812.8	12.7	1045.8	6011.8	209.33	239.17	269.01	3413	12	233	244319.2	2072.5	2487	2694.2	2134.2	2585.1	2885.7	4569
60-1169	O	36	0.438	46.02	112	38.15	43.63	49.12	20	0.472	10	2015.2	466.5	559.8	606.4	480.4	581.9	649.5	1028.4
		914.4	11.112	1168.9	6019.1	186.25	213.04	239.82	3413	12	254.5	275193.8	2075	2490	2697.5	2136.8	2588.2	2889.2	4574.5
60-978	O	28	0.625	38.51	112.1	49.96	57.12	64.27	20	0.472	10.5	1569.7	467.2	560.6	607.3	481.1	582.7	650.5	1029.9
		711.2	15.875	978.2	6028	243.93	278.86	313.79	3413	12	267	214356	2078.1	2493.7	2701.5	2139.9	2592	2893.4	4581.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
60-572	O	20	0.75	22.52	112.1	68.89	78.14	87.4	20	0.472	2.5	1121.2	467.2	560.6	607.3	481.1	582.7	650.5	1029.9
		508	19.05	572	6028.1	336.35	381.53	426.71	3413	12	64	153112.6	2078.1	2493.7	2701.5	2140	2592.1	2893.5	4581.3
60-1118	O	34	0.472	44.02	112.1	40.54	46.35	52.17	20	0.472	10	1906.5	467.3	560.7	607.5	481.2	582.8	650.6	1030.1
		863.6	12	1118.1	6029.4	197.91	226.32	254.72	3413	12	254.5	260347.9	2078.6	2494.3	2702.1	2140.4	2592.6	2894.1	4582.3
60-710	O	24	0.625	27.94	112.3	56.54	64.21	71.87	20	0.472	3.9	1347.4	467.9	561.4	608.2	481.8	583.6	651.4	1031.4
		609.6	15.875	709.6	6036.9	276.06	313.48	350.91	3413	12	100	184003.7	2081.1	2497.4	2705.5	2143.1	2595.9	2897.7	4588
61-862	O	30	0.472	33.94	112.6	44.55	50.61	56.67	20	0.472	3.9	1689.3	469.3	563.1	610	483.2	585.3	653.4	1034.5
		762	12	862	6054.9	217.52	247.11	276.7	3413	12	100	230690.3	2087.3	2504.8	2713.5	2149.5	2603.6	2906.3	4601.7
61-1017	O	30	0.562	40.02	112.7	46.43	53.06	59.69	20	0.472	10	1690.2	469.5	563.4	610.4	483.5	585.6	653.7	1035.1
		762	14.288	1016.5	6058.2	226.69	259.06	291.43	3413	12	254.5	230818.5	2088.5	2506.2	2715	2150.7	2605	2907.9	4604.3
61-913	O	32	0.438	35.94	112.8	41.67	47.34	53.01	20	0.472	3.9	1804.2	469.8	563.8	610.8	483.8	586	654.2	1035.8
		812.8	11.112	912.8	6062.3	203.44	231.14	258.83	3413	12	100	246373.8	2089.9	2507.9	2716.9	2152.1	2606.8	2909.9	4607.4
61-1367	O	42	0.375	53.81	112.8	33.19	38.04	42.9	20	0.472	11.8	2368.6	470	564	611	484	586.2	654.4	1036.1
		1066.8	9.525	1366.8	6064.1	162.03	185.75	209.47	3413	12	300	323459.2	2090.5	2508.6	2717.7	2152.8	2607.6	2910.8	4608.7
61-1168	O	38	0.394	45.99	112.9	35.98	41.09	46.2	20	0.472	8	2145.6	470.5	564.6	611.7	484.5	586.9	655.1	1037.3
		965.2	10	1168.2	6071.4	175.68	200.63	225.58	3413	12	203	293003.8	2093	2511.6	2720.9	2155.3	2610.7	2914.3	4614.2
61-928	O	34	0.394	36.52	113.4	39.09	44.37	49.65	20	0.472	2.5	1928.4	472.7	567.2	614.4	486.7	589.6	658.1	1042
		863.6	10	927.6	6098.7	190.85	216.64	242.43	3413	12	64	263343	2102.5	2523	2733.2	2165	2622.5	2927.4	4635
61-966	O	28	0.625	38.02	113.6	50.36	57.52	64.69	20	0.472	10	1590	473.2	567.9	615.2	487.3	590.3	658.9	1043.2
		711.2	15.875	965.7	6106	245.88	280.86	315.84	3413	12	254.5	217130.6	2105	2526	2736.5	2167.6	2625.6	2930.9	4640.6
61-1164	O	34	0.5	45.81	113.8	41.54	47.56	53.59	20	0.472	11.8	1934.1	474	568.8	616.2	488.1	591.3	660	1045.1
		863.6	12.7	1163.6	6116.6	202.8	232.22	261.65	3413	12	300	264114.8	2108.6	2530.3	2741.2	2171.4	2630.1	2936	4648.6
61-1147	O	36	0.438	45.17	114.1	38.64	44.16	49.68	20	0.472	9.2	2053	475.2	570.3	617.8	489.4	592.8	661.7	1047.7
		914.4	11.112	1147.4	6131.9	188.67	215.6	242.54	3413	12	233	280350.4	2113.9	2536.7	2748.1	2176.8	2636.7	2943.3	4660.2
61-1283	O	40	0.394	50.51	114.1	35.01	40.08	45.15	20	0.472	10.5	2282.2	475.5	570.5	618.1	489.6	593	662	1048.2
		1016	10	1283	6134.9	170.94	195.69	220.44	3413	12	267	311652.4	2114.9	2537.9	2749.4	2177.9	2638	2944.7	4662.5
61-1097	O	34	0.472	43.17	114.3	41.1	46.96	52.81	20	0.472	9.2	1943.9	476.4	571.7	619.4	490.6	594.3	663.4	1050.3
		863.6	12	1096.6	6147.6	200.68	229.26	257.85	3413	12	233	265452.3	2119.3	2543.2	2755.1	2182.4	2643.5	2950.8	4672.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
62-1219	O	40	0.375	47.99	114.6	34.6	39.51	44.42	20	0.472	8	2291.1	477.3	572.8	620.5	491.5	595.4	664.6	1052.3
		1016	9.525	1219	6158.9	168.92	192.9	216.88	3413	12	203	312873.7	2123.2	2547.9	2760.2	2186.4	2648.3	2956.3	4680.8
62-775	O	28	0.5	30.52	114.7	48.52	55.06	61.6	20	0.472	2.5	1606.1	478	573.6	621.4	492.2	596.2	665.6	1053.8
		711.2	12.7	775.2	6167.8	236.89	268.82	300.75	3413	12	64	219326.6	2126.3	2551.5	2764.2	2189.6	2652.1	2960.5	4687.5
62-995	O	30	0.562	39.17	115.1	47.18	53.87	60.56	20	0.472	9.2	1726.8	479.7	575.6	623.6	493.9	598.3	667.9	1057.4
		762	14.288	995	6189.1	230.36	263.02	295.68	3413	12	233	235806	2133.6	2560.4	2773.7	2197.1	2661.3	2970.8	4703.7
62-1016	O	32	0.5	39.99	115.1	43.8	49.98	56.16	20	0.472	8	1842	479.7	575.6	623.6	494	598.3	667.9	1057.5
		812.8	12.7	1015.8	6189.3	213.87	244.04	274.21	3413	12	203	251534.8	2133.7	2560.4	2773.8	2197.2	2661.4	2970.9	4703.9
62-1145	O	38	0.394	45.09	115.2	36.18	41.22	46.26	20	0.472	7.1	2188.7	480	576	624	494.3	598.7	668.3	1058.2
		965.2	10	1145.2	6193.3	176.67	201.27	225.88	3413	12	180	298888.4	2135.1	2562.1	2775.6	2198.6	2663.1	2972.8	4706.9
62-1271	O	40	0.394	50.02	115.2	35.17	40.22	45.28	20	0.472	10	2304.6	480.1	576.2	624.2	494.4	598.9	668.5	1058.5
		1016	10	1270.5	6195.2	171.7	196.39	221.08	3413	12	254.5	314718.6	2135.7	2562.9	2776.5	2199.3	2664	2973.7	4708.4
62-978	O	36	0.375	38.52	115.2	37.4	42.45	47.5	20	0.472	2.5	2074.4	480.2	576.2	624.3	494.5	599	668.6	1058.6
		914.4	9.525	978.4	6196.1	182.61	207.27	231.94	3413	12	64	283283.9	2136	2563.2	2776.8	2199.6	2664.3	2974.1	4709
62-877	O	24	0.812	34.51	115.4	60.9	69.53	78.15	20	0.472	10.5	1384.8	480.8	577	625.1	495.2	599.8	669.5	1060
		609.6	20.638	876.6	6204.4	297.33	339.45	381.57	3413	12	267	189109.1	2138.9	2566.7	2780.5	2202.5	2667.9	2978.1	4715.3
62-1265	O	38	0.438	49.81	115.5	37.55	43.01	48.47	20	0.472	11.8	2193.9	481.1	577.3	625.5	495.4	600.1	669.9	1060.7
		965.2	11.112	1265.2	6208	183.33	209.99	236.66	3413	12	300	299596.1	2140.1	2568.1	2782.2	2203.8	2669.4	2979.8	4718
62-960	O	26	0.75	37.81	115.6	56.26	64.31	72.35	20	0.472	11.8	1502.5	481.6	577.9	626	495.9	600.7	670.5	1061.6
		660.4	19.05	960.4	6213.7	274.7	313.97	353.25	3413	12	300	205177.2	2142.1	2570.5	2784.7	2205.9	2671.9	2982.6	4722.4
62-1334	O	42	0.375	52.51	115.6	33.71	38.59	43.47	20	0.472	10.5	2427.2	481.6	577.9	626.1	495.9	600.7	670.6	1061.7
		1066.8	9.525	1333.8	6214.1	164.59	188.41	212.24	3413	12	267	331462	2142.2	2570.7	2784.9	2206	2672.1	2982.8	4722.7
62-813	O	24	0.75	31.99	115.8	60.17	68.57	76.97	20	0.472	8	1389.9	482.6	579.1	627.4	497	602	672	1063.9
		609.6	19.05	812.6	6227.1	293.78	334.8	375.82	3413	12	203	189801.9	2146.7	2576.1	2790.7	2210.6	2677.7	2989	4732.6
62-1214	O	36	0.472	47.81	116	39.87	45.66	51.44	20	0.472	11.8	2088.5	483.4	580.1	628.5	497.8	603	673.1	1065.8
		914.4	12	1214.4	6238	194.68	222.92	251.16	3413	12	300	285202.6	2150.5	2580.6	2795.6	2214.5	2682.4	2994.3	4740.9
62-944	O	28	0.625	37.17	116.2	51.24	58.48	65.72	20	0.472	9.2	1626.2	484	580.8	629.2	498.4	603.7	673.9	1067
		711.2	15.875	944.2	6245.1	250.18	285.52	320.87	3413	12	233	222074.8	2152.9	2583.5	2798.8	2217	2685.4	2997.6	4746.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
63-1014	O	36	0.394	39.94	116.5	38.03	43.2	48.38	20	0.472	3.9	2097.3	485.5	582.6	631.1	499.9	605.6	676	1070.3
		914.4	10	1014.4	6264.4	185.69	210.95	236.2	3413	12	100	286407.7	2159.6	2591.5	2807.4	2223.9	2693.7	3006.9	4760.9
63-1321	O	42	0.375	52.02	116.7	33.85	38.71	43.58	20	0.472	10	2450.2	486.2	583.4	632	500.6	606.4	676.9	1071.8
		1066.8	9.525	1321.3	6272.9	165.26	189.01	212.77	3413	12	254.5	334597.7	2162.5	2595	2811.3	2226.9	2697.4	3011	4767.4
63-1196	O	40	0.375	47.09	116.8	34.76	39.6	44.45	20	0.472	7.1	2335.2	486.5	583.8	632.4	501	606.8	677.4	1072.5
		1016	9.525	1196	6277.4	169.74	193.37	217	3413	12	180	318890.5	2164	2596.9	2813.3	2228.5	2699.3	3013.1	4770.8
63-864	O	24	0.812	34.02	117.1	61.5	70.16	78.82	20	0.472	10	1404.8	487.8	585.4	634.1	502.3	608.4	679.2	1075.4
		609.6	20.638	864.1	6294.1	300.28	342.56	384.83	3413	12	254.5	191844.7	2169.8	2603.8	2820.8	2234.4	2706.5	3021.2	4783.5
63-1131	O	34	0.5	44.51	117.1	42.4	48.48	54.57	20	0.472	10.5	1990.5	487.9	585.4	634.2	502.4	608.5	679.3	1075.6
		863.6	12.7	1130.6	6295.1	207.01	236.72	266.44	3413	12	267	271823.8	2170.2	2604.2	2821.2	2234.8	2706.9	3021.7	4784.3
63-1117	O	36	0.438	43.99	117.1	39.37	44.94	50.5	20	0.472	8	2108.1	488	585.6	634.4	502.5	608.7	679.4	1075.8
		914.4	11.112	1117.4	6296.5	192.24	219.4	246.56	3413	12	203	287877.2	2170.7	2604.8	2821.8	2235.3	2707.5	3022.3	4785.4
63-1249	O	40	0.394	49.17	117.2	35.57	40.65	45.72	20	0.472	9.2	2344.3	488.4	586.1	634.9	502.9	609.2	680	1076.7
		1016	10	1249	6301.9	173.68	198.46	223.25	3413	12	233	320136.1	2172.5	2607	2824.2	2237.2	2709.8	3024.9	4789.4
63-877	O	32	0.438	34.52	117.4	43.07	48.87	54.68	20	0.472	2.5	1878.2	489.1	586.9	635.9	503.7	610.1	681	1078.3
		812.8	11.112	876.8	6311.3	210.29	238.63	266.96	3413	12	64	256489.5	2175.7	2610.9	2828.4	2240.5	2713.8	3029.4	4796.6
63-1113	O	32	0.562	43.81	117.5	45.62	52.2	58.77	20	0.472	11.8	1880.5	489.7	587.6	636.6	504.3	610.8	681.8	1079.6
		812.8	14.288	1112.8	6318.7	222.73	254.84	286.94	3413	12	300	256792.8	2178.3	2614	2831.8	2243.1	2717	3033	4802.2
63-826	O	30	0.472	32.52	117.5	46.17	52.38	58.6	20	0.472	2.5	1762.9	489.7	587.6	636.6	504.3	610.8	681.8	1079.6
		762	12	826	6318.8	225.41	255.76	286.11	3413	12	64	240744.6	2178.3	2614	2831.8	2243.2	2717.1	3033	4802.3
63-1067	O	34	0.472	41.99	117.6	41.94	47.85	53.76	20	0.472	8	1998.5	489.8	587.8	636.8	504.4	611	682	1079.9
		863.6	12	1066.6	6320.5	204.75	233.62	262.49	3413	12	203	272918.6	2178.9	2614.7	2832.6	2243.8	2717.8	3033.8	4803.6
63-993	O	32	0.5	39.09	117.8	44.22	50.34	56.47	20	0.472	7.1	1884.6	490.8	588.9	638	505.4	612.2	683.4	1082
		812.8	12.7	992.8	6332.7	215.89	245.79	275.69	3413	12	180	257362	2183.1	2619.8	2838.1	2248.1	2723.1	3039.7	4812.9
64-1065	O	38	0.375	41.94	118.1	36.44	41.4	46.35	20	0.472	3.9	2244.6	492.2	590.7	639.9	506.9	614	685.4	1085.2
		965.2	9.525	1065.2	6351.6	177.93	202.11	226.29	3413	12	100	306526.5	2189.6	2627.5	2846.5	2254.8	2731.2	3048.8	4827.2
64-1367	O	42	0.394	53.81	118.3	34.66	39.7	44.74	20	0.472	11.8	2483.4	492.7	591.3	640.6	507.4	614.6	686.1	1086.3
		1066.8	10	1366.8	6358	169.21	193.83	218.45	3413	12	300	339134.5	2191.8	2630.2	2849.4	2257.1	2733.9	3051.8	4832.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
64-674	O	24	0.625	26.52	118.3	59.16	67.11	75.05	20	0.472	2.5	1419.4	492.9	591.4	640.7	507.5	614.8	686.2	1086.6
		609.6	15.875	673.6	6359.5	288.86	327.64	366.41	3413	12	64	193837.6	2192.4	2630.8	2850.1	2257.6	2734.6	3052.6	4833.2
64-1118	O	34	0.5	44.02	118.4	42.66	48.74	54.82	20	0.472	10	2012.8	493.3	592	641.3	508	615.3	686.9	1087.6
		863.6	12.7	1118.1	6365.5	208.27	237.97	267.67	3413	12	254.5	274862.7	2194.4	2633.3	2852.8	2259.8	2737.2	3055.4	4837.8
64-1011	O	28	0.688	39.81	118.5	53.02	60.61	68.2	20	0.472	11.8	1659.1	493.8	592.5	641.9	508.5	615.9	687.5	1088.6
		711.2	17.462	1011.2	6371.3	258.88	295.93	332.98	3413	12	300	226563.5	2196.4	2635.7	2855.4	2261.8	2739.7	3058.2	4842.2
64-1232	O	38	0.438	48.51	118.6	38.23	43.73	49.23	20	0.472	10.5	2252.7	494	592.8	642.2	508.7	616.2	687.8	1089.1
		965.2	11.112	1232.2	6374.2	186.67	213.53	240.38	3413	12	267	307619.7	2197.4	2636.9	2856.7	2262.8	2740.9	3059.6	4844.4
64-1300	O	42	0.375	51.17	118.6	34.21	39.1	43.98	20	0.472	9.2	2490.7	494.2	593	642.5	508.9	616.4	688.1	1089.5
		1066.8	9.525	1299.8	6376.7	167.05	190.88	214.72	3413	12	233	340132.3	2198.3	2637.9	2857.8	2263.7	2742	3060.8	4846.3
64-965	O	30	0.562	37.99	118.7	48.29	55.07	61.85	20	0.472	8	1780.5	494.6	593.5	642.9	509.3	616.9	688.6	1090.3
		762	14.288	965	6381.5	235.79	268.89	301.98	3413	12	203	243136.8	2200	2639.9	2859.9	2265.4	2744.1	3063.1	4850
64-910	O	24	0.875	35.81	118.8	63.12	72.08	81.04	20	0.472	11.8	1425.9	495.1	594.1	643.7	509.9	617.6	689.4	1091.5
		609.6	22.225	909.6	6388.6	308.19	351.93	395.66	3413	12	300	194724.1	2202.4	2642.9	2863.1	2267.9	2747.1	3066.5	4855.3
64-862	O	30	0.5	33.94	118.9	46.97	53.33	59.7	20	0.472	3.9	1782.9	495.3	594.3	643.8	510	617.7	689.6	1091.8
		762	12.7	862	6390.3	229.33	260.4	291.46	3413	12	100	243471	2203	2643.6	2863.9	2268.6	2747.8	3067.4	4856.6
64-659	O	22	0.75	25.94	119	66.16	75.07	83.98	20	0.472	3.9	1309.2	495.9	595.1	644.7	510.7	618.6	690.5	1093.3
		558.8	19.05	658.8	6398.7	323.01	366.52	410.04	3413	12	100	178780.4	2205.9	2647.1	2867.6	2271.5	2751.5	3071.4	4863
64-1062	O	30	0.625	41.81	119.1	49.46	56.56	63.66	20	0.472	11.8	1786.3	496.2	595.4	645.1	511	618.9	690.9	1093.9
		762	15.875	1062	6402.6	241.49	276.14	310.79	3413	12	300	243938.8	2207.2	2648.7	2869.4	2272.9	2753.1	3073.2	4866
64-790	O	24	0.75	31.09	119.2	61.17	69.57	77.96	20	0.472	7.1	1430.4	496.7	596	645.7	511.4	619.5	691.5	1094.9
		609.6	19.05	789.6	6408.5	298.66	339.65	380.64	3413	12	180	195330.5	2209.2	2651.1	2872	2275	2755.6	3076.1	4870.4
64-1181	O	36	0.472	46.51	119.3	40.65	46.49	52.32	20	0.472	10.5	2146.8	497	596.3	646	511.7	619.9	691.9	1095.6
		914.4	12	1181.4	6412.3	198.48	226.96	255.45	3413	12	267	293169.1	2210.6	2652.7	2873.7	2276.4	2757.3	3077.9	4873.3
64-1418	O	44	0.375	55.81	119.5	33.38	38.23	43.09	20	0.472	11.8	2629	497.9	597.5	647.3	512.7	621.1	693.3	1097.7
		1117.6	9.525	1417.6	6424.7	162.95	186.67	210.39	3413	12	300	359013.1	2214.8	2657.8	2879.3	2280.8	2762.6	3083.9	4882.8
64-1094	O	36	0.438	43.09	119.6	39.66	45.16	50.65	20	0.472	7.1	2152.4	498.2	597.9	647.7	513.1	621.5	693.7	1098.4
		914.4	11.112	1094.4	6428.9	193.63	220.47	247.31	3413	12	180	293927.3	2216.3	2659.5	2881.1	2282.2	2764.4	3085.9	4885.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
64-927	O	26	0.75	36.51	119.7	57.84	66.03	74.21	20	0.472	10.5	1555.9	498.7	598.4	648.3	513.5	622	694.4	1099.4
		660.4	19.05	927.4	6434.8	282.39	322.37	362.35	3413	12	267	212478.1	2218.3	2662	2883.8	2284.4	2767	3088.7	4890.5
64-1220	O	38	0.438	48.02	119.8	38.43	43.92	49.41	20	0.472	10	2275.7	499.1	598.9	648.8	513.9	622.5	694.9	1100.2
		965.2	11.112	1219.7	6439.5	187.62	214.44	241.25	3413	12	254.5	310772.3	2220	2663.9	2885.9	2286	2769	3091	4894.1
65-914	O	28	0.625	35.99	120	52.55	59.9	67.25	20	0.472	8	1679.6	499.9	599.9	649.8	514.8	623.5	696	1102
		711.2	15.875	914.2	6450	256.56	292.45	328.35	3413	12	203	229362.3	2223.6	2668.3	2890.6	2289.8	2773.5	3096	4902
65-843	O	24	0.812	33.17	120.1	62.77	71.55	80.34	20	0.472	9.2	1440.7	500.2	600.3	650.3	515.1	624	696.5	1102.8
		609.6	20.638	842.6	6454.7	306.49	349.36	392.23	3413	12	233	196739.9	2225.2	2670.2	2892.7	2291.4	2775.5	3098.3	4905.6
65-1219	O	40	0.394	47.99	120.1	36.17	41.27	46.38	20	0.472	8	2402	500.4	600.5	650.5	515.3	624.2	696.8	1103.2
		1016	10	1219	6457	176.58	201.52	226.45	3413	12	203	328014.8	2226	2671.2	2893.8	2292.2	2776.5	3099.4	4907.3
65-1044	O	34	0.472	41.09	120.2	42.29	48.14	54	20	0.472	7.1	2042.6	500.6	600.8	650.8	515.5	624.5	697.1	1103.7
		863.6	12	1043.6	6459.8	206.48	235.06	263.64	3413	12	180	278933.5	2226.9	2672.3	2895	2293.2	2777.7	3100.7	4909.4
65-1169	O	36	0.472	46.02	120.5	40.88	46.71	52.54	20	0.472	10	2169.8	502.3	602.7	652.9	517.2	626.5	699.3	1107.3
		914.4	12	1168.9	6480.8	199.6	228.06	256.51	3413	12	254.5	296304.2	2234.2	2681	2904.4	2300.7	2786.8	3110.8	4925.4
65-1097	O	34	0.5	43.17	120.7	43.27	49.39	55.52	20	0.472	9.2	2052.2	503	603.6	653.9	518	627.4	700.4	1108.9
		863.6	12.7	1096.6	6490.3	211.24	241.15	271.06	3413	12	233	280251.7	2237.5	2684.9	2908.7	2304.1	2790.8	3115.3	4932.6
65-978	O	36	0.394	38.52	120.8	39.16	44.43	49.7	20	0.472	2.5	2174.5	503.4	604	654.4	518.3	627.8	700.9	1109.7
		914.4	10	978.4	6494.9	191.18	216.92	242.65	3413	12	64	296946	2239	2686.8	2910.7	2305.7	2792.8	3117.5	4936.1
65-964	O	34	0.438	37.94	120.9	41.84	47.51	53.18	20	0.472	3.9	2054.9	503.7	604.4	654.8	518.6	628.2	701.3	1110.3
		863.6	11.112	963.6	6498.8	204.27	231.95	259.64	3413	12	100	280616.4	2240.4	2688.4	2912.5	2307.1	2794.5	3119.4	4939.1
65-1080	O	32	0.562	42.51	121.1	46.65	53.3	59.96	20	0.472	10.5	1937.9	504.7	605.6	656.1	519.7	629.5	702.7	1112.6
		812.8	14.288	1079.8	6511.8	227.75	260.24	292.73	3413	12	267	264640.7	2244.9	2693.8	2918.3	2311.7	2800.1	3125.7	4949
65-1334	O	42	0.394	52.51	121.2	35.22	40.29	45.35	20	0.472	10.5	2544.9	504.9	605.9	656.4	520	629.8	703.1	1113.2
		1066.8	10	1333.8	6515.3	171.94	196.69	221.44	3413	12	267	347525.1	2246.1	2695.3	2919.9	2312.9	2801.6	3127.3	4951.6
65-915	O	26	0.75	36.02	121.3	58.37	66.58	74.79	20	0.472	10	1577.2	505.5	606.6	657.2	520.6	630.5	703.9	1114.4
		660.4	19.05	914.9	6522.7	284.97	325.06	365.16	3413	12	254.5	215381.1	2248.6	2698.4	2923.2	2315.6	2804.8	3130.9	4957.3
65-913	O	32	0.472	35.94	121.4	44.77	50.83	56.89	20	0.472	3.9	1941.8	505.7	606.8	657.4	520.7	630.8	704.1	1114.8
		812.8	12	912.8	6525	218.59	248.18	277.77	3413	12	100	265176.4	2249.4	2699.3	2924.2	2316.4	2805.8	3132	4959

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
65-1270	O	42	0.375	49.99	121.4	34.75	39.66	44.57	20	0.472	8	2549.6	505.9	607	657.6	520.9	631	704.4	1115.2
		1066.8	9.525	1269.8	6527.3	169.68	193.64	217.6	3413	12	203	348168.2	2250.2	2700.3	2925.3	2317.2	2806.8	3133.1	4960.8
65-942	O	30	0.562	37.09	121.6	48.84	55.57	62.31	20	0.472	7.1	1823.9	506.6	608	658.6	521.7	632	705.4	1116.9
		762	14.288	942	6537.4	238.46	271.34	304.21	3413	12	180	249073.2	2253.7	2704.4	2929.8	2320.8	2811.1	3137.9	4968.4
66-1198	O	38	0.438	47.17	121.9	38.91	44.43	49.95	20	0.472	9.2	2316.6	508	609.6	660.4	523.1	633.7	707.3	1120
		965.2	11.112	1198.2	6555.1	189.97	216.92	243.87	3413	12	233	316348.7	2259.8	2711.7	2937.7	2327.1	2818.7	3146.4	4981.9
66-1029	O	38	0.375	40.52	122.3	37.46	42.49	47.53	20	0.472	2.5	2323.2	509.5	611.4	662.3	524.6	635.5	709.4	1123.2
		965.2	9.525	1029.2	6573.7	182.87	207.48	232.08	3413	12	64	317248.3	2266.2	2719.5	2946.1	2333.7	2826.7	3155.4	4996
66-1321	O	42	0.394	52.02	122.3	35.37	40.42	45.48	20	0.472	10	2568.9	509.7	611.7	662.6	524.9	635.8	709.7	1123.7
		1066.8	10	1321.3	6576.9	172.68	197.37	222.06	3413	12	254.5	350812.8	2267.3	2720.8	2947.5	2334.8	2828.1	3156.9	4998.5
66-1385	O	44	0.375	54.51	122.3	33.89	38.76	43.64	20	0.472	10.5	2691.7	509.8	611.7	662.7	525	635.9	709.8	1123.9
		1117.6	9.525	1384.6	6577.8	165.44	189.26	213.07	3413	12	267	367569.7	2267.6	2721.2	2947.9	2335.1	2828.5	3157.4	4999.2
66-922	O	24.5	0.875	36.31	122.4	63.49	72.48	81.47	20	0.472	11.8	1499.4	510	612	663	525.2	636.1	710.1	1124.3
		622.3	22.225	922.3	6580.7	309.98	353.87	397.76	3413	12	300	204758.2	2268.6	2722.3	2949.2	2336.1	2829.7	3158.7	5001.3
66-1196	O	40	0.394	47.09	122.4	36.36	41.4	46.44	20	0.472	7.1	2448.2	510	612	663.1	525.2	636.2	710.2	1124.4
		1016	10	1196	6581.2	177.54	202.15	226.76	3413	12	180	334322.7	2268.8	2722.5	2949.4	2336.3	2829.9	3159	5001.7
66-978	O	28	0.688	38.51	122.5	54.41	62.12	69.83	20	0.472	10.5	1715.1	510.4	612.5	663.6	525.6	636.7	710.7	1125.3
		711.2	17.462	978.2	6586.2	265.64	303.28	340.92	3413	12	267	234206.7	2270.5	2724.6	2951.7	2338.1	2832.1	3161.4	5005.5
66-811	O	28	0.562	31.94	122.5	52.11	59.14	66.18	20	0.472	3.9	1715.1	510.4	612.5	663.6	525.6	636.7	710.7	1125.3
		711.2	14.288	811.2	6586.3	254.42	288.77	323.12	3413	12	100	234209.8	2270.6	2724.7	2951.7	2338.1	2832.1	3161.4	5005.6
66-1214	O	36	0.5	47.81	122.5	41.95	47.99	54.03	20	0.472	11.8	2205.2	510.5	612.6	663.6	525.7	636.7	710.8	1125.4
		914.4	12.7	1214.4	6586.7	204.8	234.3	263.81	3413	12	300	301143.8	2270.7	2724.8	2951.9	2338.3	2832.3	3161.6	5005.9
66-1067	O	32	0.562	42.02	122.5	46.97	53.63	60.28	20	0.472	10	1960.6	510.6	612.7	663.8	525.8	636.9	710.9	1125.6
		812.8	14.288	1067.3	6588.1	229.32	261.83	294.33	3413	12	254.5	267740.1	2271.2	2725.4	2952.5	2338.8	2832.9	3162.3	5007
66-710	O	24	0.688	27.94	122.5	61.75	70.07	78.38	20	0.472	3.9	1470.5	510.6	612.7	663.8	525.8	636.9	710.9	1125.7
		609.6	17.462	709.6	6588.4	301.49	342.1	382.7	3413	12	100	200816	2271.3	2725.5	2952.7	2338.9	2833	3162.5	5007.2
66-1147	O	36	0.472	45.17	122.8	41.43	47.29	53.16	20	0.472	9.2	2210.4	511.7	614	665.2	526.9	638.2	712.4	1128
		914.4	12	1147.4	6602.3	202.27	230.91	259.54	3413	12	233	301856.4	2276.1	2731.3	2958.9	2343.8	2839	3169.1	5017.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
66-1029	O	30	0.625	40.51	122.9	50.66	57.86	65.06	20	0.472	10.5	1843.6	512.1	614.5	665.7	527.4	638.8	713	1129
		762	15.875	1029	6607.9	247.35	282.49	317.63	3413	12	267	251761.9	2278	2733.6	2961.4	2345.8	2841.4	3171.8	5022
66-891	O	28	0.625	35.09	123.1	53.24	60.55	67.87	20	0.472	7.1	1722.9	512.8	615.3	666.6	528	639.6	714	1130.5
		711.2	15.875	891.2	6616.5	259.92	295.65	331.39	3413	12	180	235281.6	2280.9	2737.1	2965.2	2348.8	2845.1	3175.9	5028.5
66-1316	O	40	0.438	51.81	123.2	37.83	43.3	48.77	20	0.472	11.8	2464.3	513.4	616.1	667.4	528.7	640.4	714.8	1131.8
		1016	11.112	1316	6624.6	184.72	211.41	238.1	3413	12	300	336528.1	2283.7	2740.5	2968.9	2351.7	2848.6	3179.8	5034.7
66-877	O	24	0.875	34.51	123.3	65.05	74.19	83.34	20	0.472	10.5	1479.6	513.8	616.5	667.9	529	640.8	715.3	1132.6
		609.6	22.225	876.6	6629.1	317.58	362.23	406.88	3413	12	267	202054.5	2285.3	2742.4	2970.9	2353.3	2850.5	3182	5038.1
66-1372	O	44	0.375	54.02	123.5	34.02	38.88	43.75	20	0.472	10	2716.2	514.4	617.3	668.8	529.7	641.7	716.3	1134.1
		1117.6	9.525	1372.1	6637.8	166.1	189.84	213.59	3413	12	254.5	370918.3	2288.3	2745.9	2974.8	2356.4	2854.2	3186.1	5044.7
66-1247	O	42	0.375	49.09	123.6	34.92	39.76	44.59	20	0.472	7.1	2596.6	515.2	618.2	669.8	530.5	642.6	717.3	1135.8
		1066.8	9.525	1246.8	6647.7	170.48	194.1	217.73	3413	12	180	354591	2291.7	2750.1	2979.2	2360	2858.5	3190.9	5052.3
67-1065	O	38	0.394	41.94	123.8	38.15	43.31	48.48	20	0.472	3.9	2353.1	516	619.2	670.8	531.4	643.7	718.5	1137.6
		965.2	10	1065.2	6658.4	186.25	211.47	236.69	3413	12	100	321335.9	2295.4	2754.5	2984	2363.7	2863.1	3196	5060.4
67-826	O	30	0.5	32.52	124	48.69	55.22	61.76	20	0.472	2.5	1860.6	516.8	620.2	671.9	532.2	644.7	719.6	1139.4
		762	12.7	826	6668.8	237.73	269.62	301.52	3413	12	64	254082.3	2299	2758.8	2988.7	2367.4	2867.6	3201	5068.3
67-966	O	28	0.688	38.02	124.1	54.86	62.59	70.32	20	0.472	10	1737.3	517	620.4	672.2	532.4	644.9	719.9	1139.9
		711.2	17.462	965.7	6671.5	267.86	305.59	343.32	3413	12	254.5	237238.3	2299.9	2759.9	2989.9	2368.4	2868.7	3202.3	5070.3
67-1067	O	34	0.5	41.99	124.1	44.16	50.35	56.54	20	0.472	8	2110	517.1	620.6	672.3	532.5	645.1	720.1	1140.1
		863.6	12.7	1066.6	6672.9	215.61	245.84	276.07	3413	12	203	288134.3	2300.4	2760.5	2990.5	2368.9	2869.3	3203	5071.4
67-893	O	26	0.75	35.17	124.2	59.49	67.81	76.12	20	0.472	9.2	1615.2	517.7	621.2	673	533.1	645.7	720.8	1141.3
		660.4	19.05	893.4	6679.7	290.45	331.06	371.67	3413	12	233	220564.4	2302.8	2763.3	2993.6	2371.3	2872.3	3206.3	5076.6
67-1265	O	38	0.472	49.81	124.3	40.22	46.01	51.81	20	0.472	11.8	2362.6	518.1	621.7	673.5	533.5	646.2	721.4	1142.2
		965.2	12	1265.2	6685.2	196.37	224.66	252.96	3413	12	300	322628.8	2304.7	2765.6	2996	2373.3	2874.6	3208.9	5080.8
67-1300	O	42	0.394	51.17	124.4	35.76	40.84	45.91	20	0.472	9.2	2611.4	518.1	621.8	673.6	533.6	646.3	721.4	1142.3
		1066.8	10	1299.8	6685.7	174.6	199.38	224.16	3413	12	233	356615.6	2304.8	2765.8	2996.3	2373.4	2874.9	3209.1	5081.1
67-1017	O	30	0.625	40.02	124.4	51.05	58.26	65.46	20	0.472	10	1866.3	518.4	622.1	673.9	533.8	646.6	721.8	1142.9
		762	15.875	1016.5	6689.2	249.24	284.43	319.62	3413	12	254.5	254857.8	2306	2767.2	2997.8	2374.7	2876.3	3210.8	5083.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
67-813	O	24	0.812	31.99	124.5	64.67	73.63	82.6	20	0.472	8	1493.9	518.7	622.5	674.3	534.2	647	722.2	1143.5
		609.6	20.638	812.6	6693	315.75	359.51	403.28	3413	12	203	204003.2	2307.3	2768.8	2999.5	2376	2878	3212.6	5086.7
67-1168	O	38	0.438	45.99	125.1	39.61	45.18	50.74	20	0.472	8	2376.1	521.1	625.3	677.4	536.6	649.9	725.5	1148.7
		965.2	11.112	1168.2	6723.4	193.41	220.58	247.75	3413	12	203	324472.7	2317.8	2781.4	3013.2	2386.8	2891.1	3227.2	5109.8
67-1046	O	32	0.562	41.17	125.1	47.69	54.41	61.12	20	0.472	9.2	2000.9	521.1	625.3	677.4	536.6	649.9	725.5	1148.7
		812.8	14.288	1045.8	6723.5	232.86	265.65	298.43	3413	12	233	273244.4	2317.9	2781.4	3013.2	2386.9	2891.1	3227.3	5109.9
67-864	O	24	0.875	34.02	125.1	65.71	74.89	84.08	20	0.472	10	1501	521.2	625.4	677.5	536.7	650.1	725.7	1149
		609.6	22.225	864.1	6725	320.82	365.67	410.51	3413	12	254.5	204977.4	2318.4	2782	3013.9	2387.4	2891.7	3228	5111
67-1116	O	40	0.375	43.94	125.1	36.54	41.48	46.43	20	0.472	3.9	2502.6	521.4	625.6	677.8	536.9	650.3	725.9	1149.4
		1016	9.525	1116	6727.4	178.38	202.53	226.69	3413	12	100	341750	2319.2	2783	3014.9	2388.2	2892.8	3229.1	5112.8
67-1418	O	44	0.394	55.81	125.3	34.86	39.91	44.95	20	0.472	11.8	2756.6	522.1	626.5	678.7	537.6	651.2	726.9	1151
		1117.6	10	1417.6	6736.5	170.21	194.84	219.46	3413	12	300	376435.5	2322.3	2786.8	3019	2391.5	2896.7	3233.5	5119.7
67-1351	O	44	0.375	53.17	125.4	34.37	39.25	44.13	20	0.472	9.2	2759.4	522.6	627.1	679.4	538.2	651.9	727.7	1152.1
		1117.6	9.525	1350.6	6743.4	167.83	191.66	215.48	3413	12	233	376822.9	2324.7	2789.7	3022.1	2393.9	2899.7	3236.8	5125
68-928	O	34	0.438	36.52	125.6	43.17	48.96	54.76	20	0.472	2.5	2134.7	523.2	627.8	680.2	538.8	652.6	728.5	1153.4
		863.6	11.112	927.6	6751	210.78	239.07	267.35	3413	12	64	291507.1	2327.3	2792.8	3025.5	2396.6	2902.9	3240.5	5130.7
68-623	O	22	0.75	24.52	125.9	69.55	78.83	88.12	20	0.472	2.5	1384.9	524.6	629.5	681.9	540.2	654.3	730.4	1156.4
		558.8	19.05	622.8	6768.6	339.57	384.9	430.23	3413	12	64	189114.5	2333.4	2800.1	3033.4	2402.9	2910.5	3248.9	5144.1
68-1181	O	36	0.5	46.51	125.9	42.78	48.88	54.98	20	0.472	10.5	2266.8	524.7	629.7	682.1	540.3	654.5	730.6	1156.8
		914.4	12.7	1181.4	6770.7	208.88	238.66	268.45	3413	12	267	309555.6	2334.1	2800.9	3034.3	2403.6	2911.4	3249.9	5145.7
68-1117	O	36	0.472	43.99	126.1	42.23	48.15	54.07	20	0.472	8	2269.8	525.4	630.5	683	541.1	655.4	731.6	1158.3
		914.4	12	1117.4	6779.5	206.21	235.11	264.01	3413	12	203	309960.6	2337.2	2804.6	3038.3	2406.7	2915.2	3254.2	5152.5
68-910	O	24	0.938	35.81	126.3	67.1	76.55	86.01	20	0.472	11.8	1515.8	526.3	631.6	684.2	542	656.5	732.8	1160.3
		609.6	23.812	909.6	6791	327.59	373.76	419.92	3413	12	300	206991	2341.1	2809.4	3043.5	2410.8	2920.1	3259.7	5161.2
68-877	O	32	0.472	34.52	126.3	46.3	52.51	58.72	20	0.472	2.5	2021.6	526.5	631.7	684.4	542.1	656.7	733	1160.6
		812.8	12	876.8	6792.9	226.06	256.37	286.68	3413	12	64	276064.1	2341.8	2810.1	3044.3	2411.5	2921	3260.6	5162.6
68-1283	O	40	0.438	50.51	126.4	38.5	44	49.51	20	0.472	10.5	2527.7	526.6	631.9	684.6	542.3	656.9	733.2	1161
		1016	11.112	1283	6795	187.96	214.84	241.72	3413	12	267	345183.9	2342.5	2811	3045.2	2412.2	2921.8	3261.6	5164.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
68-1044	O	34	0.5	41.09	126.9	44.56	50.7	56.84	20	0.472	7.1	2156.5	528.5	634.3	687.1	544.3	659.3	735.9	1165.2
		863.6	12.7	1043.6	6819.9	217.58	247.55	277.51	3413	12	180	294484.5	2351.1	2821.3	3056.4	2421.1	2932.6	3273.6	5183.1
68-944	O	28	0.688	37.17	126.9	55.85	63.66	71.48	20	0.472	9.2	1776.8	528.8	634.6	687.5	544.6	659.6	736.3	1165.8
		711.2	17.462	944.2	6823.4	272.67	310.82	348.97	3413	12	233	242640.3	2352.3	2822.7	3058	2422.3	2934.1	3275.2	5185.8
68-889	O	24.5	0.875	35.01	126.9	65.4	74.57	83.75	20	0.472	10.5	1555.1	528.9	634.7	687.6	544.7	659.7	736.5	1166.1
		622.3	22.225	889.3	6824.9	319.31	364.1	408.9	3413	12	267	212356.4	2352.8	2823.4	3058.6	2422.8	2934.7	3275.9	5186.9
68-995	O	30	0.625	39.17	127.1	51.9	59.18	66.46	20	0.472	9.2	1906.6	529.6	635.5	688.5	545.4	660.6	737.4	1167.6
		762	15.875	995	6833.7	253.4	288.94	324.47	3413	12	233	260364.8	2355.8	2827	3062.6	2426	2938.5	3280.2	5193.6
68-1169	O	36	0.5	46.02	127.3	43.03	49.13	55.23	20	0.472	10	2291.1	530.3	636.4	689.4	546.1	661.5	738.4	1169.2
		914.4	12.7	1168.9	6843.1	210.11	239.88	269.65	3413	12	254.5	312865.9	2359.1	2830.9	3066.8	2429.3	2942.5	3284.7	5200.7
68-1164	O	34	0.562	45.81	127.3	46.15	52.75	59.36	20	0.472	11.8	2163.8	530.3	636.4	689.4	546.1	661.5	738.4	1169.2
		863.6	14.288	1163.6	6843.1	225.32	257.56	289.8	3413	12	300	295486.4	2359.1	2830.9	3066.8	2429.3	2942.5	3284.7	5200.8
68-1270	O	42	0.394	49.99	127.3	36.34	41.44	46.55	20	0.472	8	2673.1	530.4	636.5	689.5	546.2	661.6	738.5	1169.3
		1066.8	10	1269.8	6843.7	177.41	202.33	227.26	3413	12	203	365041	2359.3	2831.1	3067	2429.5	2942.8	3285	5201.2
69-1145	O	38	0.438	45.09	127.6	39.89	45.39	50.9	20	0.472	7.1	2423.8	531.5	637.8	691	547.4	663	740.1	1171.8
		965.2	11.112	1145.2	6858.5	194.76	221.63	248.5	3413	12	180	330989.3	2364.4	2837.2	3073.7	2434.8	2949.1	3292.1	5212.4
69-1271	O	40	0.438	50.02	127.6	38.69	44.18	49.68	20	0.472	10	2552.6	531.8	638.1	691.3	547.6	663.3	740.4	1172.4
		1016	11.112	1270.5	6861.8	188.89	215.72	242.56	3413	12	254.5	348580.1	2365.5	2838.6	3075.2	2435.9	2950.6	3293.7	5215
69-1232	O	38	0.472	48.51	127.7	40.97	46.82	52.66	20	0.472	10.5	2425.8	532	638.4	691.6	547.8	663.6	740.7	1172.8
		965.2	12	1232.2	6864.3	200.06	228.59	257.12	3413	12	267	331269.3	2366.4	2839.6	3076.3	2436.8	2951.6	3294.8	5216.8
69-913	O	32	0.5	35.94	128.1	47.21	53.58	59.94	20	0.472	3.9	2049.8	533.8	640.6	693.9	549.7	665.8	743.2	1176.8
		812.8	12.7	912.8	6887.7	230.51	261.59	292.67	3413	12	100	279917.8	2374.5	2849.4	3086.8	2445.1	2961.7	3306.1	5234.7
69-790	O	24	0.812	31.09	128.1	65.8	74.77	83.75	20	0.472	7.1	1537.4	533.8	640.6	694	549.7	665.8	743.3	1176.8
		609.6	20.638	789.6	6888	321.26	365.08	408.9	3413	12	180	209945.5	2374.5	2849.5	3086.9	2445.2	2961.8	3306.2	5234.9
69-1029	O	38	0.394	40.52	128.2	39.22	44.48	49.74	20	0.472	2.5	2435.4	534.1	640.9	694.3	550	666.2	743.6	1177.4
		965.2	10	1029.2	6891.3	191.48	217.16	242.85	3413	12	64	332575.8	2375.7	2850.8	3088.4	2446.4	2963.3	3307.8	5237.4
69-775	O	28	0.562	30.52	128.2	54.18	61.43	68.68	20	0.472	2.5	1794.7	534.1	641	694.4	550	666.3	743.7	1177.6
		711.2	14.288	775.2	6892.2	264.54	299.92	335.3	3413	12	64	245086.4	2376	2851.2	3088.8	2446.7	2963.6	3308.3	5238.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
69-843	O	24	0.875	33.17	128.3	67.09	76.41	85.73	20	0.472	9.2	1539.3	534.5	641.4	694.8	550.4	666.7	744.2	1178.3
		609.6	22.225	842.6	6896.6	327.55	373.06	418.56	3413	12	233	210207.7	2377.5	2853	3090.8	2448.3	2965.5	3310.4	5241.4
69-1321	O	44	0.375	51.99	128.3	34.9	39.8	44.7	20	0.472	8	2822.1	534.5	641.4	694.8	550.4	666.7	744.2	1178.3
		1117.6	9.525	1320.6	6896.6	170.38	194.32	218.27	3413	12	203	385383.2	2377.5	2853	3090.8	2448.3	2965.5	3310.4	5241.4
69-1385	O	44	0.394	54.51	128.3	35.41	40.48	45.54	20	0.472	10.5	2822.3	534.5	641.4	694.9	550.4	666.7	744.2	1178.4
		1117.6	10	1384.6	6897.1	172.87	197.62	222.36	3413	12	267	385407.3	2377.7	2853.2	3091	2448.5	2965.7	3310.6	5241.8
69-1011	O	28	0.75	39.81	128.4	57.3	65.43	73.55	20	0.472	11.8	1797.7	535	642	695.6	551	667.4	745	1179.5
		711.2	19.05	1011.2	6903.8	279.78	319.44	359.11	3413	12	300	245497.4	2380	2856	3094	2450.8	2968.6	3313.8	5246.9
69-863	O	26	0.75	33.99	128.6	61.16	69.63	78.11	20	0.472	8	1671.3	535.7	642.8	696.4	551.6	668.2	745.8	1180.9
		660.4	19.05	863.4	6911.8	298.61	339.98	381.35	3413	12	203	228228.2	2382.8	2859.3	3097.6	2453.7	2972.1	3317.7	5253
69-1094	O	36	0.472	43.09	128.7	42.58	48.44	54.3	20	0.472	7.1	2317.5	536.5	643.7	697.4	552.4	669.1	746.9	1182.7
		914.4	12	1094.4	6922	207.89	236.51	265.14	3413	12	180	316474.8	2386.3	2863.5	3102.2	2457.3	2976.5	3322.6	5260.7
69-1016	O	32	0.562	39.99	128.8	48.77	55.57	62.37	20	0.472	8	2060	536.5	643.8	697.4	552.4	669.1	747	1182.7
		812.8	14.288	1015.8	6922.1	238.1	271.3	304.5	3413	12	203	281314.2	2386.3	2863.6	3102.2	2457.3	2976.5	3322.6	5260.8
69-877	O	24.5	0.875	34.52	128.8	66.06	75.27	84.49	20	0.472	10	1577.2	536.5	643.8	697.4	552.4	669.2	747	1182.7
		622.3	22.225	876.8	6922.2	322.53	367.52	412.5	3413	12	254.5	215383.8	2386.3	2863.6	3102.2	2457.4	2976.5	3322.6	5260.9
69-1220	O	38	0.472	48.02	129	41.2	47.04	52.87	20	0.472	10	2450.7	537.4	644.9	698.7	553.4	670.4	748.3	1184.8
		965.2	12	1219.7	6934.6	201.15	229.65	258.15	3413	12	254.5	334664.3	2390.6	2868.7	3107.8	2461.8	2981.9	3328.6	5270.3
69-1014	O	36	0.438	39.94	129	41.99	47.66	53.33	20	0.472	3.9	2322.1	537.5	645	698.8	553.5	670.5	748.4	1185
		914.4	11.112	1014.4	6935.9	205.02	232.69	260.36	3413	12	100	317107.6	2391.1	2869.3	3108.4	2462.2	2982.4	3329.2	5271.3
69-674	O	24	0.688	26.52	129.1	64.65	73.28	81.91	20	0.472	2.5	1549.1	537.9	645.5	699.3	553.9	670.9	748.9	1185.8
		609.6	17.462	673.6	6940.6	315.66	357.78	399.9	3413	12	64	211548.4	2392.7	2871.2	3110.5	2463.9	2984.4	3331.5	5274.8
70-1080	O	40	0.375	42.52	129.3	37.5	42.53	47.56	20	0.472	2.5	2586	538.8	646.5	700.4	554.8	672	750.1	1187.7
		1016	9.525	1080	6951.6	183.11	207.66	232.21	3413	12	64	353141.7	2396.5	2875.8	3115.4	2467.8	2989.2	3336.8	5283.2
70-1372	O	44	0.394	54.02	129.5	35.56	40.61	45.67	20	0.472	10	2848	539.4	647.3	701.2	555.4	672.8	751	1189.1
		1117.6	10	1372.1	6959.9	173.59	198.28	222.97	3413	12	254.5	388918.4	2399.3	2879.2	3119.1	2470.8	2992.8	3340.7	5289.5
70-1247	O	42	0.394	49.09	129.6	36.53	41.57	46.61	20	0.472	7.1	2722.5	540.2	648.2	702.2	556.2	673.8	752.1	1190.8
		1066.8	10	1246.8	6969.9	178.35	202.96	227.57	3413	12	180	371774.9	2402.8	2883.3	3123.6	2474.3	2997.1	3345.6	5297.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
70-1147	O	36	0.5	45.17	129.7	43.62	49.76	55.9	20	0.472	9.2	2334	540.3	648.3	702.4	556.4	673.9	752.3	1191.1
		914.4	12.7	1147.4	6971.3	212.98	242.95	272.92	3413	12	233	318728.4	2403.3	2883.9	3124.3	2474.8	2997.7	3346.2	5298.2
70-1113	O	32	0.625	43.81	129.8	50.13	57.27	64.41	20	0.472	11.8	2077.1	540.9	649.1	703.2	557	674.7	753.2	1192.5
		812.8	15.875	1112.8	6979.6	244.76	279.62	314.48	3413	12	300	283649.4	2406.1	2887.3	3128	2477.7	3001.2	3350.2	5304.5
70-1249	O	40	0.438	49.17	129.8	39.15	44.68	50.2	20	0.472	9.2	2596.5	540.9	649.1	703.2	557	674.7	753.2	1192.6
		1016	11.112	1249	6979.9	191.16	218.13	245.1	3413	12	233	354580.5	2406.2	2887.5	3128.1	2477.9	3001.4	3350.4	5304.7
70-964	O	34	0.472	37.94	130.1	44.97	51.03	57.09	20	0.472	3.9	2212.2	542.2	650.6	704.9	558.3	676.3	754.9	1195.3
		863.6	12	963.6	6996.1	219.54	249.14	278.73	3413	12	100	302091.1	2411.8	2894.2	3135.4	2483.6	3008.3	3358.1	5317
70-1062	O	30	0.688	41.81	130.2	53.86	61.51	69.16	20	0.472	11.8	1952.6	542.4	650.9	705.1	558.5	676.5	755.2	1195.8
		762	17.462	1062	6998.7	262.98	300.32	337.66	3413	12	300	266649.7	2412.7	2895.2	3136.5	2484.5	3009.4	3359.4	5319
70-1298	O	44	0.375	51.09	130.6	35.06	39.89	44.73	20	0.472	7.1	2872.1	544	652.8	707.2	560.2	678.5	757.4	1199.2
		1117.6	9.525	1297.6	7018.9	171.16	194.78	218.4	3413	12	180	392214.1	2419.7	2903.6	3145.6	2491.7	3018.1	3369.1	5334.3
70-1131	O	34	0.562	44.51	131	47.15	53.82	60.5	20	0.472	10.5	2227	545.8	655	709.6	562.1	680.8	760	1203.3
		863.6	14.288	1130.6	7042.9	230.18	262.8	295.41	3413	12	267	304111.1	2427.9	2913.5	3156.3	2500.2	3028.4	3380.6	5352.6
70-1367	O	42	0.438	53.81	131	38.1	43.57	49.04	20	0.472	11.8	2751.1	545.8	655	709.6	562.1	680.8	760	1203.4
		1066.8	11.112	1366.8	7043.2	186	212.72	239.44	3413	12	300	375682.6	2428	2913.7	3156.5	2500.3	3028.6	3380.7	5352.8
70-965	O	30	0.625	37.99	131.1	53.16	60.55	67.93	20	0.472	8	1965.9	546.1	655.3	709.9	562.3	681.1	760.3	1203.9
		762	15.875	965	7046.2	259.54	295.61	331.67	3413	12	203	268459.1	2429.1	2914.9	3157.8	2501.4	3029.9	3382.2	5355.1
70-877	O	24	0.938	34.51	131.1	69.17	78.83	88.49	20	0.472	10.5	1572.8	546.1	655.3	710	562.4	681.2	760.4	1204
		609.6	23.812	876.6	7046.7	337.72	384.89	432.05	3413	12	267	214783.3	2429.3	2915.1	3158	2501.6	3030.1	3382.4	5355.5
70-914	O	28	0.688	35.99	131.1	57.3	65.25	73.2	20	0.472	8	1835.1	546.2	655.4	710	562.4	681.2	760.5	1204.1
		711.2	17.462	914.2	7047.3	279.79	318.58	357.38	3413	12	203	250602.7	2429.5	2915.4	3158.3	2501.8	3030.3	3382.7	5356
71-1116	O	40	0.394	43.94	131.2	38.25	43.41	48.57	20	0.472	3.9	2623.7	546.6	655.9	710.6	562.9	681.8	761.1	1205
		1016	10	1116	7052.9	186.75	211.95	237.15	3413	12	100	358288.5	2431.4	2917.7	3160.8	2503.8	3032.8	3385.4	5360.2
71-1198	O	38	0.472	47.17	131.3	41.73	47.6	53.47	20	0.472	9.2	2494.7	547.1	656.5	711.2	563.4	682.4	761.7	1206.1
		965.2	12	1198.2	7059	203.73	232.41	261.08	3413	12	233	340669.3	2433.5	2920.2	3163.6	2506	3035.4	3388.3	5364.9
71-1265	O	38	0.5	49.81	131.3	42.32	48.38	54.44	20	0.472	11.8	2494.9	547.1	656.6	711.3	563.4	682.5	761.8	1206.2
		965.2	12.7	1265.2	7059.7	206.63	236.21	265.79	3413	12	300	340703.4	2433.8	2920.5	3163.9	2506.2	3035.7	3388.7	5365.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
71-1351	O	44	0.394	53.17	131.5	35.94	41.01	46.08	20	0.472	9.2	2893.3	548	657.6	712.4	564.3	683.5	763	1208.1
		1117.6	10	1350.6	7070.7	175.45	200.23	225	3413	12	233	395109.6	2437.5	2925	3168.8	2510.1	3040.4	3393.9	5373.7
71-993	O	32	0.562	39.09	131.7	49.3	56.05	62.81	20	0.472	7.1	2107.7	548.9	658.7	713.6	565.2	684.6	764.3	1210.1
		812.8	14.288	992.8	7082.5	240.68	273.68	306.67	3413	12	180	287831.4	2441.6	2929.9	3174.1	2514.3	3045.5	3399.6	5382.7
71-855	O	24.5	0.875	33.67	132	67.43	76.77	86.12	20	0.472	9.2	1616.9	550	659.9	714.9	566.3	686	765.7	1212.4
		622.3	22.225	855.3	7096.2	329.2	374.84	420.49	3413	12	233	220798	2446.3	2935.6	3180.2	2519.1	3051.4	3406.2	5393.1
71-840	O	26	0.75	33.09	132.1	62.13	70.59	79.06	20	0.472	7.1	1717	550.3	660.4	715.4	566.7	686.4	766.3	1213.2
		660.4	19.05	840.4	7101	303.32	344.67	386.03	3413	12	180	234474.3	2448	2937.6	3182.4	2520.8	3053.4	3408.5	5396.7
71-1167	O	42	0.375	45.94	132.1	36.62	41.56	46.5	20	0.472	3.9	2774.6	550.5	660.6	715.7	566.9	686.7	766.5	1213.7
		1066.8	9.525	1166.8	7103.5	178.8	202.92	227.04	3413	12	100	378903	2448.9	2938.6	3183.5	2521.8	3054.5	3409.7	5398.7
71-1118	O	34	0.562	44.02	132.5	47.46	54.14	60.82	20	0.472	10	2251.9	551.9	662.3	717.5	568.4	688.4	768.5	1216.8
		863.6	14.288	1118.1	7121.6	231.71	264.34	296.97	3413	12	254.5	307511	2455.1	2946.1	3191.6	2528.2	3062.3	3418.4	5412.4
71-710	O	24	0.75	27.94	132.6	66.93	75.9	84.86	20	0.472	3.9	1591.6	552.7	663.2	718.4	569.1	689.3	769.5	1218.4
		609.6	19.05	709.6	7131	326.79	370.55	414.32	3413	12	100	217352	2458.3	2950	3195.8	2531.5	3066.3	3422.9	5419.5
71-1316	O	40	0.472	51.81	132.7	40.54	46.34	52.15	20	0.472	11.8	2654.2	553	663.5	718.8	569.4	689.7	769.9	1219
		1016	12	1316	7134.9	197.93	226.27	254.62	3413	12	300	362450.6	2459.7	2951.6	3197.5	2532.9	3068	3424.7	5422.5
71-978	O	28	0.75	38.51	132.7	58.83	67.09	75.36	20	0.472	10.5	1858.4	553.1	663.7	719	569.6	689.9	770.1	1219.3
		711.2	19.05	978.2	7136.7	287.24	327.58	367.93	3413	12	267	253779.4	2460.3	2952.3	3198.4	2533.5	3068.8	3425.6	5423.9
71-862	O	30	0.562	33.94	132.9	52.44	59.49	66.53	20	0.472	3.9	1993.2	553.7	664.4	719.8	570.1	690.6	770.9	1220.6
		762	14.288	862	7144.1	256.03	290.44	324.85	3413	12	100	272189.1	2462.8	2955.4	3201.7	2536.1	3072	3429.2	5429.5
71-864	O	24	0.938	34.02	133	69.89	79.6	89.31	20	0.472	10	1595.6	554	664.8	720.2	570.5	691	771.4	1221.4
		609.6	23.812	864.1	7148.6	341.25	388.65	436.05	3413	12	254.5	217890.3	2464.4	2957.3	3203.7	2537.8	3073.9	3431.3	5433
71-1519	O	48	0.375	59.81	133	33.72	38.57	43.43	20	0.472	11.8	3191.7	554.1	664.9	720.3	570.6	691.2	771.5	1221.6
		1219.2	9.525	1519.2	7149.9	164.62	188.32	212.03	3413	12	300	435855.7	2464.8	2957.8	3204.3	2538.2	3074.4	3431.9	5433.9
72-813	O	24	0.875	31.99	133	69.14	78.67	88.19	20	0.472	8	1596.1	554.2	665.1	720.5	570.7	691.3	771.7	1221.8
		609.6	22.225	812.6	7151.2	337.59	384.09	430.59	3413	12	203	217968.3	2465.3	2958.3	3204.9	2538.7	3075	3432.6	5434.9
72-1219	O	40	0.438	47.99	133	39.83	45.4	50.97	20	0.472	8	2660.4	554.3	665.1	720.5	570.8	691.3	771.7	1221.9
		1016	11.112	1219	7151.7	194.49	221.67	248.85	3413	12	203	363306.8	2465.5	2958.6	3205.1	2538.9	3075.2	3432.8	5435.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
72-1117	O	36	0.5	43.99	133.1	44.49	50.69	56.89	20	0.472	8	2396.7	554.8	665.7	721.2	571.3	692	772.5	1223.1
		914.4	12.7	1117.4	7158.5	217.2	247.48	277.76	3413	12	203	327285.7	2467.8	2961.4	3208.1	2541.3	3078.1	3436.1	5440.4
72-877	O	32	0.5	34.52	133.4	48.84	55.37	61.89	20	0.472	2.5	2134	555.7	666.9	722.4	572.3	693.2	773.8	1225.1
		812.8	12.7	876.8	7170.5	238.48	270.33	302.19	3413	12	64	291410.8	2472	2966.3	3213.5	2545.5	3083.3	3441.9	5449.6
72-910	O	24	1	35.81	133.7	71.05	81	90.95	20	0.472	11.8	1604.1	557	668.4	724.1	573.6	694.7	775.5	1227.9
		609.6	25.4	909.6	7186.8	346.89	395.46	444.04	3413	12	300	219052.3	2477.5	2973.1	3220.8	2551.3	3090.3	3449.6	5461.9
72-978	O	36	0.438	38.52	133.8	43.26	49.05	54.83	20	0.472	2.5	2407.6	557.3	668.8	724.5	573.9	695.1	776	1228.6
		914.4	11.112	978.4	7191.1	211.22	239.46	267.7	3413	12	64	328775.6	2479	2974.8	3222.7	2552.8	3092.2	3451.7	5465.2
72-1080	O	32	0.625	42.51	133.8	51.3	58.53	65.77	20	0.472	10.5	2140.6	557.4	668.9	724.7	574	695.3	776.2	1228.9
		812.8	15.875	1079.8	7192.9	250.45	285.78	321.11	3413	12	267	292318	2479.7	2975.6	3223.5	2553.5	3092.9	3452.6	5466.6
72-1334	O	42	0.438	52.51	134.2	38.74	44.25	49.76	20	0.472	10.5	2819.1	559.4	671.2	727.2	576	697.7	778.8	1233.1
		1066.8	11.112	1333.8	7217.4	189.15	216.05	242.95	3413	12	267	384977.5	2488.1	2985.7	3234.6	2562.2	3103.5	3464.4	5485.2
72-942	O	30	0.625	37.09	134.3	53.82	61.18	68.54	20	0.472	7.1	2013.9	559.4	671.3	727.2	576.1	697.8	778.9	1233.3
		762	15.875	942	7218.2	262.8	298.71	334.63	3413	12	180	275013.8	2488.4	2986.1	3234.9	2562.5	3103.8	3464.7	5485.8
72-1029	O	30	0.688	40.51	134.4	55.2	62.97	70.73	20	0.472	10.5	2015.3	559.8	671.8	727.7	576.5	698.2	779.4	1234.1
		762	17.462	1029	7223.1	269.53	307.44	345.35	3413	12	267	275201.2	2490.1	2988.1	3237.1	2564.2	3105.9	3467.1	5489.6
72-966	O	28	0.75	38.02	134.5	59.34	67.63	75.92	20	0.472	10	1882.4	560.3	672.3	728.3	576.9	698.8	780.1	1235.1
		711.2	19.05	965.7	7229	289.75	330.21	370.67	3413	12	254.5	257064.3	2492.1	2990.5	3239.8	2566.3	3108.5	3469.9	5494.1
72-891	O	28	0.688	35.09	134.5	58.12	66.04	73.97	20	0.472	7.1	1882.5	560.3	672.3	728.3	576.9	698.8	780.1	1235.1
		711.2	17.462	891.2	7229.2	283.74	322.45	361.16	3413	12	180	257070.2	2492.2	2990.6	3239.8	2566.4	3108.6	3470	5494.2
72-1321	O	44	0.394	51.99	134.5	36.49	41.6	46.7	20	0.472	8	2959.1	560.4	672.5	728.6	577.1	699	780.3	1235.5
		1117.6	10	1320.6	7231.3	178.17	203.09	228.01	3413	12	203	404085.3	2492.9	2991.5	3240.8	2567.1	3109.5	3471	5495.8
72-1168	O	38	0.472	45.99	134.7	42.51	48.43	54.36	20	0.472	8	2558.7	561.1	673.4	729.5	577.8	699.9	781.3	1237
		965.2	12	1168.2	7240.3	207.54	236.47	265.4	3413	12	203	349417.9	2496	2995.2	3244.8	2570.3	3113.3	3475.4	5502.6
72-1232	O	38	0.5	48.51	134.8	43.13	49.25	55.36	20	0.472	10.5	2561.7	561.8	674.1	730.3	578.5	700.7	782.2	1238.5
		965.2	12.7	1232.2	7248.8	210.6	240.45	270.29	3413	12	267	349828	2498.9	2998.7	3248.6	2573.3	3117	3479.4	5509.1
73-1097	O	34	0.562	43.17	135.1	48.16	54.9	61.63	20	0.472	9.2	2296	562.7	675.3	731.6	579.5	701.9	783.5	1240.6
		863.6	14.288	1096.6	7261.2	235.14	268.03	300.93	3413	12	233	313540	2503.2	3003.9	3254.2	2577.7	3122.3	3485.4	5518.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
73-928	O	34	0.472	36.52	135.2	46.42	52.62	58.82	20	0.472	2.5	2298	563.2	675.9	732.2	580	702.5	784.2	1241.7
		863.6	12	927.6	7267.6	226.65	256.92	287.18	3413	12	64	313815.2	2505.4	3006.5	3257	2580	3125.1	3488.5	5523.4
73-811	O	28	0.625	31.94	135.2	57.49	65.2	72.91	20	0.472	3.9	1892.8	563.3	676	732.4	580.1	702.7	784.4	1241.9
		711.2	15.875	811.2	7269	280.71	318.35	355.99	3413	12	100	258485	2505.9	3007.1	3257.7	2580.5	3125.7	3489.1	5524.4
73-1067	O	32	0.625	42.02	135.4	51.67	58.92	66.16	20	0.472	10	2165.7	564	676.8	733.2	580.8	703.5	785.3	1243.3
		812.8	15.875	1067.3	7277.1	252.29	287.66	323.04	3413	12	254.5	295741.6	2508.7	3010.4	3261.3	2583.4	3129.2	3493	5530.6
73-1321	O	42	0.438	52.02	135.5	38.93	44.43	49.93	20	0.472	10	2845.8	564.6	677.6	734	581.5	704.3	786.2	1244.8
		1066.8	11.112	1321.3	7285.7	190.05	216.91	243.77	3413	12	254.5	388619.5	2511.7	3014	3265.2	2586.4	3132.9	3497.1	5537.1
73-1080	O	40	0.394	42.52	135.6	39.27	44.52	49.78	20	0.472	2.5	2711.1	564.8	677.8	734.3	581.6	704.5	786.4	1245.2
		1016	10	1080	7288	191.76	217.39	243.02	3413	12	64	370231.5	2512.5	3014.9	3266.2	2587.2	3133.8	3498.3	5538.9
73-1196	O	40	0.438	47.09	135.6	40.1	45.61	51.12	20	0.472	7.1	2711.6	564.9	677.9	734.4	581.7	704.6	786.6	1245.4
		1016	11.112	1196	7289.2	195.8	222.69	249.58	3413	12	180	370293.5	2512.9	3015.4	3266.7	2587.7	3134.4	3498.8	5539.8
73-1486	O	48	0.375	58.51	135.9	34.2	39.07	43.95	20	0.472	10.5	3262.6	566.4	679.7	736.3	583.3	706.5	788.7	1248.7
		1219.2	9.525	1486.2	7308.6	166.98	190.77	214.57	3413	12	267	445533.6	2519.6	3023.5	3275.4	2594.6	3142.7	3508.1	5554.6
73-1094	O	36	0.5	43.09	135.9	44.88	51.03	57.18	20	0.472	7.1	2447	566.4	679.7	736.4	583.3	706.5	788.7	1248.8
		914.4	12.7	1094.4	7308.9	219.11	249.14	279.17	3413	12	180	334163.9	2519.7	3023.6	3275.6	2594.7	3142.8	3508.3	5554.8
73-1017	O	30	0.688	40.02	136	55.65	63.43	71.21	20	0.472	10	2040	566.7	680	736.7	583.5	706.8	789	1249.3
		762	17.462	1016.5	7312	271.69	309.69	347.68	3413	12	254.5	278585.3	2520.7	3024.8	3276.9	2595.7	3144.1	3509.7	5557.1
73-1283	O	40	0.472	50.51	136.1	41.27	47.12	52.98	20	0.472	10.5	2722.4	567.2	680.6	737.3	584.1	707.5	789.7	1250.4
		1016	12	1283	7318.4	201.51	230.08	258.66	3413	12	267	371773.2	2522.9	3027.5	3279.8	2598	3146.9	3512.8	5562
73-1220	O	38	0.5	48.02	136.2	43.38	49.49	55.6	20	0.472	10	2588	567.5	681	737.8	584.4	707.9	790.2	1251.2
		965.2	12.7	1219.7	7323.1	211.8	241.63	271.46	3413	12	254.5	353413.1	2524.6	3029.5	3281.9	2599.7	3148.9	3515.1	5565.6
73-1131	O	42	0.375	44.52	136.3	37.55	42.57	47.59	20	0.472	2.5	2863	568.1	681.7	738.5	585	708.5	790.9	1252.3
		1066.8	9.525	1130.8	7329.7	183.33	207.83	232.34	3413	12	64	390965.7	2526.8	3032.2	3284.9	2602	3151.8	3518.3	5570.6
73-843	O	24	0.938	33.17	136.4	71.38	81.24	91.09	20	0.472	9.2	1636.3	568.2	681.8	738.6	585.1	708.7	791.1	1252.5
		609.6	23.812	842.6	7331	348.5	396.63	444.75	3413	12	233	223450	2527.3	3032.7	3285.5	2602.5	3152.3	3518.9	5571.6
74-825	O	24.5	0.875	32.49	136.8	69.46	79.01	88.56	20	0.472	8	1675.6	569.9	683.9	740.9	586.9	710.9	793.6	1256.5
		622.3	22.225	825.3	7354.1	339.14	385.77	432.4	3413	12	203	228824.1	2535.3	3042.3	3295.8	2610.7	3162.3	3530	5589.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
74-1298	O	44	0.394	51.09	136.9	36.68	41.72	46.76	20	0.472	7.1	3011.5	570.4	684.4	741.5	587.3	711.4	794.1	1257.4
		1117.6	10	1297.6	7359.5	179.09	203.7	228.31	3413	12	180	411247.7	2537.1	3044.5	3298.2	2612.6	3164.6	3532.5	5593.2
74-790	O	24	0.875	31.09	136.9	70.4	79.95	89.5	20	0.472	7.1	1642.6	570.4	684.4	741.5	587.3	711.4	794.2	1257.4
		609.6	22.225	789.6	7359.5	343.74	390.37	437	3413	12	180	224317.4	2537.1	3044.5	3298.2	2612.6	3164.6	3532.6	5593.2
74-1474	O	48	0.375	58.02	137.1	34.33	39.19	44.05	20	0.472	10	3290.2	571.2	685.5	742.6	588.2	712.5	795.4	1259.3
		1219.2	9.525	1473.7	7370.6	167.6	191.33	215.06	3413	12	254.5	449312.6	2540.9	3049.1	3303.2	2616.6	3169.4	3537.9	5601.7
74-1214	O	36	0.562	47.81	137.1	46.63	53.26	59.89	20	0.472	11.8	2467.9	571.3	685.5	742.7	588.3	712.6	795.4	1259.4
		914.4	14.288	1214.4	7371.4	227.68	260.05	292.42	3413	12	300	337019.1	2541.2	3049.4	3303.5	2616.8	3169.7	3538.3	5602.2
74-1065	O	38	0.438	41.94	137.1	42.13	47.79	53.46	20	0.472	3.9	2605.8	571.5	685.7	742.9	588.5	712.8	795.7	1259.8
		965.2	11.112	1065.2	7373.6	205.7	233.35	261.01	3413	12	100	355847.7	2541.9	3050.3	3304.5	2617.6	3170.6	3539.3	5603.9
74-1145	O	38	0.472	45.09	137.4	42.84	48.71	54.58	20	0.472	7.1	2610.1	572.4	686.9	744.1	589.4	714	797	1261.9
		965.2	12	1145.2	7385.7	209.17	237.83	266.5	3413	12	180	356435.6	2546.1	3055.4	3310	2621.9	3175.9	3545.2	5613.2
74-964	O	34	0.5	37.94	137.4	47.43	53.8	60.17	20	0.472	3.9	2335.5	572.4	686.9	744.2	589.5	714	797	1262
		863.6	12.7	963.6	7386.1	231.57	262.66	293.76	3413	12	100	318933.2	2546.3	3055.5	3310.2	2622.1	3176	3545.3	5613.5
74-1271	O	40	0.472	50.02	137.5	41.49	47.34	53.18	20	0.472	10	2749.2	572.8	687.3	744.6	589.8	714.4	797.5	1262.7
		1016	12	1270.5	7390.4	202.57	231.12	259.66	3413	12	254.5	375430.9	2547.7	3057.3	3312.1	2623.6	3177.9	3547.4	5616.7
74-944	O	28	0.75	37.17	137.5	60.43	68.82	77.2	20	0.472	9.2	1925.3	573	687.6	744.9	590.1	714.7	797.8	1263.2
		711.2	19.05	944.2	7393.6	295.05	336	376.95	3413	12	233	262917.8	2548.9	3058.6	3313.5	2624.7	3179.3	3548.9	5619.2
74-1300	O	42	0.438	51.17	137.8	39.38	44.9	50.43	20	0.472	9.2	2892.9	574	688.8	746.2	591.1	715.9	799.2	1265.4
		1066.8	11.112	1299.8	7406.2	192.26	219.24	246.23	3413	12	233	395047.7	2553.2	3063.8	3319.2	2629.2	3184.7	3555	5628.7
74-1046	O	32	0.625	41.17	138.1	52.5	59.81	67.12	20	0.472	9.2	2210.2	575.6	690.7	748.2	592.7	717.9	801.4	1268.9
		812.8	15.875	1045.8	7426.7	256.3	292.02	327.73	3413	12	233	301821.6	2560.3	3072.3	3328.3	2636.5	3193.5	3564.8	5644.3
74-1011	O	28	0.812	39.81	138.2	61.56	70.22	78.88	20	0.472	11.8	1934.4	575.7	690.9	748.4	592.9	718.1	801.6	1269.2
		711.2	20.638	1011.2	7428.7	300.58	342.84	385.1	3413	12	300	264165.3	2561	3073.2	3329.2	2637.2	3194.4	3565.8	5645.8
74-1167	O	42	0.394	45.94	138.5	38.34	43.5	48.66	20	0.472	3.9	2909.1	577.2	692.6	750.4	594.4	720	803.7	1272.5
		1066.8	10	1166.8	7447.8	187.21	212.38	237.56	3413	12	100	397265.2	2567.5	3081	3337.8	2644	3202.6	3574.9	5660.3
75-1198	O	38	0.5	47.17	138.7	43.95	50.1	56.25	20	0.472	9.2	2634.4	577.7	693.3	751	594.9	720.6	804.4	1273.6
		965.2	12.7	1198.2	7454.5	214.57	244.6	274.63	3413	12	233	359754.6	2569.9	3083.8	3340.8	2646.4	3205.4	3578.2	5665.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
75-826	O	30	0.562	32.52	138.7	54.4	61.65	68.89	20	0.472	2.5	2080.1	577.8	693.4	751.1	595	720.7	804.5	1273.8
		762	14.288	826	7455.4	265.6	300.98	336.35	3413	12	64	284052.1	2570.2	3084.2	3341.2	2646.7	3205.8	3578.6	5666.1
75-877	O	24	1	34.51	138.7	73.27	83.44	93.62	20	0.472	10.5	1664.5	577.9	693.5	751.3	595.1	720.9	804.7	1274.1
		609.6	25.4	876.6	7457.3	357.74	407.41	457.08	3413	12	267	227298.7	2570.8	3085	3342.1	2647.3	3206.6	3579.5	5667.6
75-1418	O	44	0.438	55.81	138.8	38.34	43.82	49.3	20	0.472	11.8	3054.1	578.4	694.1	752	595.6	721.5	805.4	1275.2
		1117.6	11.112	1417.6	7463.5	187.19	213.94	240.68	3413	12	300	417062.6	2573	3087.6	3344.9	2649.6	3209.3	3582.5	5672.3
75-1067	O	34	0.562	41.99	138.9	49.19	56.01	62.83	20	0.472	8	2360.6	578.6	694.3	752.1	595.8	721.7	805.6	1275.5
		863.6	14.288	1066.6	7465.5	240.18	273.48	306.78	3413	12	203	322358.9	2573.6	3088.4	3345.7	2650.2	3210.2	3583.4	5673.8
75-1014	O	36	0.472	39.94	138.9	45.14	51.2	57.26	20	0.472	3.9	2500.3	578.8	694.5	752.4	596	721.9	805.9	1275.9
		914.4	12	1014.4	7467.9	220.41	250	279.59	3413	12	100	341433.4	2574.5	3089.4	3346.8	2651.1	3211.2	3584.6	5675.6
75-995	O	30	0.688	39.17	138.9	56.6	64.46	72.33	20	0.472	9.2	2084.1	578.9	694.7	752.6	596.2	722.1	806.1	1276.3
		762	17.462	995	7469.9	276.33	314.74	353.14	3413	12	233	284605	2575.2	3090.2	3347.7	2651.8	3212.1	3585.6	5677.2
75-1452	O	48	0.375	57.17	139.1	34.66	39.54	44.41	20	0.472	9.2	3339	579.7	695.6	753.6	596.9	723.1	807.1	1277.9
		1219.2	9.525	1452.2	7479.7	169.24	193.04	216.84	3413	12	233	455964.7	2578.5	3094.3	3352.1	2655.3	3216.3	3590.3	5684.6
75-1218	O	44	0.375	47.94	139.1	36.7	41.63	46.57	20	0.472	3.9	3060.8	579.7	695.6	753.6	597	723.1	807.2	1278
		1117.6	9.525	1217.6	7480	179.18	203.27	227.37	3413	12	100	417983.7	2578.6	3094.4	3352.2	2655.4	3216.4	3590.4	5684.8
75-1519	O	48	0.394	59.81	139.5	35.23	40.28	45.32	20	0.472	11.8	3346.9	581.1	697.3	755.4	598.4	724.8	809.1	1281
		1219.2	10	1519.2	7497.6	172.02	196.65	221.28	3413	12	300	457055.7	2584.7	3101.7	3360.1	2661.7	3224	3598.9	5698.2
75-674	O	24	0.75	26.52	139.7	70.11	79.42	88.73	20	0.472	2.5	1676.7	582.2	698.6	756.8	599.5	726.2	810.6	1283.5
		609.6	19.05	673.6	7512.1	342.3	387.76	433.21	3413	12	64	228968.2	2589.7	3107.6	3366.6	2666.8	3230.2	3605.8	5709.2
75-1570	O	50	0.375	61.81	139.8	33.87	38.72	43.58	20	0.472	11.8	3494.1	582.3	698.8	757.1	599.7	726.4	810.8	1283.8
		1270	9.525	1570	7514.1	165.38	189.07	212.77	3413	12	300	477147.8	2590.4	3108.5	3367.5	2667.5	3231.1	3606.8	5710.7
75-1249	O	40	0.472	49.17	139.8	42	47.88	53.76	20	0.472	9.2	2796.5	582.6	699.1	757.4	600	726.7	811.2	1284.4
		1016	12	1249	7517.6	205.08	233.79	262.5	3413	12	233	381893.5	2591.6	3109.9	3369.1	2668.7	3232.6	3608.4	5713.4
75-1316	O	40	0.5	51.81	140.2	42.67	48.74	54.81	20	0.472	11.8	2803.2	584	700.8	759.2	601.4	728.4	813.1	1287.5
		1016	12.7	1316	7535.4	208.33	237.97	267.62	3413	12	300	382797.9	2597.7	3117.3	3377.1	2675.1	3240.2	3617	5726.9
76-1164	O	34	0.625	45.81	140.6	50.74	57.92	65.1	20	0.472	11.8	2390.9	586	703.2	761.8	603.5	730.9	815.9	1291.9
		863.6	15.875	1163.6	7561.4	247.75	282.8	317.84	3413	12	300	326503.1	2606.7	3128.1	3388.7	2684.3	3251.4	3629.5	5746.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
76-802	O	24.5	0.875	31.59	140.7	70.71	80.29	89.86	20	0.472	7.1	1723.7	586.3	703.5	762.2	603.7	731.3	816.3	1292.5
		622.3	22.225	802.3	7565	345.24	392	438.75	3413	12	180	235383.9	2607.9	3129.5	3390.3	2685.6	3252.9	3631.2	5749.4
76-864	O	24	1	34.02	140.7	74.05	84.28	94.51	20	0.472	10	1688.6	586.3	703.6	762.2	603.8	731.3	816.3	1292.5
		609.6	25.4	864.1	7565.2	361.56	411.5	461.43	3413	12	254.5	230586.7	2608	3129.6	3390.4	2685.6	3253	3631.3	5749.5
76-1181	O	36	0.562	46.51	140.9	47.6	54.3	61.01	20	0.472	10.5	2536.9	587.2	704.7	763.4	604.7	732.5	817.7	1294.6
		914.4	14.288	1181.4	7577.3	232.41	265.13	297.86	3413	12	267	346433	2612.2	3134.6	3395.8	2689.9	3258.2	3637.1	5758.7
76-1270	O	42	0.438	49.99	141	40.04	45.61	51.17	20	0.472	8	2961.2	587.5	705.1	763.8	605	732.9	818.1	1295.3
		1066.8	11.112	1269.8	7581.2	195.48	222.67	249.86	3413	12	203	404381	2613.5	3136.2	3397.6	2691.3	3259.9	3639	5761.7
76-1367	O	42	0.472	53.81	141.1	40.83	46.65	52.46	20	0.472	11.8	2963.3	588	705.6	764.4	605.5	733.4	818.7	1296.2
		1066.8	12	1366.8	7586.6	199.37	227.76	256.15	3413	12	300	404671.5	2615.4	3138.5	3400	2693.3	3262.3	3641.6	5765.8
76-1062	O	30	0.75	41.81	141.1	58.24	66.44	74.64	20	0.472	11.8	2116.8	588	705.6	764.4	605.5	733.4	818.7	1296.3
		762	19.05	1062	7587	284.37	324.39	364.4	3413	12	300	289064	2615.5	3138.6	3400.2	2693.4	3262.4	3641.8	5766.1
76-813	O	24	0.938	31.99	141.4	73.59	83.67	93.75	20	0.472	8	1696.7	589.1	707	765.9	606.7	734.8	820.3	1298.8
		609.6	23.812	812.6	7601.7	359.31	408.53	457.74	3413	12	203	231699.5	2620.6	3144.7	3406.8	2698.6	3268.7	3648.8	5777.3
76-775	O	28	0.625	30.52	141.5	59.82	67.77	75.72	20	0.472	2.5	1980.7	589.5	707.4	766.4	607.1	735.3	820.8	1299.6
		711.2	15.875	775.2	7606.5	292.05	330.88	369.7	3413	12	64	270488.9	2622.3	3146.7	3408.9	2700.3	3270.8	3651.1	5781
76-1044	O	34	0.562	41.09	141.9	49.71	56.49	63.27	20	0.472	7.1	2412.6	591.3	709.6	768.7	608.9	737.6	823.3	1303.6
		863.6	14.288	1043.6	7630	242.69	275.79	308.9	3413	12	180	329463.4	2630.4	3156.4	3419.5	2708.6	3280.9	3662.4	5798.8
76-1029	O	38	0.438	40.52	141.9	43.34	49.12	54.89	20	0.472	2.5	2697	591.4	709.7	768.9	609	737.7	823.5	1303.9
		965.2	11.112	1029.2	7631.5	211.62	239.82	268.01	3413	12	64	368294.8	2630.9	3157	3420.1	2709.2	3281.5	3663.1	5799.9
76-1113	O	32	0.688	43.81	142	54.62	62.33	70.03	20	0.472	11.8	2271.4	591.5	709.8	769	609.1	737.8	823.6	1304
		812.8	17.462	1112.8	7632.4	266.7	304.3	341.9	3413	12	300	310179.7	2631.2	3157.4	3420.5	2709.5	3281.9	3663.5	5800.6
76-914	O	28	0.75	35.99	142	62.04	70.58	79.11	20	0.472	8	1988.5	591.8	710.2	769.4	609.4	738.2	824	1304.7
		711.2	19.05	914.2	7636.3	302.9	344.58	386.27	3413	12	203	271545.6	2632.5	3159	3422.3	2710.9	3283.6	3665.4	5803.6
76-1422	O	48	0.375	55.99	142.1	35.15	40.05	44.95	20	0.472	8	3409.4	591.9	710.3	769.5	609.5	738.3	824.2	1304.9
		1219.2	9.525	1422.2	7637.5	171.63	195.54	219.45	3413	12	203	465582.9	2632.9	3159.5	3422.8	2711.3	3284.1	3666	5804.5
76-1385	O	44	0.438	54.51	142.1	38.97	44.48	49.99	20	0.472	10.5	3126.9	592.2	710.7	769.9	609.8	738.7	824.6	1305.6
		1117.6	11.112	1384.6	7641.4	190.25	217.17	244.09	3413	12	267	427002.7	2634.3	3161.1	3424.6	2712.7	3285.8	3667.9	5807.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
76-1168	O	38	0.5	45.99	142.2	44.78	50.99	57.21	20	0.472	8	2702.1	592.6	711.1	770.3	610.2	739.1	825.1	1306.3
		965.2	12.7	1168.2	7645.9	218.65	248.98	279.3	3413	12	203	368993.3	2635.8	3163	3426.6	2714.3	3287.8	3670.1	5810.9
76-1016	O	32	0.625	39.99	142.2	53.71	61.13	68.54	20	0.472	8	2275.5	592.6	711.1	770.3	610.2	739.1	825.1	1306.4
		812.8	15.875	1015.8	7646	262.23	298.45	334.66	3413	12	203	310735.4	2635.9	3163.1	3426.6	2714.3	3287.8	3670.1	5811
77-1169	O	36	0.562	46.02	142.4	47.9	54.61	61.32	20	0.472	10	2564	593.5	712.2	771.6	611.2	740.3	826.4	1308.5
		914.4	14.288	1168.9	7658.3	233.89	266.63	299.37	3413	12	254.5	350137.7	2640.1	3168.1	3432.1	2718.7	3293.1	3676	5820.3
77-1486	O	48	0.394	58.51	142.6	35.75	40.82	45.88	20	0.472	10.5	3421.3	594	712.8	772.2	611.7	740.9	827	1309.5
		1219.2	10	1486.2	7664.1	174.54	199.28	224.02	3413	12	267	467204.3	2642.1	3170.5	3434.7	2720.8	3295.6	3678.8	5824.7
77-710	O	24	0.812	27.94	142.6	72.08	81.69	91.3	20	0.472	3.9	1710.7	594	712.8	772.2	611.7	740.9	827.1	1309.5
		609.6	20.638	709.6	7664.5	351.94	398.85	445.76	3413	12	100	233614.7	2642.3	3170.7	3434.9	2720.9	3295.7	3679	5825
77-928	O	34	0.5	36.52	142.7	48.98	55.5	62.02	20	0.472	2.5	2426.1	594.6	713.6	773	612.3	741.7	828	1310.9
		863.6	12.7	927.6	7672.8	239.14	270.97	302.8	3413	12	64	331310.9	2645.1	3174.1	3438.6	2723.8	3299.3	3682.9	5831.3
77-1537	O	50	0.375	60.51	142.8	34.34	39.21	44.08	20	0.472	10.5	3569.1	594.9	713.8	773.3	612.6	742	828.2	1311.4
		1270	9.525	1537	7675.5	167.67	191.45	215.24	3413	12	267	487392.3	2646	3175.2	3439.8	2724.8	3300.5	3684.2	5833.4
77-978	O	28	0.812	38.51	142.8	63.24	72.05	80.86	20	0.472	10.5	1999.7	595.1	714.2	773.7	612.9	742.3	828.7	1312.1
		711.2	20.638	978.2	7679.3	308.74	351.77	394.8	3413	12	267	273077.1	2647.4	3176.8	3441.6	2726.2	3302.1	3686.1	5836.3
77-1131	O	42	0.394	44.52	142.9	39.33	44.57	49.81	20	0.472	2.5	3001.7	595.6	714.7	774.3	613.3	742.9	829.3	1313
		1066.8	10	1130.8	7684.9	192.01	217.6	243.18	3413	12	64	409912.5	2649.3	3179.1	3444.1	2728.1	3304.5	3688.8	5840.5
77-965	O	30	0.688	37.99	143.3	58	65.99	73.99	20	0.472	8	2148.9	596.9	716.3	776	614.7	744.6	831.1	1316
		762	17.462	965	7702.2	283.19	322.21	361.23	3413	12	203	293452.8	2655.2	3186.3	3451.8	2734.3	3311.9	3697	5853.7
77-1219	O	40	0.472	47.99	143.3	42.76	48.69	54.62	20	0.472	8	2865.4	597	716.3	776	614.7	744.6	831.2	1316
		1016	12	1219	7702.6	208.75	237.71	266.67	3413	12	203	391292	2655.4	3186.4	3452	2734.4	3312.1	3697.2	5854
77-913	O	32	0.562	35.94	143.3	52.73	59.79	66.85	20	0.472	3.9	2292.5	597	716.4	776.1	614.8	744.7	831.2	1316.1
		812.8	14.288	912.8	7703.2	257.47	291.93	326.38	3413	12	100	313057.6	2655.6	3186.7	3452.3	2734.6	3312.4	3697.5	5854.4
77-1182	O	44	0.375	46.52	143.4	37.59	42.6	47.61	20	0.472	2.5	3154.1	597.4	716.8	776.6	615.1	745.1	831.7	1316.9
		1117.6	9.525	1181.6	7707.9	183.52	207.98	232.45	3413	12	64	430718.5	2657.2	3188.7	3454.4	2736.3	3314.4	3699.8	5858
77-1372	O	44	0.438	54.02	143.4	39.15	44.65	50.16	20	0.472	10	3155.4	597.6	717.1	776.9	615.4	745.4	832.1	1317.5
		1117.6	11.112	1372.1	7711	191.13	218.01	244.89	3413	12	254.5	430892.8	2658.3	3189.9	3455.8	2737.4	3315.7	3701.3	5860.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
77-1247	O	42	0.438	49.09	143.6	40.3	45.81	51.32	20	0.472	7.1	3015.8	598.4	718.1	777.9	616.2	746.4	833.2	1319.2
		1066.8	11.112	1246.8	7721	196.76	223.67	250.58	3413	12	180	411840.7	2661.7	3194.1	3460.3	2741	3320.1	3706.1	5868
77-1474	O	48	0.394	58.02	143.8	35.89	40.95	46	20	0.472	10	3450.3	599	718.8	778.7	616.8	747.2	834	1320.6
		1219.2	10	1473.7	7729.1	175.23	199.91	224.6	3413	12	254.5	471167.1	2664.5	3197.4	3463.9	2743.8	3323.5	3710	5874.1
77-1283	O	40	0.5	50.51	143.8	43.46	49.58	55.71	20	0.472	10.5	2875.3	599	718.8	778.7	616.8	747.2	834	1320.6
		1016	12.7	1283	7729.2	212.18	242.09	271.99	3413	12	267	392643.8	2664.6	3197.5	3463.9	2743.9	3323.6	3710	5874.2
77-1525	O	50	0.375	60.02	143.9	34.47	39.32	44.18	20	0.472	10	3598.4	599.7	719.7	779.6	617.6	748.1	835	1322.1
		1270	9.525	1524.5	7738.4	168.28	192	215.72	3413	12	254.5	491388.7	2667.7	3201.3	3468	2747.1	3327.5	3714.4	5881.2
77-978	O	36	0.472	38.52	144	46.53	52.72	58.91	20	0.472	2.5	2592.3	600.1	720.1	780.1	617.9	748.5	835.5	1322.9
		914.4	12	978.4	7742.7	227.17	257.4	287.64	3413	12	64	353996.3	2669.2	3203	3470	2748.7	3329.4	3716.5	5884.5
78-843	O	24	1	33.17	144.3	75.65	86.03	96.42	20	0.472	9.2	1731.6	601.3	721.5	781.6	619.2	750	837.2	1325.5
		609.6	25.4	842.6	7758.2	369.33	420.06	470.79	3413	12	233	236470.4	2674.6	3209.5	3476.9	2754.2	3336	3723.9	5896.2
78-1399	O	48	0.375	55.09	144.4	35.31	40.14	44.98	20	0.472	7.1	3465.4	601.6	722	782.1	619.5	750.4	837.7	1326.4
		1219.2	9.525	1399.2	7763.1	172.38	195.99	219.6	3413	12	180	473236.1	2676.2	3211.5	3479.1	2755.9	3338.1	3726.3	5899.9
78-1334	O	42	0.472	52.51	144.6	41.55	47.41	53.27	20	0.472	10.5	3036.7	602.5	723	783.3	620.4	751.5	838.9	1328.3
		1066.8	12	1333.8	7774.3	202.85	231.46	260.08	3413	12	267	414683.6	2680.1	3216.1	3484.1	2759.9	3343	3731.7	5908.5
78-966	O	28	0.812	38.02	144.7	63.81	72.65	81.49	20	0.472	10	2025.6	602.9	723.4	783.7	620.8	752	839.4	1329
		711.2	20.638	965.7	7778.7	311.52	354.71	397.89	3413	12	254.5	276611.8	2681.6	3217.9	3486.1	2761.5	3344.9	3733.8	5911.8
78-1131	O	34	0.625	44.51	144.7	51.87	59.14	66.42	20	0.472	10.5	2460.7	603.1	723.7	784.1	621.1	752.3	839.8	1329.6
		863.6	15.875	1130.6	7782.1	253.27	288.77	324.27	3413	12	267	336033.1	2682.8	3219.4	3487.6	2762.7	3346.3	3735.4	5914.4
78-1145	O	38	0.5	45.09	145.1	45.16	51.33	57.49	20	0.472	7.1	2756.4	604.5	725.4	785.8	622.5	754	841.6	1332.6
		965.2	12.7	1145.2	7799.5	220.51	250.59	280.68	3413	12	180	376404.1	2688.8	3226.5	3495.4	2768.8	3353.8	3743.8	5927.6
78-1147	O	36	0.562	45.17	145.1	48.58	55.34	62.1	20	0.472	9.2	2612.1	604.6	725.6	786	622.6	754.2	841.9	1333
		914.4	14.288	1147.4	7801.8	237.2	270.2	303.2	3413	12	233	356698.6	2689.6	3227.5	3496.5	2769.6	3354.8	3744.9	5929.4
78-1271	O	40	0.5	50.02	145.2	43.7	49.82	55.94	20	0.472	10	2903.6	604.9	725.9	786.4	622.9	754.5	842.3	1333.6
		1016	12.7	1270.5	7805.3	213.35	243.24	273.13	3413	12	254.5	396506.9	2690.8	3228.9	3498	2770.9	3356.3	3746.5	5932
78-1116	O	40	0.438	43.94	145.3	42.26	47.92	53.58	20	0.472	3.9	2906	605.4	726.5	787	623.4	755.1	843	1334.7
		1016	11.112	1116	7811.8	206.32	233.96	261.6	3413	12	100	396837.8	2693	3231.6	3500.9	2773.2	3359.1	3749.6	5936.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
78-790	O	24	0.938	31.09	145.5	74.98	85.1	95.23	20	0.472	7.1	1746.1	606.3	727.6	788.2	624.3	756.2	844.2	1336.6
		609.6	23.812	789.6	7823.1	366.1	415.52	464.94	3413	12	180	238448.6	2696.9	3236.3	3506	2777.2	3363.9	3755.1	5945.6
78-993	O	32	0.625	39.09	145.5	54.35	61.74	69.13	20	0.472	7.1	2328.2	606.3	727.6	788.2	624.3	756.3	844.2	1336.6
		812.8	15.875	992.8	7823.2	265.37	301.46	337.54	3413	12	180	317934.1	2696.9	3236.3	3506	2777.2	3364	3755.1	5945.6
78-1029	O	30	0.75	40.51	145.6	59.73	68.06	76.39	20	0.472	10.5	2184.7	606.8	728.2	788.9	624.9	756.9	845	1337.8
		762	19.05	1029	7830.3	291.61	332.29	372.96	3413	12	267	298334.3	2699.4	3239.3	3509.2	2779.8	3367	3758.5	5951
78-891	O	28	0.75	35.09	145.7	62.97	71.51	80.04	20	0.472	7.1	2039.8	607.1	728.5	789.2	625.2	757.2	845.3	1338.4
		711.2	19.05	891.2	7833.3	307.46	349.13	390.8	3413	12	180	278553.6	2700.5	3240.5	3510.6	2780.8	3368.3	3760	5953.3
78-1351	O	44	0.438	53.17	145.7	39.58	45.12	50.65	20	0.472	9.2	3205.6	607.1	728.5	789.3	625.2	757.3	845.3	1338.4
		1117.6	11.112	1350.6	7833.8	193.27	220.27	247.28	3413	12	233	437752.1	2700.6	3240.7	3510.8	2781	3368.5	3760.2	5953.7
78-1218	O	44	0.394	47.94	145.9	38.43	43.58	48.73	20	0.472	3.9	3209.4	607.8	729.4	790.2	625.9	758.2	846.3	1340
		1117.6	10	1217.6	7843	187.63	212.78	237.94	3413	12	100	438267.9	2703.8	3244.5	3514.9	2784.3	3372.5	3764.6	5960.7
78-1452	O	48	0.394	57.17	145.9	36.25	41.32	46.39	20	0.472	9.2	3501.4	607.9	729.5	790.2	626	758.2	846.4	1340.1
		1219.2	10	1452.2	7843.6	176.98	201.75	226.52	3413	12	233	478142.8	2704	3244.8	3515.2	2784.5	3372.7	3764.9	5961.1
78-1321	O	42	0.472	52.02	146	41.76	47.61	53.47	20	0.472	10	3065.4	608.2	729.9	790.7	626.3	758.6	846.9	1340.9
		1066.8	12	1321.3	7847.9	203.89	232.47	261.06	3413	12	254.5	418606.7	2705.5	3246.6	3517.1	2786	3374.6	3767	5964.4
78-760	O	26	0.75	29.94	146	67.6	76.61	85.62	20	0.472	3.9	1897.7	608.2	729.9	790.7	626.3	758.7	846.9	1340.9
		660.4	19.05	760.4	7848.1	330.07	374.05	418.03	3413	12	100	259142.8	2705.5	3246.6	3517.2	2786.1	3374.7	3767.1	5964.5
78-1503	O	50	0.375	59.17	146	34.79	39.66	44.54	20	0.472	9.2	3649.8	608.3	730	790.8	626.4	758.8	847	1341.1
		1270	9.525	1503	7849.1	169.87	193.66	217.45	3413	12	233	498417.8	2705.9	3247.1	3517.6	2786.4	3375.1	3767.6	5965.3
79-1196	O	40	0.472	47.09	146	43.08	48.96	54.84	20	0.472	7.1	2920.5	608.4	730.1	791	626.5	758.9	847.2	1341.3
		1016	12	1196	7850.7	210.34	239.04	267.75	3413	12	180	398816.9	2706.4	3247.7	3518.4	2787	3375.8	3768.3	5966.6
79-1080	O	32	0.688	42.51	146.3	55.93	63.74	71.56	20	0.472	10.5	2340.8	609.6	731.5	792.5	627.7	760.4	848.8	1343.9
		812.8	17.462	1079.8	7865.6	273.06	311.21	349.37	3413	12	267	319659.2	2711.6	3253.9	3525.1	2792.3	3382.2	3775.5	5977.9
79-1118	O	34	0.625	44.02	146.4	52.24	59.52	66.8	20	0.472	10	2488.2	609.9	731.8	792.8	628	760.7	849.1	1344.5
		863.6	15.875	1118.1	7869.1	255.06	290.6	326.15	3413	12	254.5	339789.8	2712.8	3255.3	3526.6	2793.5	3383.7	3777.2	5980.6
79-1621	O	52	0.375	63.81	146.6	34.02	38.87	43.72	20	0.472	11.8	3810.5	610.7	732.8	793.8	628.8	761.7	850.3	1346.2
		1320.8	9.525	1620.8	7879.4	166.08	189.77	213.46	3413	12	300	520354.8	2716.3	3259.6	3531.2	2797.2	3388.1	3782.1	5988.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
79-1570	O	50	0.394	61.81	146.6	35.4	40.44	45.49	20	0.472	11.8	3664.2	610.7	732.8	793.9	628.9	761.7	850.3	1346.3
		1270	10	1570	7880	172.84	197.47	222.1	3413	12	300	500379	2716.5	3259.8	3531.5	2797.4	3388.4	3782.4	5988.8
79-1014	O	36	0.5	39.94	146.7	47.62	53.99	60.37	20	0.472	3.9	2640	611.1	733.3	794.4	629.3	762.3	850.9	1347.2
		914.4	12.7	1014.4	7885.3	232.52	263.62	294.73	3413	12	100	360517.5	2718.4	3262	3533.9	2799.3	3390.7	3785	5992.9
79-862	O	30	0.625	33.94	146.7	57.89	65.61	73.34	20	0.472	3.9	2200.8	611.3	733.6	794.7	629.5	762.5	851.2	1347.7
		762	15.875	862	7888.1	282.63	320.36	358.08	3413	12	100	300537.1	2719.3	3263.2	3535.1	2800.3	3391.9	3786.3	5995
79-942	O	30	0.688	37.09	146.8	58.79	66.76	74.74	20	0.472	7.1	2201.4	611.5	733.8	794.9	629.7	762.7	851.4	1348.1
		762	17.462	942	7890.2	287.02	325.97	364.91	3413	12	180	300617.8	2720.1	3264.1	3536.1	2801	3392.8	3787.3	5996.6
79-1265	O	38	0.562	49.81	147	47.08	53.73	60.38	20	0.472	11.8	2792.9	612.5	735	796.2	630.7	764	852.8	1350.3
		965.2	14.288	1265.2	7903	229.86	262.34	294.82	3413	12	300	381396.6	2724.4	3269.3	3541.8	2805.5	3398.3	3793.4	6006.2
79-1017	O	30	0.75	40.02	147.4	60.23	68.58	76.93	20	0.472	10	2211.5	614.3	737.2	798.6	632.6	766.2	855.3	1354.3
		762	19.05	1016.5	7926.6	294.05	334.84	375.62	3413	12	254.5	302003	2732.6	3279.1	3552.4	2813.9	3408.4	3804.8	6024.2
79-1249	O	40	0.5	49.17	147.7	44.25	50.41	56.57	20	0.472	9.2	2953.5	615.3	738.4	799.9	633.6	767.5	856.7	1356.5
		1016	12.7	1249	7939.6	216.04	246.12	276.2	3413	12	233	403332.3	2737.1	3284.5	3558.2	2818.6	3414	3811	6034.1
79-1065	O	38	0.472	41.94	147.7	45.3	51.36	57.42	20	0.472	3.9	2806.2	615.4	738.5	800	633.7	767.6	856.8	1356.7
		965.2	12	1065.2	7940.4	221.19	250.78	280.37	3413	12	100	383205	2737.4	3284.8	3558.6	2818.9	3414.4	3811.4	6034.7
79-811	O	28	0.688	31.94	147.7	62.85	71.23	79.61	20	0.472	3.9	2068.1	615.5	738.6	800.2	633.8	767.7	857	1357
		711.2	17.462	811.2	7942.1	306.88	347.79	388.71	3413	12	100	282422.3	2738	3285.5	3559.3	2819.5	3415.1	3812.2	6036
79-1011	O	28	0.875	39.81	147.8	65.8	74.99	84.18	20	0.472	11.8	2069.2	615.8	739	800.6	634.2	768.2	857.5	1357.7
		711.2	22.225	1011.2	7946.3	321.28	366.13	410.98	3413	12	300	282570.2	2739.4	3287.3	3561.2	2820.9	3416.9	3814.2	6039.2
80-944	O	28	0.812	37.17	148	64.99	73.95	82.91	20	0.472	9.2	2071.7	616.6	739.9	801.6	634.9	769.1	858.5	1359.3
		711.2	20.638	944.2	7955.9	317.32	361.06	404.79	3413	12	233	282910.4	2742.7	3291.2	3565.5	2824.3	3421	3818.8	6046.5
80-1067	O	32	0.688	42.02	148	56.36	64.19	72.02	20	0.472	10	2368.2	616.7	740.1	801.7	635.1	769.3	858.7	1359.6
		812.8	17.462	1067.3	7957.8	275.16	313.4	351.63	3413	12	254.5	323403	2743.3	3292	3566.3	2825	3421.8	3819.7	6047.9
80-1300	O	42	0.472	51.17	148.4	42.26	48.14	54.03	20	0.472	9.2	3116.1	618.3	741.9	803.8	636.7	771.2	860.9	1363
		1066.8	12	1299.8	7977.7	206.32	235.06	263.81	3413	12	233	425530.9	2750.2	3300.3	3575.3	2832.1	3430.4	3829.3	6063.1
80-1473	O	50	0.375	57.99	149	35.27	40.16	45.06	20	0.472	8	3724.2	620.7	744.8	806.9	639.2	774.2	864.2	1368.4
		1270	9.525	1473	8009	172.19	196.09	219.99	3413	12	203	508568.9	2761	3313.2	3589.3	2843.2	3443.9	3844.3	6086.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
80-1422	O	48	0.394	55.99	149	36.77	41.87	46.97	20	0.472	8	3575.2	620.7	744.8	806.9	639.2	774.2	864.2	1368.4
		1219.2	10	1422.2	8009	179.54	204.44	229.34	3413	12	203	488228.8	2761	3313.2	3589.3	2843.2	3443.9	3844.3	6086.8
80-1117	O	36	0.562	43.99	149	49.58	56.42	63.26	20	0.472	8	2682.2	620.9	745	807.1	639.4	774.4	864.5	1368.8
		914.4	14.288	1117.4	8011.3	242.08	275.46	308.85	3413	12	203	366275.3	2761.8	3314.1	3590.3	2844	3444.8	3845.4	6088.6
80-1321	O	44	0.438	51.99	149	40.22	45.79	51.36	20	0.472	8	3278.4	620.9	745.1	807.2	639.4	774.5	864.5	1368.8
		1117.6	11.112	1320.6	8011.7	196.4	223.59	250.79	3413	12	203	447696.5	2762	3314.3	3590.5	2844.2	3445.1	3845.6	6088.9
80-1367	O	42	0.5	53.81	149	42.99	49.08	55.16	20	0.472	11.8	3130	621	745.2	807.3	639.5	774.6	864.7	1369.1
		1066.8	12.7	1366.8	8013.3	209.9	239.61	269.32	3413	12	300	427432	2762.5	3315	3591.3	2844.7	3445.7	3846.4	6090.1
80-877	O	32	0.562	34.52	149.2	54.59	61.84	69.08	20	0.472	2.5	2386.6	621.5	745.8	808	640	775.2	865.4	1370.2
		812.8	14.288	876.8	8019.5	266.55	301.91	337.28	3413	12	64	325911.3	2764.6	3317.5	3594	2846.9	3448.4	3849.3	6094.8
80-1097	O	34	0.625	43.17	149.2	53.03	60.38	67.73	20	0.472	9.2	2537	621.8	746.2	808.4	640.3	775.6	865.8	1370.8
		863.6	15.875	1096.6	8023.4	258.94	294.81	330.68	3413	12	233	346451.8	2766	3319.2	3595.8	2848.3	3450.1	3851.2	6097.8
80-1418	O	44	0.472	55.81	149.6	41.11	46.93	52.76	20	0.472	11.8	3290.1	623.1	747.8	810.1	641.7	777.2	867.6	1373.7
		1117.6	12	1417.6	8040.4	200.71	229.14	257.58	3413	12	300	449296	2771.8	3326.2	3603.4	2854.3	3457.4	3859.4	6110.7
80-1588	O	52	0.375	62.51	149.6	34.47	39.34	44.21	20	0.472	10.5	3889.7	623.3	748	810.3	641.9	777.5	867.9	1374.2
		1320.8	9.525	1587.8	8043.1	168.32	192.09	215.87	3413	12	267	531169.5	2772.8	3327.3	3604.6	2855.3	3458.6	3860.7	6112.8
80-813	O	24	1	31.99	149.6	78.02	88.65	99.28	20	0.472	8	1795.6	623.5	748.2	810.5	642	777.7	868.1	1374.5
		609.6	25.4	812.6	8044.6	380.91	432.82	484.74	3413	12	203	245200.6	2773.3	3327.9	3605.3	2855.8	3459.2	3861.4	6113.9
80-1537	O	50	0.394	60.51	149.7	35.9	40.97	46.04	20	0.472	10.5	3742.9	623.8	748.6	811	642.4	778.1	868.6	1375.2
		1270	10	1537	8049.2	175.29	200.03	224.77	3413	12	267	511122.3	2774.9	3329.8	3607.3	2857.5	3461.1	3863.6	6117.4
81-1080	O	40	0.438	42.52	150.1	43.42	49.18	54.95	20	0.472	2.5	3002.8	625.6	750.7	813.3	644.2	780.3	871.1	1379.2
		1016	11.112	1080	8072.2	211.98	240.14	268.3	3413	12	64	410065.7	2782.8	3339.3	3617.6	2865.6	3471	3874.6	6134.8
81-674	O	24	0.812	26.52	150.2	75.54	85.52	95.51	20	0.472	2.5	1802.2	625.7	750.9	813.5	644.4	780.5	871.3	1379.5
		609.6	20.638	673.6	8074.1	368.8	417.57	466.34	3413	12	64	246100.1	2783.5	3340.2	3618.5	2866.3	3471.9	3875.6	6136.4
81-1182	O	44	0.394	46.52	150.3	39.37	44.61	49.84	20	0.472	2.5	3307.2	626.4	751.6	814.3	645	781.3	872.1	1380.8
		1117.6	10	1181.6	8082	192.23	217.78	243.33	3413	12	64	451620.7	2786.2	3343.4	3622	2869.1	3475.2	3879.3	6142.3
81-995	O	30	0.75	39.17	150.6	61.28	69.73	78.18	20	0.472	9.2	2259.3	627.6	753.1	815.9	646.3	782.8	873.8	1383.6
		762	19.05	995	8097.9	299.17	340.43	381.69	3413	12	233	308528.6	2791.6	3350	3629.1	2874.7	3482.1	3887	6154.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
81-1575	O	52	0.375	62.02	150.8	34.6	39.45	44.31	20	0.472	10	3920.5	628.3	753.9	816.8	647	783.7	874.8	1385.1
		1320.8	9.525	1575.3	8107	168.91	192.63	216.34	3413	12	254.5	535384.4	2794.8	3353.7	3633.2	2878	3486	3891.3	6161.3
81-1232	O	38	0.562	48.51	150.9	48.02	54.74	61.47	20	0.472	10.5	2867.7	628.9	754.7	817.5	647.6	784.4	875.6	1386.4
		965.2	14.288	1232.2	8114.6	234.45	267.27	300.1	3413	12	267	391610.9	2797.4	3356.9	3636.6	2880.7	3489.3	3895	6167.1
81-1525	O	50	0.394	60.02	150.9	36.04	41.1	46.15	20	0.472	10	3773.6	628.9	754.7	817.6	647.6	784.5	875.7	1386.5
		1270	10	1524.5	8115.2	175.96	200.65	225.33	3413	12	254.5	515313.2	2797.6	3357.1	3636.9	2880.9	3489.5	3895.3	6167.5
81-1046	O	32	0.688	41.17	151.1	57.28	65.19	73.1	20	0.472	9.2	2416.9	629.4	755.3	818.2	648.1	785.1	876.4	1387.6
		812.8	17.462	1045.8	8121.3	279.65	318.28	356.91	3413	12	233	330051.6	2799.7	3359.7	3639.7	2883.1	3492.2	3898.2	6172.2
81-1219	O	40	0.5	47.99	151.3	45.06	51.28	57.49	20	0.472	8	3026.2	630.5	756.6	819.6	649.2	786.4	877.8	1389.9
		1016	12.7	1219	8135	219.98	250.35	280.71	3413	12	203	413258.4	2804.4	3365.3	3645.8	2887.9	3498.1	3904.8	6182.6
81-1450	O	50	0.375	57.09	151.3	35.42	40.25	45.09	20	0.472	7.1	3783.2	630.5	756.6	819.7	649.3	786.5	877.9	1390.1
		1270	9.525	1450	8136	172.92	196.53	220.14	3413	12	180	516635.9	2804.8	3365.7	3646.2	2888.3	3498.5	3905.3	6183.4
81-1399	O	48	0.394	55.09	151.4	36.95	41.99	47.03	20	0.472	7.1	3634	630.9	757.1	820.2	649.7	786.9	878.4	1390.9
		1219.2	10	1399.2	8140.7	180.41	205.03	229.64	3413	12	180	496254.3	2806.4	3367.7	3648.3	2889.9	3500.5	3907.5	6186.9
81-1214	O	36	0.625	47.81	151.5	51.3	58.52	65.73	20	0.472	11.8	2727.8	631.4	757.7	820.9	650.2	787.6	879.2	1392.1
		914.4	15.875	1214.4	8147.6	250.49	285.71	320.92	3413	12	300	372509.9	2808.8	3370.6	3651.4	2892.4	3503.5	3910.9	6192.2
82-1298	O	44	0.438	51.09	151.7	40.48	46	51.51	20	0.472	7.1	3336.5	631.9	758.3	821.5	650.7	788.2	879.9	1393.1
		1117.6	11.112	1297.6	8153.8	197.64	224.57	251.5	3413	12	180	455631.9	2810.9	3373.1	3654.2	2894.6	3506.1	3913.8	6196.9
82-1270	O	42	0.472	49.99	151.9	42.99	48.92	54.86	20	0.472	8	3189.7	632.9	759.5	822.7	651.7	789.4	881.2	1395.2
		1066.8	12	1269.8	8166.2	209.87	238.86	267.84	3413	12	203	435584.3	2815.2	3378.2	3659.7	2899	3511.5	3919.8	6206.3
82-1062	O	30	0.812	41.81	151.9	62.61	71.35	80.09	20	0.472	11.8	2278.8	633	759.6	822.9	651.8	789.5	881.4	1395.5
		762	20.638	1062	8167.6	305.68	348.35	391.03	3413	12	300	311186.4	2815.7	3378.8	3660.4	2899.5	3512.1	3920.5	6207.4
82-978	O	36	0.5	38.52	152.1	49.1	55.61	62.13	20	0.472	2.5	2737.2	633.6	760.3	823.7	652.5	790.3	882.2	1396.8
		914.4	12.7	978.4	8175.5	239.73	271.53	303.34	3413	12	64	373782.7	2818.4	3382.1	3663.9	2902.3	3515.5	3924.2	6213.4
82-1094	O	36	0.562	43.09	152.1	50.08	56.88	63.68	20	0.472	7.1	2738.5	633.9	760.7	824.1	652.8	790.7	882.7	1397.5
		914.4	14.288	1094.4	8179.6	244.51	277.71	310.92	3413	12	180	373973	2819.8	3383.8	3665.8	2903.8	3517.2	3926.2	6216.5
82-710	O	24	0.875	27.94	152.3	77.21	87.46	97.7	20	0.472	3.9	1827.8	634.7	761.6	825.1	653.6	791.6	883.7	1399.2
		609.6	22.225	709.6	8189.2	376.96	426.99	477.03	3413	12	100	249606.8	2823.1	3387.7	3670.1	2907.2	3521.4	3930.8	6223.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
82-1220	O	38	0.562	48.02	152.5	48.31	55.04	61.77	20	0.472	10	2897.1	635.3	762.4	825.9	654.2	792.5	884.6	1400.6
		965.2	14.288	1219.7	8197.8	235.89	268.73	301.58	3413	12	254.5	395624.3	2826.1	3391.3	3673.9	2910.2	3525	3934.9	6230.3
82-1334	O	42	0.5	52.51	152.7	43.76	49.89	56.03	20	0.472	10.5	3207.5	636.4	763.7	827.3	655.3	793.8	886.1	1403
		1066.8	12.7	1333.8	8211.6	213.64	243.6	273.56	3413	12	267	438007.2	2830.9	3397	3680.1	2915.1	3531	3941.6	6240.8
82-978	O	28	0.875	38.51	152.8	67.62	76.98	86.34	20	0.472	10.5	2139	636.6	763.9	827.6	655.6	794.1	886.4	1403.5
		711.2	22.225	978.2	8214.4	330.14	375.85	421.55	3413	12	267	292102.8	2831.8	3398.2	3681.3	2916.1	3532.2	3942.9	6242.9
82-914	O	28	0.812	35.99	152.8	66.75	75.88	85	20	0.472	8	2139.7	636.8	764.2	827.9	655.8	794.3	886.7	1403.9
		711.2	20.638	914.2	8216.9	325.91	370.47	415.03	3413	12	203	292194.3	2832.7	3399.2	3682.5	2917	3533.3	3944.1	6244.9
82-1029	O	38	0.472	40.52	152.9	46.63	52.81	59	20	0.472	2.5	2904.3	636.9	764.3	828	655.9	794.4	886.8	1404.1
		965.2	12	1029.2	8218.2	227.65	257.85	288.05	3413	12	64	396609	2833.1	3399.7	3683	2917.5	3533.8	3944.7	6245.8
82-1554	O	52	0.375	61.17	152.9	34.91	39.78	44.65	20	0.472	9.2	3974.8	637	764.4	828.1	655.9	794.5	886.9	1404.3
		1320.8	9.525	1553.8	8219.1	170.46	194.24	218.02	3413	12	233	542792.5	2833.5	3400.1	3683.5	2917.8	3534.2	3945.2	6246.6
82-1503	O	50	0.394	59.17	153.1	36.39	41.46	46.53	20	0.472	9.2	3827.5	637.9	765.5	829.3	656.9	795.7	888.2	1406.3
		1270	10	1503	8231.3	177.67	202.43	227.2	3413	12	233	522684.6	2837.6	3405.1	3688.9	2922.1	3539.4	3951	6255.8
82-826	O	30	0.625	32.52	153.1	60.08	68.04	75.99	20	0.472	2.5	2296.7	638	765.6	829.4	657	795.8	888.3	1406.5
		762	15.875	826	8231.9	293.35	332.2	371.04	3413	12	64	313635.6	2837.9	3405.4	3689.2	2922.3	3539.7	3951.3	6256.2
82-1385	O	44	0.472	54.51	153.1	41.8	47.67	53.54	20	0.472	10.5	3368.5	638	765.6	829.4	657	795.8	888.3	1406.5
		1117.6	12	1384.6	8232	204.1	232.74	261.39	3413	12	267	460004.3	2837.9	3405.5	3689.2	2922.4	3539.8	3951.4	6256.3
82-1319	O	48	0.375	51.94	153.1	36.84	41.76	46.69	20	0.472	3.9	3675.6	638.1	765.7	829.6	657.1	795.9	888.5	1406.8
		1219.2	9.525	1319.2	8233.8	179.85	203.9	227.95	3413	12	100	501934.5	2838.5	3406.2	3690.1	2923	3540.5	3952.2	6257.7
82-724	O	26	0.75	28.52	153.2	70.59	79.92	89.25	20	0.472	2.5	1992	638.5	766.1	830	657.5	796.4	889	1407.5
		660.4	19.05	724.4	8238.1	344.65	390.22	435.78	3413	12	64	272021.3	2840	3408	3692	2924.5	3542.4	3954.3	6260.9
82-1672	O	54	0.375	65.81	153.4	34.15	39	43.85	20	0.472	11.8	4140.9	639	766.8	830.7	658.1	797.1	889.8	1408.8
		1371.6	9.525	1671.6	8245.5	166.75	190.43	214.11	3413	12	300	565479.2	2842.6	3411.1	3695.3	2927.2	3545.6	3957.9	6266.6
82-1067	O	34	0.625	41.99	153.4	54.21	61.65	69.1	20	0.472	8	2608.4	639.3	767.2	831.1	658.3	797.4	890.1	1409.4
		863.6	15.875	1066.6	8249.1	264.65	301.01	337.37	3413	12	203	356196.3	2843.8	3412.5	3696.9	2928.4	3547.1	3959.6	6269.3
83-1167	O	42	0.438	45.94	153.5	42.37	48.03	53.69	20	0.472	3.9	3222.6	639.4	767.3	831.2	658.4	797.6	890.3	1409.6
		1066.8	11.112	1166.8	8250.4	206.88	234.51	262.15	3413	12	100	440078	2844.2	3413.1	3697.5	2928.9	3547.7	3960.2	6270.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
83-1621	O	52	0.394	63.81	153.7	35.56	40.6	45.65	20	0.472	11.8	3996.2	640.4	768.5	832.5	659.5	798.8	891.7	1411.8
		1320.8	10	1620.8	8263.4	173.61	198.24	222.86	3413	12	300	545713.8	2848.7	3418.4	3703.3	2933.5	3553.3	3966.4	6280.2
83-964	O	34	0.562	37.94	153.7	53	60.06	67.13	20	0.472	3.9	2612.9	640.4	768.5	832.5	659.5	798.8	891.7	1411.9
		863.6	14.288	963.6	8263.5	258.76	293.25	327.75	3413	12	100	356816.1	2848.7	3418.5	3703.3	2933.5	3553.3	3966.5	6280.2
83-1164	O	34	0.688	45.81	153.9	55.32	63.07	70.82	20	0.472	11.8	2615.5	641	769.3	833.4	660.1	799.6	892.6	1413.2
		863.6	17.462	1163.6	8271.6	270.1	307.94	345.78	3413	12	300	357166.6	2851.5	3421.8	3707	2936.4	3556.8	3970.4	6286.4
83-1113	O	32	0.75	43.81	154	59.1	67.36	75.62	20	0.472	11.8	2463.3	641.5	769.8	833.9	660.6	800.1	893.2	1414.2
		812.8	19.05	1112.8	8277.2	288.55	328.88	369.21	3413	12	300	336386.6	2853.5	3424.2	3709.5	2938.4	3559.2	3973.1	6290.7
83-790	O	24	1	31.09	154	79.54	90.23	100.92	20	0.472	7.1	1847.9	641.6	769.9	834.1	660.7	800.3	893.4	1414.5
		609.6	25.4	789.6	8279	388.32	440.52	492.72	3413	12	180	252343	2854.1	3424.9	3710.3	2939	3560	3973.9	6292
83-1321	O	42	0.5	52.02	154.2	43.99	50.12	56.26	20	0.472	10	3237.8	642.4	770.9	835.1	661.5	801.3	894.5	1416.3
		1066.8	12.7	1321.3	8289.3	214.78	244.73	274.67	3413	12	254.5	442150.9	2857.6	3429.2	3714.9	2942.7	3564.4	3978.9	6299.9
83-1196	O	40	0.5	47.09	154.2	45.42	51.6	57.77	20	0.472	7.1	3084.4	642.6	771.1	835.4	661.7	801.5	894.7	1416.6
		1016	12.7	1196	8291.5	221.78	251.92	282.06	3413	12	180	421205.7	2858.4	3430	3715.9	2943.5	3565.3	3979.9	6301.5
83-1372	O	44	0.472	54.02	154.5	42.01	47.87	53.73	20	0.472	10	3399.2	643.8	772.6	836.9	663	803	896.4	1419.3
		1117.6	12	1372.1	8307	205.1	233.73	262.35	3413	12	254.5	464195	2863.7	3436.5	3722.9	2949	3572	3987.4	6313.3
83-1519	O	48	0.438	59.81	154.5	38.78	44.27	49.75	20	0.472	11.8	3709.1	643.9	772.7	837.1	663.1	803.2	896.6	1419.6
		1219.2	11.112	1519.2	8308.9	189.33	216.12	242.91	3413	12	300	506510.7	2864.4	3437.3	3723.7	2949.7	3572.8	3988.3	6314.8
83-775	O	28	0.688	30.52	154.6	65.43	74.08	82.73	20	0.472	2.5	2164.2	644.1	772.9	837.3	663.3	803.4	896.8	1420
		711.2	17.462	775.2	8311	319.44	361.69	403.93	3413	12	64	295537.9	2865.1	3438.1	3724.6	2950.4	3573.7	3989.3	6316.3
83-1247	O	42	0.472	49.09	154.7	43.3	49.19	55.08	20	0.472	7.1	3248.6	644.6	773.5	837.9	663.7	804	897.5	1421
		1066.8	12	1246.8	8316.8	211.41	240.16	268.9	3413	12	180	443619.7	2867.1	3440.5	3727.3	2952.5	3576.2	3992.1	6320.8
83-966	O	28	0.875	38.02	154.8	68.24	77.64	87.04	20	0.472	10	2166.7	644.9	773.8	838.3	664.1	804.3	897.9	1421.6
		711.2	22.225	965.7	8320.7	333.2	379.09	424.99	3413	12	254.5	295883.8	2868.5	3442.1	3729	2953.8	3577.9	3993.9	6323.7
83-1198	O	38	0.562	47.17	155.2	48.97	55.75	62.53	20	0.472	9.2	2949.1	646.7	776.1	840.7	666	806.7	900.5	1425.8
		965.2	14.288	1198.2	8344.9	239.1	272.19	305.29	3413	12	233	402723.3	2876.8	3452.1	3739.8	2962.4	3588.3	4005.5	6342.1
83-965	O	30	0.75	37.99	155.3	62.83	71.42	80.01	20	0.472	8	2329.5	647.1	776.5	841.2	666.4	807.1	901	1426.6
		762	19.05	965	8349.6	306.74	348.7	390.67	3413	12	203	318120.2	2878.4	3454.1	3742	2964.1	3590.3	4007.8	6345.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
84-1016	O	32	0.688	39.99	155.5	58.63	66.66	74.7	20	0.472	8	2488.3	648	777.6	842.4	667.3	808.3	902.2	1428.6
		812.8	17.462	1015.8	8361.2	286.26	325.48	364.7	3413	12	203	339799.2	2882.4	3458.9	3747.1	2968.2	3595.3	4013.4	6354.5
84-1181	O	36	0.625	46.51	155.8	52.4	59.7	67.01	20	0.472	10.5	2804	649.1	778.9	843.8	668.4	809.6	903.8	1430.9
		914.4	15.875	1181.4	8375.2	255.85	291.5	327.16	3413	12	267	382915.2	2887.3	3464.7	3753.4	2973.2	3601.3	4020.1	6365.2
84-1524	O	52	0.375	59.99	155.9	35.38	40.27	45.16	20	0.472	8	4053	649.5	779.4	844.4	668.9	810.2	904.4	1431.9
		1320.8	9.525	1523.8	8381	172.72	196.6	220.48	3413	12	203	553478.8	2889.2	3467.1	3756	2975.2	3603.8	4022.9	6369.5
84-1065	O	38	0.5	41.94	156	47.8	54.17	60.55	20	0.472	3.9	2963.4	649.9	779.8	844.8	669.2	810.6	904.8	1432.7
		965.2	12.7	1065.2	8385.3	233.38	264.49	295.61	3413	12	100	404673.3	2890.7	3468.9	3757.9	2976.8	3605.7	4024.9	6372.8
84-1473	O	50	0.394	57.99	156.2	36.9	42	47.09	20	0.472	8	3905.5	650.9	781.1	846.2	670.3	811.9	906.3	1435
		1270	10	1473	8398.9	180.15	205.04	229.93	3413	12	203	533329.9	2895.4	3474.5	3764	2981.6	3611.5	4031.5	6383.2
84-722	O	24.5	0.875	28.44	156.3	77.43	87.69	97.96	20	0.472	3.9	1914.6	651.2	781.5	846.6	670.6	812.3	906.7	1435.7
		622.3	22.225	722.3	8402.8	378.04	428.16	478.28	3413	12	100	261454.4	2896.8	3476.1	3765.8	2983	3613.2	4033.4	6386.2
84-1639	O	54	0.375	64.51	156.5	34.6	39.47	44.33	20	0.472	10.5	4224.3	651.9	782.3	847.5	671.3	813.1	907.7	1437.2
		1371.6	9.525	1638.6	8411.6	168.93	192.69	216.46	3413	12	267	576867.4	2899.8	3479.8	3769.7	2986.1	3617	4037.6	6392.8
84-1116	O	40	0.472	43.94	156.5	45.45	51.51	57.57	20	0.472	3.9	3129.8	652	782.5	847.7	671.5	813.3	907.9	1437.5
		1016	12	1116	8413.5	221.89	251.49	281.08	3413	12	100	427405.9	2900.5	3480.5	3770.6	2986.8	3617.8	4038.5	6394.3
84-1300	O	42	0.5	51.17	156.7	44.52	50.7	56.87	20	0.472	9.2	3291.4	653	783.7	849	672.5	814.6	909.3	1439.7
		1066.8	12.7	1299.8	8426.4	217.39	247.52	277.65	3413	12	233	449464.5	2904.9	3485.9	3776.4	2991.4	3623.4	4044.7	6404.1
84-891	O	28	0.812	35.09	156.8	67.81	76.95	86.08	20	0.472	7.1	2194.9	653.2	783.9	849.2	672.7	814.8	909.6	1440.1
		711.2	20.638	891.2	8429	331.06	375.68	420.3	3413	12	180	299735.2	2905.8	3487	3777.5	2992.3	3624.5	4045.9	6406
84-1029	O	30	0.812	40.51	156.8	64.23	73.12	82.02	20	0.472	10.5	2351.9	653.3	783.9	849.3	672.7	814.9	909.6	1440.2
		762	20.638	1029	8429.6	313.6	357.02	400.44	3413	12	267	321166.2	2906	3487.2	3777.8	2992.5	3624.7	4046.2	6406.5
84-1044	O	34	0.625	41.09	156.8	54.83	62.25	69.67	20	0.472	7.1	2665.9	653.4	784.1	849.4	672.8	815	909.8	1440.5
		863.6	15.875	1043.6	8430.9	267.7	303.93	340.16	3413	12	180	364046.6	2906.5	3487.7	3778.4	2993	3625.3	4046.8	6407.5
84-1588	O	52	0.394	62.51	156.9	36.05	41.11	46.18	20	0.472	10.5	4079.2	653.7	784.5	849.8	673.2	815.4	910.2	1441.2
		1320.8	10	1587.8	8435.1	176	200.73	225.47	3413	12	267	557055.7	2907.9	3489.5	3780.3	2994.5	3627.1	4048.9	6410.7
84-1316	O	40	0.562	51.81	156.9	47.49	54.16	60.84	20	0.472	11.8	3138.8	653.9	784.7	850.1	673.4	815.6	910.5	1441.6
		1016	14.288	1316	8437.5	231.87	264.46	297.04	3413	12	300	428625.4	2908.7	3490.5	3781.3	2995.3	3628.1	4050	6412.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
84-1351	O	44	0.472	53.17	157	42.49	48.39	54.28	20	0.472	9.2	3453.3	654	784.8	850.3	673.5	815.8	910.7	1441.9
		1117.6	12	1350.6	8439.2	207.46	236.24	265.02	3413	12	233	471584.5	2909.3	3491.2	3782.1	2995.9	3628.9	4050.8	6413.8
85-1011	O	28	0.938	39.81	157.3	70.02	79.74	89.45	20	0.472	11.8	2202.1	655.4	786.5	852	674.9	817.5	912.5	1444.8
		711.2	23.812	1011.2	8456.5	341.88	389.31	436.73	3413	12	300	300714	2915.3	3498.3	3789.9	3002.1	3636.3	4059.1	6427
85-1169	O	36	0.625	46.02	157.4	52.76	60.07	67.38	20	0.472	10	2834	656	787.2	852.8	675.6	818.3	913.4	1446.2
		914.4	15.875	1168.9	8464.8	257.58	293.29	328.99	3413	12	254.5	387010	2918.1	3501.8	3793.6	3005	3639.9	4063.1	6433.2
85-1283	O	48	0.375	50.52	157.4	37.66	42.65	47.65	20	0.472	2.5	3778.7	656	787.2	852.8	675.6	818.3	913.4	1446.3
		1219.2	9.525	1283.2	8464.8	183.87	208.26	232.64	3413	12	64	516016.2	2918.1	3501.8	3793.6	3005	3639.9	4063.1	6433.3
85-1626	O	54	0.375	64.02	157.7	34.72	39.57	44.43	20	0.472	10	4256.8	656.9	788.3	854	676.5	819.4	914.7	1448.2
		1371.6	9.525	1626.1	8476.3	169.5	193.21	216.92	3413	12	254.5	581301.9	2922.1	3506.5	3798.7	3009.1	3644.8	4068.6	6442
85-1418	O	44	0.5	55.81	158	43.29	49.39	55.48	20	0.472	11.8	3475.5	658.2	789.9	855.7	677.8	821	916.5	1451.1
		1117.6	12.7	1417.6	8493.4	211.36	241.12	270.89	3413	12	300	474609.2	2928	3513.6	3806.4	3015.1	3652.1	4076.8	6455
85-1486	O	48	0.438	58.51	158	39.37	44.89	50.41	20	0.472	10.5	3791.5	658.2	789.9	855.7	677.8	821	916.5	1451.1
		1219.2	11.112	1486.2	8493.4	192.24	219.19	246.14	3413	12	267	517757.4	2928	3513.6	3806.4	3015.2	3652.2	4076.8	6455
85-1575	O	52	0.394	62.02	158.1	36.18	41.24	46.29	20	0.472	10	4111.6	658.9	790.7	856.6	678.5	821.9	917.4	1452.6
		1320.8	10	1575.3	8502.1	176.65	201.33	226.02	3413	12	254.5	561475.9	2931	3517.2	3810.3	3018.2	3655.9	4081	6461.6
85-913	O	32	0.625	35.94	158.3	58.23	65.98	73.72	20	0.472	3.9	2532.2	659.4	791.3	857.3	679.1	822.5	918.2	1453.8
		812.8	15.875	912.8	8508.8	284.33	322.14	359.94	3413	12	100	345798.6	2933.3	3520	3813.3	3020.6	3658.8	4084.2	6466.7
85-1501	O	52	0.375	59.09	158.3	35.52	40.36	45.19	20	0.472	7.1	4115.2	659.5	791.4	857.3	679.1	822.6	918.2	1453.9
		1320.8	9.525	1500.8	8509.4	173.43	197.03	220.64	3413	12	180	561961	2933.5	3520.2	3813.6	3020.8	3659	4084.5	6467.1
85-944	O	28	0.875	37.17	158.3	69.53	79.06	88.58	20	0.472	9.2	2216	659.5	791.4	857.4	679.2	822.7	918.3	1454
		711.2	22.225	944.2	8510.2	339.49	386	432.5	3413	12	233	302621.3	2933.8	3520.5	3813.9	3021.1	3659.4	4084.9	6467.7
85-1131	O	34	0.688	44.51	158.3	56.58	64.44	72.3	20	0.472	10.5	2691.8	659.8	791.7	857.7	679.4	822.9	918.6	1454.5
		863.6	17.462	1130.6	8513	276.27	314.65	353.02	3413	12	267	367591.5	2934.8	3521.7	3815.2	3022.1	3660.6	4086.2	6469.9
85-1131	O	42	0.438	44.52	158.3	43.48	49.24	55	20	0.472	2.5	3325.2	659.8	791.7	857.7	679.4	822.9	918.6	1454.5
		1066.8	11.112	1130.8	8513.1	212.3	240.43	268.56	3413	12	64	454088.3	2934.8	3521.7	3815.2	3022.1	3660.6	4086.3	6469.9
85-1080	O	32	0.75	42.51	158.7	60.54	68.93	77.32	20	0.472	10.5	2538.6	661.1	793.3	859.4	680.8	824.6	920.5	1457.4
		812.8	19.05	1079.8	8530.2	295.58	336.54	377.51	3413	12	267	346667	2940.7	3528.8	3822.9	3028.2	3668	4094.5	6482.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
85-1450	O	50	0.394	57.09	158.7	37.07	42.11	47.16	20	0.472	7.1	3967.4	661.2	793.5	859.6	680.9	824.8	920.7	1457.8
		1270	10	1450	8532.1	181	205.62	230.24	3413	12	180	541789.7	2941.3	3529.6	3823.7	3028.9	3668.8	4095.4	6484.4
85-1017	O	30	0.812	40.02	158.7	64.78	73.71	82.63	20	0.472	10	2380.8	661.3	793.6	859.7	681	824.9	920.8	1457.9
		762	20.638	1016.5	8533.2	316.3	359.87	403.44	3413	12	254.5	325115.6	2941.7	3530.1	3824.2	3029.3	3669.3	4095.9	6485.2
86-942	O	30	0.75	37.09	159.1	63.73	72.32	80.92	20	0.472	7.1	2386.4	662.9	795.5	861.8	682.6	826.8	923	1461.4
		762	19.05	942	8553.5	311.14	353.1	395.06	3413	12	180	325887.5	2948.7	3538.4	3833.3	3036.5	3678	4105.7	6500.6
86-993	O	32	0.688	39.09	159.1	59.39	67.41	75.43	20	0.472	7.1	2545.9	663	795.6	861.9	682.7	827	923.1	1461.6
		812.8	17.462	992.8	8554.9	289.96	329.12	368.27	3413	12	180	347671.2	2949.2	3539	3834	3037	3678.6	4106.4	6501.7
86-1168	O	38	0.562	45.99	159.2	49.94	56.79	63.65	20	0.472	8	3024.8	663.3	796	862.3	683.1	827.4	923.6	1462.4
		965.2	14.288	1168.2	8559.2	243.81	277.28	310.74	3413	12	203	413065.4	2950.7	3540.8	3835.9	3038.5	3680.4	4108.4	6505
86-1474	O	48	0.438	58.02	159.3	39.54	45.06	50.57	20	0.472	10	3823.6	663.8	796.6	863	683.6	828	924.3	1463.4
		1219.2	11.112	1473.7	8565.4	193.07	219.99	246.9	3413	12	254.5	522149	2952.8	3543.4	3838.7	3040.7	3683.1	4111.4	6509.7
86-928	O	34	0.562	36.52	159.7	54.76	62.01	69.25	20	0.472	2.5	2714.3	665.3	798.3	864.9	685.1	829.8	926.3	1466.6
		863.6	14.288	927.6	8584.2	267.39	302.75	338.11	3413	12	64	370664.1	2959.3	3551.1	3847.1	3047.4	3691.2	4120.4	6524
86-1605	O	54	0.375	63.17	159.8	35.03	39.89	44.76	20	0.472	9.2	4313.8	665.7	798.9	865.4	685.5	830.4	926.9	1467.6
		1371.6	9.525	1604.6	8589.8	171.01	194.78	218.55	3413	12	233	589090.7	2961.2	3553.5	3849.6	3049.4	3693.6	4123.1	6528.3
86-811	O	28	0.75	31.94	160.1	68.19	77.24	86.28	20	0.472	3.9	2241	667	800.3	867	686.8	831.9	928.6	1470.4
		711.2	19.05	811.2	8605.9	332.93	377.1	421.27	3413	12	100	306024.4	2966.8	3560.1	3856.8	3055.1	3700.5	4130.8	6540.5
86-1118	O	34	0.688	44.02	160.1	57	64.88	72.75	20	0.472	10	2721.9	667.1	800.6	867.3	687	832.1	928.9	1470.7
		863.6	17.462	1118.1	8608.2	278.31	316.77	355.22	3413	12	254.5	371701.1	2967.6	3561.1	3857.8	3055.9	3701.5	4131.9	6542.2
86-1370	O	50	0.375	53.94	160.2	36.9	41.82	46.74	20	0.472	3.9	4004.2	667.4	800.8	867.6	687.2	832.4	929.2	1471.2
		1270	9.525	1370	8611.1	180.15	204.18	228.21	3413	12	100	546804.4	2968.6	3562.3	3859.1	3056.9	3702.8	4133.3	6544.4
86-1722	O	56	0.375	67.81	160.2	34.28	39.13	43.98	20	0.472	11.8	4485.4	667.5	801	867.7	687.3	832.6	929.4	1471.5
		1422.4	9.525	1722.4	8612.5	167.37	191.05	214.72	3413	12	300	612523.2	2969.1	3562.9	3859.8	3057.4	3703.4	4134	6545.5
86-1554	O	52	0.394	61.17	160.3	36.52	41.59	46.66	20	0.472	9.2	4168.5	668	801.6	868.4	687.9	833.2	930.1	1472.7
		1320.8	10	1553.8	8619.7	178.31	203.07	227.83	3413	12	233	569245.1	2971.5	3565.8	3863	3060	3706.5	4137.5	6551
86-862	O	30	0.688	33.94	160.4	63.31	71.71	80.12	20	0.472	3.9	2405.7	668.2	801.9	868.7	688.1	833.5	930.4	1473.2
		762	17.462	862	8622.5	309.1	350.14	391.18	3413	12	100	328517.4	2972.5	3567	3864.3	3061	3707.7	4138.8	6553.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
86-1147	O	36	0.625	45.17	160.4	53.53	60.9	68.28	20	0.472	9.2	2887.1	668.3	802	868.8	688.2	833.6	930.5	1473.3
		914.4	15.875	1147.4	8623.4	261.34	297.36	333.37	3413	12	233	394261.8	2972.8	3567.4	3864.7	3061.3	3708.1	4139.2	6553.8
86-1270	O	42	0.5	49.99	160.4	45.31	51.53	57.76	20	0.472	8	3369.1	668.5	802.2	869	688.4	833.8	930.8	1473.7
		1066.8	12.7	1269.8	8625.5	221.21	251.61	282.01	3413	12	203	460083.5	2973.5	3568.2	3865.6	3062	3709	4140.2	6555.4
86-674	O	24	0.875	26.52	160.5	80.93	91.6	102.26	20	0.472	2.5	1925.5	668.6	802.3	869.2	688.5	833.9	930.9	1473.9
		609.6	22.225	673.6	8626.9	395.15	447.21	499.27	3413	12	64	262946.9	2974	3568.8	3866.2	3062.5	3709.6	4140.9	6556.4
86-1067	O	32	0.75	42.02	160.5	61.02	69.44	77.85	20	0.472	10	2568.3	668.8	802.6	869.5	688.7	834.3	931.3	1474.5
		812.8	19.05	1067.3	8630.1	297.94	339.02	380.11	3413	12	254.5	350727.1	2975.1	3570.1	3867.7	3063.7	3710.9	4142.4	6558.9
86-1321	O	44	0.472	51.99	160.5	43.2	49.14	55.08	20	0.472	8	3531.8	668.9	802.7	869.6	688.8	834.3	931.4	1474.6
		1117.6	12	1320.6	8630.9	210.91	239.92	268.93	3413	12	203	482297.4	2975.4	3570.5	3868	3064	3711.3	4142.9	6559.5
86-1319	O	48	0.394	51.94	160.6	38.58	43.73	48.87	20	0.472	3.9	3854.4	669.2	803	869.9	689.1	834.7	931.7	1475.2
		1219.2	10	1319.2	8634.3	188.37	213.49	238.6	3413	12	100	526348.5	2976.6	3571.9	3869.6	3065.2	3712.8	4144.5	6562.1
86-1672	O	54	0.394	65.81	160.8	35.71	40.75	45.79	20	0.472	11.8	4342.9	670.2	804.2	871.3	690.2	836	933.2	1477.5
		1371.6	10	1671.6	8647.7	174.33	198.96	223.59	3413	12	300	593061.1	2981.2	3577.4	3875.6	3069.9	3718.5	4150.9	6572.3
87-1283	O	40	0.562	50.51	161	48.4	55.15	61.89	20	0.472	10.5	3219.5	670.7	804.9	871.9	690.7	836.6	933.9	1478.7
		1016	14.288	1283	8654.5	236.32	269.25	302.17	3413	12	267	439650	2983.5	3580.2	3878.6	3072.4	3721.4	4154.2	6577.4
87-1029	O	38	0.5	40.52	161.4	49.21	55.72	62.23	20	0.472	2.5	3067	672.6	807.1	874.4	692.6	838.9	936.5	1482.8
		965.2	12.7	1029.2	8678.6	240.27	272.04	303.82	3413	12	64	418828.2	2991.8	3590.2	3889.4	3080.9	3731.8	4165.7	6595.7
87-1218	O	44	0.438	47.94	161.6	42.48	48.14	53.79	20	0.472	3.9	3555.7	673.4	808.1	875.5	693.5	840	937.7	1484.6
		1117.6	11.112	1217.6	8689.5	207.39	235.02	262.64	3413	12	100	485568.3	2995.6	3594.7	3894.3	3084.8	3736.5	4171	6604
87-1452	O	48	0.438	57.17	161.7	39.96	45.49	51.03	20	0.472	9.2	3880.2	673.7	808.4	875.7	693.7	840.3	938	1485.1
		1219.2	11.112	1452.2	8692.2	195.09	222.12	249.15	3413	12	233	529879.5	2996.5	3595.9	3895.5	3085.7	3737.7	4172.3	6606.1
87-1080	O	40	0.472	42.52	161.7	46.71	52.89	59.07	20	0.472	2.5	3234.2	673.8	808.5	875.9	693.8	840.4	938.1	1485.4
		1016	12	1080	8694	228.07	258.25	288.42	3413	12	64	441652.8	2997.1	3596.6	3896.3	3086.4	3738.4	4173.1	6607.4
87-1385	O	44	0.5	54.51	161.7	44.03	50.18	56.33	20	0.472	10.5	3558.3	673.9	808.7	876.1	694	840.6	938.3	1485.7
		1117.6	12.7	1384.6	8695.8	215	245.01	275.02	3413	12	267	485920.8	2997.8	3597.3	3897.1	3087	3739.2	4174	6608.8
87-710	O	24	0.938	27.94	161.9	82.3	93.19	104.07	20	0.472	3.9	1943	674.6	809.6	877	694.7	841.5	939.4	1487.3
		609.6	23.812	709.6	8705.1	401.83	454.98	508.12	3413	12	100	265331.2	3001	3601.2	3901.3	3090.3	3743.2	4178.4	6615.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
87-995	O	30	0.812	39.17	162.1	65.93	74.96	84	20	0.472	9.2	2432.2	675.6	810.7	878.3	695.7	842.7	940.7	1489.4
		762	20.638	995	8717.6	321.91	366.01	410.11	3413	12	233	332140.7	3005.3	3606.3	3906.9	3094.7	3748.6	4184.4	6625.4
87-1145	O	38	0.562	45.09	162.4	50.42	57.24	64.06	20	0.472	7.1	3085.6	676.7	812	879.7	696.8	844	942.2	1491.7
		965.2	14.288	1145.2	8731.1	246.17	279.46	312.75	3413	12	180	421361.3	3009.9	3611.9	3912.9	3099.5	3754.4	4190.9	6635.6
87-1570	O	50	0.438	61.81	162.4	38.98	44.47	49.96	20	0.472	11.8	4061.1	676.9	812.2	879.9	697	844.3	942.4	1492.2
		1270	11.112	1570	8733.6	190.3	217.11	243.92	3413	12	300	554582.8	3010.8	3613	3914	3100.4	3755.4	4192.1	6637.5
87-1265	O	38	0.625	49.81	162.5	51.82	59.07	66.31	20	0.472	11.8	3087.9	677.2	812.6	880.3	697.3	844.6	942.9	1492.9
		965.2	15.875	1265.2	8737.6	253.01	288.38	323.76	3413	12	300	421678	3012.2	3614.6	3915.8	3101.9	3757.2	4194.1	6640.6
87-1271	O	40	0.562	50.02	162.6	48.69	55.44	62.18	20	0.472	10	3251.2	677.3	812.8	880.5	697.5	844.8	943.1	1493.2
		1016	14.288	1270.5	8739.7	237.73	270.67	303.61	3413	12	254.5	443975.6	3012.9	3615.5	3916.8	3102.6	3758.1	4195	6642.2
87-1062	O	30	0.875	41.81	162.6	66.95	76.23	85.52	20	0.472	11.8	2438.6	677.4	812.9	880.6	697.6	844.9	943.2	1493.4
		762	22.225	1062	8740.6	326.88	372.21	417.54	3413	12	300	333017.9	3013.2	3615.9	3917.2	3102.9	3758.5	4195.5	6642.9
87-978	O	28	0.938	38.51	162.6	71.98	81.89	91.79	20	0.472	10.5	2276.4	677.5	813	880.7	697.7	845.1	943.3	1493.6
		711.2	23.812	978.2	8741.8	351.44	399.8	448.17	3413	12	267	310858.7	3013.6	3616.4	3917.7	3103.3	3759	4196.1	6643.8
88-1575	O	54	0.375	61.99	162.8	35.48	40.36	45.25	20	0.472	8	4396	678.4	814.1	881.9	698.6	846.2	944.6	1495.6
		1371.6	9.525	1574.6	8753.5	173.21	197.08	220.95	3413	12	203	600314.4	3017.7	3621.2	3923	3107.5	3764	4201.7	6652.7
88-1372	O	44	0.5	54.02	163.2	44.26	50.41	56.55	20	0.472	10	3590.7	680.1	816.1	884.1	700.3	848.3	946.9	1499.3
		1117.6	12.7	1372.1	8775	216.1	246.1	276.1	3413	12	254.5	490347.6	3025.1	3630.1	3932.6	3115.1	3773.3	4212	6669
88-1097	O	34	0.688	43.17	163.3	57.89	65.85	73.8	20	0.472	9.2	2775.3	680.2	816.3	884.3	700.5	848.4	947.1	1499.6
		863.6	17.462	1096.6	8776.9	282.65	321.49	360.32	3413	12	233	378988.7	3025.7	3630.9	3933.5	3115.8	3774.1	4212.9	6670.5
88-1689	O	56	0.375	66.51	163.3	34.72	39.58	44.45	20	0.472	10.5	4573	680.5	816.6	884.7	700.8	848.8	947.5	1500.2
		1422.4	9.525	1689.4	8780.8	169.5	193.25	217.01	3413	12	267	624488	3027.1	3632.5	3935.2	3117.2	3775.7	4214.8	6673.4
88-1298	O	44	0.472	51.09	163.4	43.5	49.4	55.29	20	0.472	7.1	3594.4	680.8	816.9	885	701	849.1	947.9	1500.8
		1117.6	12	1297.6	8783.9	212.41	241.18	269.96	3413	12	180	490846.2	3028.2	3633.8	3936.6	3118.3	3777.1	4216.3	6675.8
88-1247	O	42	0.5	49.09	163.4	45.67	51.85	58.03	20	0.472	7.1	3431.3	680.8	817	885.1	701.1	849.2	947.9	1500.9
		1066.8	12.7	1246.8	8784.6	222.96	253.14	283.33	3413	12	180	468570.7	3028.4	3634.1	3936.9	3118.5	3777.4	4216.6	6676.3
88-1524	O	52	0.394	59.99	163.5	37.01	42.11	47.21	20	0.472	8	4250.6	681.2	817.4	885.5	701.5	849.7	948.4	1501.7
		1320.8	10	1523.8	8789.4	180.72	205.6	230.49	3413	12	203	580452.2	3030	3636	3939	3120.2	3779.4	4218.9	6679.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
88-914	O	28	0.875	35.99	163.5	71.44	81.15	90.87	20	0.472	8	2288.8	681.2	817.4	885.5	701.5	849.7	948.5	1501.7
		711.2	22.225	914.2	8789.4	348.8	396.22	443.65	3413	12	203	312552	3030	3636.1	3939.1	3120.2	3779.5	4218.9	6680
88-1046	O	32	0.75	41.17	163.8	62.04	70.55	79.05	20	0.472	9.2	2621.1	682.6	819.1	887.4	702.9	851.4	950.4	1504.8
		812.8	19.05	1045.8	8807.5	302.9	344.43	385.97	3413	12	233	357937.5	3036.3	3643.5	3947.2	3126.7	3787.2	4227.6	6693.7
88-1639	O	54	0.394	64.51	164.1	36.18	41.25	46.31	20	0.472	10.5	4430.4	683.7	820.4	888.8	704	852.8	952	1507.3
		1371.6	10	1638.6	8821.9	176.66	201.39	226.12	3413	12	267	605004.9	3041.2	3649.5	3953.6	3131.8	3793.4	4234.5	6704.6
88-1014	O	36	0.562	39.94	164.1	53.24	60.31	67.38	20	0.472	3.9	2954.5	683.9	820.7	889.1	704.3	853.1	952.3	1507.7
		914.4	14.288	1014.4	8824.7	259.92	294.45	328.98	3413	12	100	403466.1	3042.2	3650.7	3954.9	3132.8	3794.6	4235.9	6706.8
88-1334	O	50	0.375	52.52	164.5	37.69	42.68	47.67	20	0.472	2.5	4112.2	685.4	822.4	891	705.8	854.9	954.3	1511
		1270	9.525	1334	8843.5	184.03	208.38	232.73	3413	12	64	561560.7	3048.7	3658.4	3963.3	3139.4	3802.7	4244.9	6721
88-686	O	24.5	0.875	27.02	164.5	81.1	91.77	102.44	20	0.472	2.5	2015	685.4	822.5	891	705.8	854.9	954.3	1511
		622.3	22.225	686.3	8843.6	395.95	448.07	500.18	3413	12	64	275169.1	3048.7	3658.5	3963.3	3139.5	3802.8	4244.9	6721.1
88-1677	O	56	0.375	66.02	164.5	34.83	39.69	44.54	20	0.472	10	4607.1	685.6	822.7	891.3	706	855.1	954.6	1511.4
		1422.4	9.525	1676.9	8846.2	170.06	193.76	217.47	3413	12	254.5	629143.1	3049.6	3659.5	3964.5	3140.4	3803.9	4246.2	6723.1
89-1117	O	36	0.625	43.99	164.7	54.66	62.13	69.6	20	0.472	8	2964.6	686.3	823.5	892.1	706.7	856	955.5	1512.9
		914.4	15.875	1117.4	8854.9	266.86	303.35	339.83	3413	12	203	404847	3052.6	3663.1	3968.4	3143.5	3807.6	4250.4	6729.7
89-966	O	28	0.938	38.02	164.7	72.66	82.62	92.57	20	0.472	10	2305.8	686.3	823.5	892.1	706.7	856	955.5	1512.9
		711.2	23.812	965.7	8855	354.77	403.36	451.95	3413	12	254.5	314882.5	3052.6	3663.2	3968.4	3143.5	3807.6	4250.4	6729.8
89-877	O	32	0.625	34.52	164.8	60.32	68.28	76.24	20	0.472	2.5	2636.2	686.5	823.8	892.5	706.9	856.3	955.9	1513.5
		812.8	15.875	876.8	8858.2	294.5	333.36	372.23	3413	12	64	359996.6	3053.8	3664.5	3969.9	3144.7	3809	4251.9	6732.2
89-1422	O	48	0.438	55.99	165.1	40.56	46.13	51.71	20	0.472	8	3962.1	687.9	825.4	894.2	708.3	858	957.8	1516.4
		1219.2	11.112	1422.2	8875.6	198.03	225.24	252.45	3413	12	203	541056.8	3059.8	3671.7	3977.7	3150.8	3816.5	4260.3	6745.5
89-1283	O	48	0.394	50.52	165.1	39.45	44.67	49.89	20	0.472	2.5	3962.5	687.9	825.5	894.3	708.4	858.1	957.9	1516.6
		1219.2	10	1283.2	8876.6	192.63	218.11	243.59	3413	12	64	541115.2	3060.1	3672.1	3978.1	3151.2	3816.9	4260.7	6746.2
89-1552	O	54	0.375	61.09	165.2	35.62	40.45	45.29	20	0.472	7.1	4461.2	688.5	826.1	895	708.9	858.7	958.6	1517.7
		1371.6	9.525	1551.6	8883.2	173.9	197.5	221.1	3413	12	180	609213.1	3062.4	3674.9	3981.1	3153.6	3819.8	4264	6751.3
89-1116	O	40	0.5	43.94	165.3	47.96	54.33	60.71	20	0.472	3.9	3305.5	688.7	826.4	895.2	709.2	859	958.9	1518.2
		1016	12.7	1116	8885.8	234.16	265.29	296.41	3413	12	100	451399.6	3063.3	3675.9	3982.3	3154.5	3820.9	4265.2	6753.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
89-1167	O	42	0.472	45.94	165.3	45.58	51.64	57.7	20	0.472	3.9	3471.3	688.7	826.5	895.4	709.3	859.1	959	1518.4
		1066.8	12	1166.8	8887.1	222.54	252.13	281.72	3413	12	100	474035.8	3063.7	3676.4	3982.8	3154.9	3821.4	4265.8	6754.2
89-1626	O	54	0.394	64.02	165.3	36.31	41.37	46.42	20	0.472	10	4464.4	689	826.7	895.6	709.5	859.3	959.3	1518.8
		1371.6	10	1626.1	8889.7	177.3	201.98	226.66	3413	12	254.5	609655.6	3064.6	3677.5	3984	3155.8	3822.6	4267.1	6756.2
89-1249	O	40	0.562	49.17	165.4	49.33	56.12	62.92	20	0.472	9.2	3307.1	689	826.8	895.7	709.5	859.4	959.3	1518.9
		1016	14.288	1249	8890.1	240.84	274.02	307.2	3413	12	233	451618.1	3064.8	3677.7	3984.2	3156	3822.8	4267.3	6756.5
89-1113	O	32	0.812	43.81	165.8	63.56	72.37	81.19	20	0.472	11.8	2652.9	690.9	829	898.1	711.4	861.7	961.9	1523
		812.8	20.638	1112.8	8914.2	310.31	353.36	396.41	3413	12	300	362274.4	3073.1	3687.7	3995	3164.6	3833.1	4278.8	6774.8
89-1351	O	44	0.5	53.17	165.8	44.78	50.96	57.14	20	0.472	9.2	3647.9	690.9	829.1	898.2	711.5	861.8	962	1523.1
		1117.6	12.7	1350.6	8914.7	218.64	248.81	278.98	3413	12	233	498153.4	3073.2	3687.9	3995.2	3164.7	3833.3	4279.1	6775.2
89-1214	O	36	0.688	47.81	165.8	55.96	63.75	71.55	20	0.472	11.8	2984.9	691	829.1	898.2	711.5	861.8	962.1	1523.3
		914.4	17.462	1214.4	8915.6	273.21	311.27	349.33	3413	12	300	407620.2	3073.5	3688.2	3995.6	3165	3833.7	4279.5	6775.8
89-1537	O	50	0.438	60.51	165.9	39.56	45.08	50.6	20	0.472	10.5	4148.3	691.4	829.7	898.8	712	862.4	962.7	1524.2
		1270	11.112	1537	8921.1	193.13	220.09	247.06	3413	12	267	566489.9	3075.4	3690.5	3998.1	3167	3836.1	4282.1	6780
89-1501	O	52	0.394	59.09	166	37.19	42.23	47.27	20	0.472	7.1	4315.7	691.6	829.9	899.1	712.2	862.7	963	1524.7
		1320.8	10	1500.8	8924.1	181.55	206.17	230.79	3413	12	180	589347.7	3076.5	3691.8	3999.4	3168.1	3837.4	4283.6	6782.3
90-1519	O	48	0.472	59.81	166.5	41.6	47.44	53.28	20	0.472	11.8	3996.6	693.8	832.6	902	714.5	865.5	966.1	1529.6
		1219.2	12	1519.2	8952.9	203.12	231.63	260.14	3413	12	300	545766.2	3086.4	3703.7	4012.3	3178.3	3849.7	4297.4	6804.2
90-1182	O	44	0.438	46.52	166.5	43.54	49.3	55.05	20	0.472	2.5	3664.1	694	832.7	902.1	714.6	865.6	966.2	1529.9
		1117.6	11.112	1181.6	8954.2	212.6	240.7	268.79	3413	12	64	500362.2	3086.9	3704.2	4012.9	3178.8	3850.3	4298	6805.2
90-1011	O	28	1	39.81	166.6	74.22	84.46	94.7	20	0.472	11.8	2333.1	694.4	833.2	902.7	715	866.1	966.8	1530.8
		711.2	25.4	1011.2	8959.5	362.38	412.37	462.36	3413	12	300	318598.7	3088.7	3706.4	4015.3	3180.6	3852.6	4300.5	6809.2
90-1655	O	56	0.375	65.17	166.7	35.13	40	44.87	20	0.472	9.2	4667	694.5	833.4	902.8	715.2	866.3	967	1531
		1422.4	9.525	1655.4	8961.1	171.53	195.29	219.06	3413	12	233	637314.2	3089.2	3707.1	4016	3181.2	3853.3	4301.3	6810.4
90-1232	O	38	0.625	48.51	166.9	52.89	60.22	67.55	20	0.472	10.5	3170.6	695.3	834.4	903.9	716	867.3	968.1	1532.8
		965.2	15.875	1232.2	8971.6	258.21	294.01	329.81	3413	12	267	432971.1	3092.9	3711.4	4020.7	3184.9	3857.8	4306.4	6818.4
90-1164	O	34	0.75	45.81	166.9	59.88	68.2	76.52	20	0.472	11.8	2837.5	695.5	834.5	904.1	716.2	867.5	968.3	1533.2
		863.6	19.05	1163.6	8973.6	292.36	332.98	373.6	3413	12	300	387479.4	3093.5	3712.2	4021.6	3185.6	3858.6	4307.3	6819.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
90-1367	O	42	0.562	53.81	166.9	47.87	54.57	61.26	20	0.472	11.8	3505.5	695.5	834.6	904.2	716.2	867.6	968.4	1533.4
		1066.8	14.288	1366.8	8974.7	233.73	266.41	299.1	3413	12	300	478710.9	3093.9	3712.7	4022.1	3186	3859.1	4307.9	6820.8
90-1421	O	52	0.375	55.94	167.2	36.95	41.87	46.79	20	0.472	3.9	4346.9	696.6	835.9	905.6	717.3	868.9	969.9	1535.7
		1320.8	9.525	1420.8	8988.5	180.43	204.44	228.45	3413	12	100	593602.9	3098.7	3718.4	4028.3	3190.9	3865.1	4314.5	6831.3
90-965	O	30	0.812	37.99	167.2	67.63	76.82	86.02	20	0.472	8	2507.8	696.6	835.9	905.6	717.4	868.9	969.9	1535.7
		762	20.638	965	8988.6	330.18	375.08	419.97	3413	12	203	342466.3	3098.7	3718.5	4028.3	3191	3865.1	4314.5	6831.3
90-1525	O	50	0.438	60.02	167.3	39.72	45.24	50.75	20	0.472	10	4182.3	697.1	836.5	906.2	717.8	869.5	970.6	1536.7
		1270	11.112	1524.5	8994.2	193.94	220.88	247.81	3413	12	254.5	571134.8	3100.7	3720.8	4030.9	3193	3867.5	4317.2	6835.6
90-826	O	30	0.688	32.52	167.4	65.74	74.41	83.07	20	0.472	2.5	2510.5	697.4	836.8	906.6	718.1	869.8	971	1537.4
		762	17.462	826	8998.3	320.98	363.28	405.58	3413	12	64	342835.4	3102.1	3722.5	4032.7	3194.4	3869.3	4319.2	6838.7
90-775	O	28	0.75	30.52	167.5	71.01	80.36	89.71	20	0.472	2.5	2345	697.9	837.5	907.3	718.7	870.5	971.8	1538.6
		711.2	19.05	775.2	9005.5	346.7	392.35	438.01	3413	12	64	320236.1	3104.5	3725.4	4035.9	3197	3872.4	4322.6	6844.2
90-1605	O	54	0.394	63.17	167.6	36.64	41.71	46.79	20	0.472	9.2	4524.2	698.2	837.8	907.6	719	870.9	972.1	1539.2
		1371.6	10	1604.6	9008.8	178.91	203.67	228.43	3413	12	233	617824.4	3105.7	3726.8	4037.4	3198.1	3873.8	4324.2	6846.7
90-891	O	28	0.875	35.09	167.7	72.62	82.36	92.1	20	0.472	7.1	2347.8	698.8	838.5	908.4	719.6	871.6	972.9	1540.5
		711.2	22.225	891.2	9016.3	354.54	402.1	449.66	3413	12	180	320618.3	3108.2	3729.9	4040.7	3200.8	3877	4327.8	6852.4
90-1029	O	30	0.875	40.51	167.8	68.71	78.17	87.62	20	0.472	10.5	2516.8	699.1	838.9	908.9	719.9	872	973.4	1541.3
		762	22.225	1029	9020.9	335.49	381.64	427.8	3413	12	267	343697.8	3109.9	3731.8	4042.8	3202.4	3879	4330.1	6855.9
90-1399	O	48	0.438	55.09	167.8	40.8	46.32	51.85	20	0.472	7.1	4027.2	699.2	839	908.9	720	872.1	973.5	1541.4
		1219.2	11.112	1399.2	9021.5	199.21	226.17	253.14	3413	12	180	549950.7	3110.1	3732.1	4043.1	3202.6	3879.2	4330.3	6856.3
90-1067	O	34	0.688	41.99	167.8	59.2	67.27	75.34	20	0.472	8	2853.3	699.3	839.2	909.2	720.2	872.3	973.7	1541.8
		863.6	17.462	1066.6	9023.8	289.03	328.44	367.85	3413	12	203	389648.4	3110.9	3733	4044.1	3203.5	3880.2	4331.4	6858.1
90-1370	O	50	0.394	53.94	168	38.65	43.79	48.93	20	0.472	3.9	4199.1	699.9	839.8	909.8	720.7	872.9	974.4	1542.9
		1270	10	1370	9030.3	188.7	213.8	238.9	3413	12	100	573427	3113.1	3735.7	4047	3205.8	3883	4334.6	6863.1
90-1722	O	56	0.394	67.81	168	35.84	40.89	45.93	20	0.472	11.8	4704.4	700.1	840.1	910.1	720.9	873.2	974.7	1543.3
		1422.4	10	1722.4	9032.9	175	199.63	224.26	3413	12	300	642423.4	3114	3736.8	4048.2	3206.7	3884.2	4335.8	6865
90-1094	O	36	0.625	43.09	168.2	55.26	62.71	70.16	20	0.472	7.1	3026.9	700.7	840.8	910.9	721.5	874	975.6	1544.7
		914.4	15.875	1094.4	9041	269.81	306.18	342.55	3413	12	180	413355.3	3116.8	3740.1	4051.8	3209.6	3887.6	4339.7	6871.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
91-944	O	28	0.938	37.17	168.5	74.05	84.14	94.23	20	0.472	9.2	2358.3	701.9	842.3	912.5	722.8	875.5	977.3	1547.4
		711.2	23.812	944.2	9056.6	361.55	410.82	460.08	3413	12	233	322052.5	3122.2	3746.6	4058.8	3215.1	3894.3	4347.2	6883
91-1220	O	38	0.625	48.02	168.6	53.23	60.57	67.92	20	0.472	10	3203.1	702.4	842.9	913.2	723.3	876.2	978	1548.6
		965.2	15.875	1219.7	9063.6	259.9	295.75	331.59	3413	12	254.5	437408.4	3124.6	3749.5	4061.9	3217.6	3897.3	4350.5	6888.3
91-1016	O	32	0.75	39.99	168.7	63.53	72.18	80.83	20	0.472	8	2698.5	702.7	843.3	913.6	723.7	876.5	978.5	1549.2
		812.8	19.05	1015.8	9067.6	310.2	352.41	394.62	3413	12	203	368508.6	3126	3751.1	4063.7	3219	3899.1	4352.5	6891.4
91-1219	O	40	0.562	47.99	169.4	50.26	57.13	64	20	0.472	8	3388.5	705.9	847.1	917.7	727	880.5	982.9	1556.3
		1016	14.288	1219	9108.9	245.39	278.94	312.48	3413	12	203	462732.6	3140.2	3768.2	4082.2	3233.7	3916.8	4372.3	6922.8
91-1321	O	44	0.5	51.99	169.6	45.54	51.77	58.01	20	0.472	8	3730.8	706.6	847.9	918.6	727.6	881.3	983.8	1557.7
		1117.6	12.7	1320.6	9117.2	222.34	252.77	283.21	3413	12	203	509469.9	3143.1	3771.7	4086	3236.6	3920.4	4376.3	6929.1
91-1503	O	50	0.438	59.17	169.7	40.12	45.66	51.2	20	0.472	9.2	4242.2	707	848.4	919.1	728.1	881.9	984.4	1558.7
		1270	11.112	1503	9122.9	195.9	222.95	249.99	3413	12	233	579304.7	3145	3774	4088.5	3238.6	3922.9	4379	6933.4
91-1625	O	56	0.375	63.99	169.8	35.57	40.46	45.34	20	0.472	8	4753.1	707.3	848.8	919.5	728.4	882.2	984.8	1559.3
		1422.4	9.525	1625.4	9126.5	173.67	197.53	221.39	3413	12	203	649077.2	3146.3	3775.5	4090.1	3239.9	3924.4	4380.7	6936.1
91-964	O	34	0.625	37.94	169.8	58.55	66.3	74.06	20	0.472	3.9	2887.2	707.6	849.2	919.9	728.7	882.7	985.3	1560.1
		863.6	15.875	963.6	9130.9	285.85	323.73	361.61	3413	12	100	394270.4	3147.8	3777.3	4092.1	3241.5	3926.3	4382.8	6939.5
91-1017	O	30	0.875	40.02	169.9	69.32	78.81	88.3	20	0.472	10	2547.8	707.7	849.3	920	728.8	882.8	985.4	1560.2
		762	22.225	1016.5	9131.9	338.46	384.8	431.14	3413	12	254.5	347924.2	3148.1	3777.7	4092.5	3241.8	3926.7	4383.3	6940.2
91-978	O	36	0.562	38.52	170.2	54.92	62.16	69.4	20	0.472	2.5	3063.2	709.1	850.9	921.8	730.2	884.5	987.3	1563.2
		914.4	14.288	978.4	9149.4	268.14	303.49	338.84	3413	12	64	418311.5	3154.2	3785	4100.4	3248	3934.3	4391.7	6953.6
92-1486	O	48	0.472	58.51	170.2	42.26	48.14	54.02	20	0.472	10.5	4085.3	709.3	851.1	922	730.4	884.7	987.5	1563.6
		1219.2	12	1486.2	9151.6	206.33	235.04	263.75	3413	12	267	557884.5	3154.9	3785.9	4101.4	3248.8	3935.2	4392.8	6955.3
92-1621	O	52	0.438	63.81	170.4	39.16	44.66	50.15	20	0.472	11.8	4429.5	709.9	851.8	922.8	731	885.4	988.4	1564.9
		1320.8	11.112	1620.8	9159.5	191.21	218.04	244.86	3413	12	300	604890.2	3157.6	3789.1	4104.9	3251.6	3938.6	4396.5	6961.2
92-1181	O	36	0.688	46.51	170.5	57.19	65.09	72.99	20	0.472	10.5	3068.3	710.3	852.3	923.3	731.4	885.9	988.9	1565.8
		914.4	17.462	1181.4	9164.6	279.21	317.78	356.36	3413	12	267	419006.3	3159.4	3791.3	4107.2	3253.4	3940.8	4399	6965.1
92-1131	O	42	0.472	44.52	170.6	46.79	52.97	59.14	20	0.472	2.5	3581.8	710.7	852.8	923.9	731.8	886.4	989.5	1566.7
		1066.8	12	1130.8	9170	228.46	258.61	288.76	3413	12	64	489127.2	3161.2	3793.5	4109.6	3255.3	3943.1	4401.6	6969.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
92-674	O	24	0.938	26.52	170.6	86.3	97.63	108.97	20	0.472	2.5	2046.8	710.7	852.8	923.9	731.9	886.5	989.6	1566.8
		609.6	23.812	673.6	9170.3	421.36	476.69	532.03	3413	12	64	279511.6	3161.4	3793.6	4109.8	3255.5	3943.2	4401.8	6969.4
92-1575	O	54	0.394	61.99	170.8	37.12	42.22	47.31	20	0.472	8	4610.4	711.5	853.8	924.9	732.7	887.5	990.6	1568.5
		1371.6	10	1574.6	9180.5	181.26	206.13	231.01	3413	12	203	629595.5	3164.9	3797.8	4114.3	3259.1	3947.6	4406.6	6977.1
92-1080	O	40	0.5	42.52	170.8	49.31	55.81	62.32	20	0.472	2.5	3415.7	711.6	853.9	925.1	732.8	887.6	990.8	1568.8
		1016	12.7	1080	9182	240.75	272.51	304.26	3413	12	64	466446.3	3165.4	3798.5	4115	3259.6	3948.3	4407.4	6978.3
92-1080	O	32	0.812	42.51	170.9	65.13	74.1	83.06	20	0.472	10.5	2734	712	854.4	925.6	733.2	888.1	991.3	1569.6
		812.8	20.638	1079.8	9186.7	318	361.77	405.54	3413	12	267	373346	3167	3800.4	4117.1	3261.3	3950.3	4409.6	6981.9
92-1334	O	42	0.562	52.51	171.1	48.76	55.52	62.28	20	0.472	10.5	3592.3	712.8	855.3	926.6	734	889	992.4	1571.3
		1066.8	14.288	1333.8	9196.8	238.06	271.07	304.08	3413	12	267	490554.8	3170.5	3804.6	4121.6	3264.8	3954.6	4414.4	6989.5
92-942	O	30	0.812	37.09	171.3	68.65	77.85	87.06	20	0.472	7.1	2569.1	713.6	856.4	927.7	734.9	890.1	993.6	1573.2
		762	20.638	942	9208.1	335.16	380.12	425.08	3413	12	180	350828	3174.4	3809.2	4126.7	3268.9	3959.5	4419.9	6998.1
92-1689	O	56	0.394	66.51	171.3	36.31	41.37	46.44	20	0.472	10.5	4796.3	713.7	856.5	927.8	735	890.3	993.8	1573.5
		1422.4	10	1689.4	9209.4	177.28	202.01	226.74	3413	12	267	654972.2	3174.8	3809.8	4127.3	3269.3	3960	4420.5	6999.1
92-710	O	24	1	27.94	171.3	87.37	98.89	110.4	20	0.472	3.9	2056.2	714	856.7	928.1	735.2	890.5	994.1	1574
		609.6	25.4	709.6	9212.3	426.57	482.8	539.04	3413	12	100	280792	3175.8	3811	4128.6	3270.4	3961.3	4421.9	7001.4
92-1385	O	52	0.375	54.52	171.5	37.72	42.7	47.68	20	0.472	2.5	4459.9	714.7	857.7	929.1	736	891.5	995.2	1575.7
		1320.8	9.525	1384.8	9222.2	184.17	208.49	232.81	3413	12	64	609034.5	3179.2	3815.1	4133	3273.9	3965.5	4426.7	7008.9
92-1044	O	34	0.688	41.09	171.5	59.93	67.99	76.05	20	0.472	7.1	2916.2	714.8	857.7	929.2	736	891.5	995.2	1575.7
		863.6	17.462	1043.6	9222.7	292.62	331.97	371.31	3413	12	180	398235.9	3179.4	3815.3	4133.2	3274.1	3965.8	4426.9	7009.2
92-1198	O	38	0.625	47.17	171.6	53.98	61.38	68.79	20	0.472	9.2	3260.6	715	858	929.5	736.3	891.9	995.6	1576.3
		965.2	15.875	1198.2	9226.2	263.54	299.69	335.84	3413	12	233	445257.1	3180.6	3816.7	4134.8	3275.3	3967.3	4428.6	7011.9
92-1474	O	48	0.472	58.02	171.7	42.46	48.33	54.21	20	0.472	10	4120	715.3	858.3	929.9	736.6	892.2	995.9	1576.9
		1219.2	12	1473.7	9229.3	207.28	235.97	264.67	3413	12	254.5	562616.5	3181.7	3818	4136.2	3276.4	3968.6	4430.1	7014.2
92-1131	O	34	0.75	44.51	171.8	61.28	69.72	78.17	20	0.472	10.5	2920.3	715.8	858.9	930.5	737.1	892.8	996.6	1577.9
		863.6	19.05	1130.6	9235.5	299.18	340.42	381.66	3413	12	267	398789.1	3183.8	3820.6	4139	3278.6	3971.3	4433	7019
93-1602	O	56	0.375	63.09	172.2	35.71	40.54	45.37	20	0.472	7.1	4821.3	717.5	860.9	932.7	738.8	894.9	999	1581.7
		1422.4	9.525	1602.4	9257.5	174.35	197.94	221.54	3413	12	180	658393.7	3191.4	3829.7	4148.8	3286.4	3980.7	4443.6	7035.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
93-811	O	28	0.812	31.94	172.2	73.5	83.21	92.92	20	0.472	3.9	2411.4	717.7	861.2	933	739	895.2	999.3	1582.2
		711.2	20.638	811.2	9260.3	358.86	406.27	453.68	3413	12	100	329294.9	3192.4	3830.8	4150.1	3287.4	3981.9	4444.9	7037.8
93-978	O	28	1	38.51	172.3	76.32	86.77	97.22	20	0.472	10.5	2411.8	717.8	861.3	933.1	739.2	895.3	999.4	1582.4
		711.2	25.4	978.2	9261.7	372.63	423.65	474.67	3413	12	267	329346.8	3192.9	3831.4	4150.7	3287.9	3982.5	4445.6	7038.9
93-1169	O	36	0.688	46.02	172.3	57.59	65.51	73.43	20	0.472	10	3101.1	717.9	861.4	933.2	739.2	895.4	999.5	1582.6
		914.4	17.462	1168.9	9262.6	281.19	319.84	358.5	3413	12	254.5	423487	3193.2	3831.8	4151.1	3288.2	3982.9	4446.1	7039.6
93-1334	O	50	0.394	52.52	172.5	39.49	44.7	49.92	20	0.472	2.5	4312.4	718.7	862.5	934.4	740.1	896.5	1000.7	1584.5
		1270	10	1334	9274	192.81	218.26	243.71	3413	12	64	588901.8	3197.1	3836.5	4156.2	3292.3	3987.8	4451.5	7048.3
93-993	O	32	0.75	39.09	172.6	64.41	73.05	81.7	20	0.472	7.1	2761	719	862.8	934.7	740.4	896.9	1001.1	1585.1
		812.8	19.05	992.8	9277.7	314.45	356.67	398.89	3413	12	180	377045.7	3198.4	3838	4157.9	3293.6	3989.4	4453.3	7051.1
93-1677	O	56	0.394	66.02	172.6	36.44	41.49	46.55	20	0.472	10	4832	719.1	862.9	934.8	740.5	896.9	1001.2	1585.2
		1422.4	10	1676.9	9278	177.9	202.58	227.26	3413	12	254.5	659854.5	3198.5	3838.2	4158	3293.7	3989.6	4453.5	7051.3
93-1298	O	44	0.5	51.09	172.6	45.89	52.08	58.27	20	0.472	7.1	3796.9	719.1	862.9	934.8	740.5	897	1001.3	1585.3
		1117.6	12.7	1297.6	9278.8	224.04	254.27	284.5	3413	12	180	518500.3	3198.8	3838.5	4158.4	3294	3989.9	4453.8	7051.9
93-1321	O	42	0.562	52.02	172.7	49.04	55.8	62.57	20	0.472	10	3626.2	719.5	863.4	935.3	740.9	897.4	1001.8	1586.2
		1066.8	14.288	1321.3	9283.8	239.42	272.45	305.48	3413	12	254.5	495195.6	3200.5	3840.6	4160.6	3295.7	3992	4456.2	7055.7
93-1196	O	40	0.562	47.09	172.7	50.73	57.57	64.4	20	0.472	7.1	3453.7	719.5	863.4	935.4	740.9	897.5	1001.8	1586.2
		1016	14.288	1196	9284.1	247.68	281.06	314.44	3413	12	180	471631.3	3200.6	3840.7	4160.7	3295.8	3992.2	4456.4	7055.9
93-1067	O	32	0.812	42.02	172.9	65.67	74.67	83.66	20	0.472	10	2766	720.3	864.4	936.4	741.7	898.5	1002.9	1588
		812.8	20.638	1067.3	9294.3	320.63	364.55	408.46	3413	12	254.5	377718.5	3204.1	3844.9	4165.3	3299.5	3996.5	4461.2	7063.6
93-913	O	32	0.688	35.94	173.1	63.71	72.14	80.57	20	0.472	3.9	2769.1	721.1	865.3	937.4	742.6	899.5	1004.1	1589.7
		812.8	17.462	912.8	9304.7	311.07	352.22	393.38	3413	12	100	378142	3207.7	3849.2	4170	3303.2	4001	4466.2	7071.6
93-1062	O	30	0.938	41.81	173.1	71.28	81.1	90.92	20	0.472	11.8	2596.4	721.2	865.5	937.6	742.7	899.6	1004.2	1590
		762	23.812	1062	9306.1	348	395.97	443.93	3413	12	300	354562.1	3208.2	3849.8	4170.6	3303.7	4001.6	4466.9	7072.6
93-1473	O	50	0.438	57.99	173.1	40.71	46.28	51.86	20	0.472	8	4328.6	721.4	865.7	937.9	742.9	899.9	1004.5	1590.4
		1270	11.112	1473	9308.7	198.76	225.98	253.19	3413	12	203	591103.2	3209.1	3850.9	4171.8	3304.6	4002.7	4468.2	7074.6
93-1552	O	54	0.394	61.09	173.3	37.29	42.33	47.38	20	0.472	7.1	4678.8	722	866.4	938.6	743.5	900.6	1005.3	1591.8
		1371.6	10	1551.6	9316.5	182.07	206.69	231.31	3413	12	180	638928.2	3211.8	3854.1	4175.3	3307.4	4006.1	4471.9	7080.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
93-995	O	30	0.875	39.17	173.5	70.57	80.18	89.79	20	0.472	9.2	2602.8	723	867.6	939.9	744.5	901.8	1006.7	1593.9
		762	22.225	995	9329.2	344.54	391.47	438.4	3413	12	233	355442.2	3216.1	3859.3	4181	3311.9	4011.6	4478	7090.2
93-1316	O	40	0.625	51.81	173.6	52.3	59.57	66.85	20	0.472	11.8	3471.1	723.2	867.8	940.1	744.7	902	1006.9	1594.2
		1016	15.875	1316	9331	255.33	290.85	326.37	3413	12	300	474012.9	3216.7	3860.1	4181.8	3312.5	4012.3	4478.9	7091.5
93-1118	O	34	0.75	44.02	173.7	61.75	70.22	78.69	20	0.472	10	2952.9	723.8	868.5	940.9	745.3	902.8	1007.7	1595.6
		863.6	19.05	1118.1	9338.8	301.48	342.83	384.18	3413	12	254.5	403247.5	3219.4	3863.3	4185.2	3315.3	4015.7	4482.6	7097.5
93-862	O	30	0.75	33.94	173.9	68.71	77.79	86.87	20	0.472	3.9	2607.9	724.4	869.3	941.7	746	903.6	1008.7	1597
		762	19.05	862	9347.3	335.46	379.79	424.13	3413	12	100	356132.3	3222.4	3866.8	4189.1	3318.3	4019.3	4486.7	7104
93-1588	O	52	0.438	62.51	173.9	39.73	45.25	50.78	20	0.472	10.5	4521.6	724.6	869.5	942	746.2	903.8	1008.9	1597.5
		1320.8	11.112	1587.8	9349.8	193.96	220.94	247.92	3413	12	267	617461.9	3223.2	3867.9	4190.2	3319.2	4020.4	4487.9	7105.9
94-914	O	28	0.938	35.99	174	76.11	86.4	96.7	20	0.472	8	2435.7	724.9	869.9	942.4	746.5	904.2	1009.4	1598.1
		711.2	23.812	914.2	9353.8	371.59	421.86	472.13	3413	12	203	332620.9	3224.6	3869.5	4192	3320.6	4022.1	4489.8	7108.9
94-1218	O	44	0.472	47.94	174.1	45.7	51.76	57.82	20	0.472	3.9	3830.6	725.5	870.6	943.1	747.1	904.9	1010.1	1599.4
		1117.6	12	1217.6	9361.1	223.13	252.73	282.32	3413	12	100	523096.3	3227.1	3872.5	4195.2	3323.2	4025.3	4493.3	7114.4
94-1452	O	48	0.472	57.17	174.2	42.91	48.82	54.72	20	0.472	9.2	4181	725.9	871	943.6	747.5	905.4	1010.7	1600.2
		1219.2	12	1452.2	9365.9	209.51	238.34	267.18	3413	12	233	570946.2	3228.8	3874.5	4197.4	3324.9	4027.3	4495.6	7118.1
94-1472	O	54	0.375	57.94	174.2	37.01	41.92	46.84	20	0.472	3.9	4703.7	725.9	871.1	943.6	747.5	905.4	1010.7	1600.3
		1371.6	9.525	1471.6	9366.2	180.69	204.68	228.67	3413	12	100	642331.5	3228.9	3874.6	4197.5	3325	4027.5	4495.8	7118.3
94-966	O	28	1	38.02	174.5	77.06	87.56	98.06	20	0.472	10	2443	727.1	872.5	945.2	748.7	906.9	1012.4	1602.9
		711.2	25.4	965.7	9381.6	376.24	427.52	478.79	3413	12	254.5	333609.8	3234.2	3881	4204.4	3330.5	4034.1	4503.2	7130
94-1065	O	38	0.562	41.94	174.6	53.45	60.53	67.61	20	0.472	3.9	3317.3	727.5	873	945.7	749.1	907.4	1012.9	1603.8
		965.2	14.288	1065.2	9386.8	260.97	295.53	330.09	3413	12	100	453006.9	3236	3883.2	4206.8	3332.3	4036.3	4505.7	7134
94-1167	O	42	0.5	45.94	174.6	48.11	54.48	60.86	20	0.472	3.9	3666.5	727.5	873	945.7	749.1	907.4	1012.9	1603.8
		1066.8	12.7	1166.8	9386.9	234.88	266.01	297.14	3413	12	100	500697.6	3236	3883.2	4206.8	3332.4	4036.4	4505.7	7134
94-1655	O	56	0.394	65.17	174.8	36.76	41.83	46.9	20	0.472	9.2	4894.8	728.4	874.1	946.9	750.1	908.5	1014.2	1605.8
		1422.4	10	1655.4	9398.5	179.47	204.23	228.98	3413	12	233	668424.5	3240	3888	4212	3336.5	4041.4	4511.3	7142.9
94-1570	O	50	0.472	61.81	175.1	41.82	47.67	53.52	20	0.472	11.8	4376.3	729.4	875.3	948.2	751.1	909.8	1015.6	1608
		1270	12	1570	9411.3	204.21	232.75	261.3	3413	12	300	597617.2	3244.4	3893.3	4217.8	3341	4046.9	4517.4	7152.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
94-1575	O	52	0.438	62.02	175.3	39.89	45.41	50.93	20	0.472	10	4557.5	730.4	876.4	949.5	752.1	911	1016.9	1610.1
		1320.8	11.112	1575.3	9424	194.76	221.71	248.65	3413	12	254.5	622361.5	3248.8	3898.6	4223.5	3345.5	4052.3	4523.5	7162.2
94-1421	O	52	0.394	55.94	175.3	38.71	43.85	48.99	20	0.472	3.9	4558.7	730.6	876.7	949.7	752.3	911.2	1017.2	1610.6
		1320.8	10	1420.8	9426.6	189.01	214.09	239.18	3413	12	100	622531.7	3249.7	3899.6	4224.6	3346.4	4053.4	4524.8	7164.2
94-1147	O	36	0.688	45.17	175.5	58.45	66.45	74.44	20	0.472	9.2	3159.2	731.3	877.6	950.7	753.1	912.2	1018.2	1612.2
		914.4	17.462	1147.4	9436.2	285.39	324.41	363.44	3413	12	233	431422.3	3253	3903.6	4228.9	3349.8	4057.6	4529.4	7171.5
94-1300	O	42	0.562	51.17	175.5	49.66	56.47	63.28	20	0.472	9.2	3686.2	731.4	877.7	950.8	753.2	912.3	1018.4	1612.4
		1066.8	14.288	1299.8	9437.3	242.44	275.7	308.97	3413	12	233	503386.7	3253.4	3904.1	4229.4	3350.2	4058	4529.9	7172.4
95-1450	O	50	0.438	57.09	175.9	40.94	46.47	52	20	0.472	7.1	4397.2	732.9	879.4	952.7	754.7	914.1	1020.4	1615.7
		1270	11.112	1450	9456.4	199.91	226.89	253.87	3413	12	180	600479.3	3260	3912	4238	3357	4066.2	4539.1	7186.8
95-1519	O	48	0.5	59.81	175.9	43.83	49.94	56.06	20	0.472	11.8	4222.4	733.1	879.7	953	754.9	914.4	1020.7	1616.1
		1219.2	12.7	1519.2	9458.8	213.98	243.85	273.72	3413	12	300	576605.5	3260.8	3912.9	4239	3357.9	4067.3	4540.2	7188.7
95-1168	O	38	0.625	45.99	176	55.07	62.57	70.06	20	0.472	8	3344.3	733.4	880.1	953.4	755.2	914.8	1021.2	1616.8
		965.2	15.875	1168.2	9463.1	268.88	305.48	342.08	3413	12	203	456691.5	3262.3	3914.8	4241	3359.4	4069.2	4542.3	7192
95-928	O	34	0.625	36.52	176.4	60.53	68.49	76.45	20	0.472	2.5	2999.2	735.1	882.1	955.6	757	916.9	1023.5	1620.6
		863.6	15.875	927.6	9485.2	295.53	334.4	373.28	3413	12	64	409572	3269.9	3923.9	4250.9	3367.3	4078.6	4552.9	7208.8
95-1046	O	32	0.812	41.17	176.4	66.78	75.88	84.98	20	0.472	9.2	2822.8	735.1	882.1	955.6	757	916.9	1023.5	1620.6
		812.8	20.638	1045.8	9485.3	326.05	370.48	414.91	3413	12	233	385483.8	3270	3923.9	4250.9	3367.3	4078.7	4553	7208.9
95-1418	O	44	0.562	55.81	177	48.22	54.94	61.65	20	0.472	11.8	3893.2	737.4	884.8	958.6	759.3	919.7	1026.7	1625.6
		1117.6	14.288	1417.6	9514.3	235.45	268.23	301.01	3413	12	300	531656.3	3279.9	3935.9	4263.9	3377.6	4091.1	4566.8	7230.8
95-1097	O	34	0.75	43.17	177.1	62.73	71.29	79.85	20	0.472	9.2	3010.8	737.9	885.5	959.3	759.9	920.5	1027.5	1626.9
		863.6	19.05	1096.6	9521.9	306.27	348.06	389.85	3413	12	233	411153.6	3282.5	3939	4267.3	3380.3	4094.4	4570.5	7236.6
95-1113	O	32	0.875	43.81	177.5	67.99	77.37	86.74	20	0.472	11.8	2840.1	739.6	887.5	961.5	761.6	922.5	1029.8	1630.5
		812.8	22.225	1112.8	9543.4	331.98	377.74	423.5	3413	12	300	387844.2	3290	3948	4277	3387.9	4103.7	4580.8	7253
96-1554	O	52	0.438	61.17	177.7	40.28	45.82	51.36	20	0.472	9.2	4620.5	740.5	888.6	962.6	762.5	923.6	1031	1632.4
		1320.8	11.112	1553.8	9554.4	196.67	223.72	250.78	3413	12	233	630973.1	3293.8	3952.5	4281.9	3391.8	4108.4	4586.1	7261.4
96-1422	O	48	0.472	55.99	177.9	43.58	49.53	55.48	20	0.472	8	4269.1	741.2	889.4	963.5	763.2	924.5	1032	1634
		1219.2	12	1422.2	9563.5	212.75	241.8	270.86	3413	12	203	582989.7	3296.9	3956.3	4286	3395	4112.3	4590.5	7268.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
96-1265	O	38	0.688	49.81	177.9	56.54	64.38	72.22	20	0.472	11.8	3379.9	741.2	889.4	963.6	763.3	924.5	1032	1634
		965.2	17.462	1265.2	9563.8	276.07	314.33	352.59	3413	12	300	461550	3297	3956.4	4286.1	3395.2	4112.4	4590.6	7268.5
96-1319	O	48	0.438	51.94	178	42.66	48.32	53.97	20	0.472	3.9	4271.4	741.6	889.9	964	763.6	925	1032.5	1634.8
		1219.2	11.112	1319.2	9568.6	208.31	235.91	263.52	3413	12	100	583301.2	3298.7	3958.4	4288.2	3396.8	4114.5	4592.9	7272.1
96-1283	O	40	0.625	50.51	178	53.33	60.69	68.05	20	0.472	10.5	3560.4	741.8	890.1	964.3	763.8	925.2	1032.8	1635.2
		1016	15.875	1283	9571	260.39	296.32	332.26	3413	12	267	486205	3299.5	3959.4	4289.3	3397.7	4115.5	4594.1	7273.9
96-1625	O	56	0.394	63.99	178	37.23	42.32	47.41	20	0.472	8	4985.1	741.8	890.2	964.4	763.9	925.3	1032.9	1635.4
		1422.4	10	1625.4	9572	181.76	206.63	231.5	3413	12	203	680761.7	3299.8	3959.8	4289.8	3398.1	4116	4594.6	7274.7
96-1672	O	54	0.438	65.81	178.3	39.34	44.84	50.33	20	0.472	11.8	4814.3	742.9	891.5	965.8	765.1	926.7	1034.5	1637.9
		1371.6	11.112	1671.6	9586.4	192.06	218.91	245.75	3413	12	300	657436	3304.8	3965.8	4296.2	3403.2	4122.2	4601.5	7285.7
96-891	O	28	0.938	35.09	178.5	77.4	87.74	98.08	20	0.472	7.1	2498.6	743.6	892.4	966.7	765.8	927.5	1035.4	1639.4
		711.2	23.812	891.2	9595.2	377.92	428.4	478.88	3413	12	180	341205.1	3307.8	3969.4	4300.2	3406.3	4125.9	4605.7	7292.3
96-944	O	28	1	37.17	178.5	78.55	89.2	99.85	20	0.472	9.2	2498.6	743.6	892.4	966.7	765.8	927.6	1035.4	1639.4
		711.2	25.4	944.2	9595.2	383.51	435.52	487.53	3413	12	233	341206.3	3307.8	3969.4	4300.2	3406.3	4125.9	4605.7	7292.4
96-1436	O	54	0.375	56.52	178.6	37.75	42.72	47.7	20	0.472	2.5	4821.6	744.1	892.9	967.3	766.2	928.1	1036	1640.4
		1371.6	9.525	1435.6	9601	184.3	208.59	232.88	3413	12	64	658439	3309.8	3971.8	4302.8	3408.4	4128.4	4608.5	7296.8
96-1029	O	30	0.938	40.51	178.6	73.18	83.19	93.2	20	0.472	10.5	2679.7	744.4	893.2	967.7	766.5	928.5	1036.4	1641
		762	23.812	1029	9604.5	357.28	406.16	455.04	3413	12	267	365932.9	3311	3973.3	4304.4	3409.6	4130	4610.2	7299.4
96-1537	O	50	0.472	60.51	178.8	42.47	48.35	54.24	20	0.472	10.5	4470.2	745	894	968.5	767.2	929.3	1037.4	1642.5
		1270	12	1537	9613.4	207.33	236.08	264.82	3413	12	267	610448.3	3314.1	3976.9	4308.3	3412.7	4133.7	4614.4	7306.2
96-965	O	30	0.875	37.99	178.9	72.41	82.2	91.99	20	0.472	8	2683.8	745.5	894.6	969.1	767.7	929.9	1038	1643.5
		762	22.225	965	9619.2	353.52	401.33	449.15	3413	12	203	366492.2	3316.1	3979.3	4310.9	3414.8	4136.3	4617.2	7310.6
96-1182	O	44	0.472	46.52	179.4	46.87	53.04	59.21	20	0.472	2.5	3947.3	747.6	897.1	971.9	769.8	932.5	1040.9	1648.1
		1117.6	12	1181.6	9646.3	228.82	258.94	289.06	3413	12	64	539033.5	3325.4	3990.5	4323.1	3424.4	4147.9	4630.2	7331.2
97-1145	O	38	0.625	45.09	179.5	55.66	63.13	70.6	20	0.472	7.1	3411.4	748.1	897.7	972.6	770.4	933.2	1041.7	1649.3
		965.2	15.875	1145.2	9653.2	271.74	308.23	344.72	3413	12	180	465863.6	3327.8	3993.4	4326.2	3426.9	4150.9	4633.5	7336.4
97-1270	O	42	0.562	49.99	179.7	50.56	57.44	64.33	20	0.472	8	3773.3	748.7	898.4	973.3	771	933.8	1042.4	1650.5
		1066.8	14.288	1269.8	9660.3	246.85	280.46	314.07	3413	12	203	515279.6	3330.3	3996.3	4329.3	3429.4	4153.9	4636.9	7341.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
97-1271	O	40	0.625	50.02	179.8	53.67	61.04	68.41	20	0.472	10	3595.4	749	898.9	973.8	771.3	934.3	1042.9	1651.3
		1016	15.875	1270.5	9665.1	262.03	298.01	333.99	3413	12	254.5	490988.6	3331.9	3998.3	4331.5	3431.1	4156	4639.3	7345.5
97-1164	O	34	0.812	45.81	179.8	64.42	73.31	82.2	20	0.472	11.8	3056.9	749.2	899.1	974	771.5	934.5	1043.2	1651.7
		863.6	20.638	1163.6	9667.5	314.54	357.93	401.33	3413	12	300	417444.1	3332.8	3999.3	4332.6	3432	4157	4640.4	7347.3
97-1486	O	48	0.5	58.51	179.8	44.53	50.7	56.86	20	0.472	10.5	4316.2	749.3	899.2	974.1	771.6	934.7	1043.3	1652
		1219.2	12.7	1486.2	9668.8	217.43	247.53	277.63	3413	12	267	589408.6	3333.2	3999.8	4333.1	3432.4	4157.6	4641	7348.3
97-1385	O	52	0.394	54.52	179.9	39.52	44.73	49.94	20	0.472	2.5	4677.2	749.6	899.5	974.4	771.9	934.9	1043.7	1652.4
		1320.8	10	1384.8	9671.6	192.98	218.39	243.81	3413	12	64	638715.3	3334.2	4001	4334.4	3433.4	4158.8	4642.4	7350.4
97-1214	O	36	0.75	47.81	180	60.6	68.97	77.34	20	0.472	11.8	3239.3	749.8	899.8	974.8	772.2	935.3	1044	1653.1
		914.4	19.05	1214.4	9675.2	295.85	336.74	377.63	3413	12	300	442351.8	3335.4	4002.5	4336	3434.7	4160.4	4644.1	7353.2
97-1131	O	42	0.5	44.52	180.2	49.4	55.9	62.4	20	0.472	2.5	3783.3	750.6	900.8	975.8	773	936.3	1045.2	1654.9
		1066.8	12.7	1130.8	9685.7	241.19	272.93	304.67	3413	12	64	516637.8	3339	4006.8	4340.8	3438.4	4164.9	4649.2	7361.2
97-877	O	32	0.688	34.52	180.2	66.02	74.69	83.37	20	0.472	2.5	2882.8	750.7	900.9	975.9	773.1	936.4	1045.3	1655
		812.8	17.462	876.8	9686.7	322.35	364.69	407.03	3413	12	64	393667.9	3339.4	4007.2	4341.2	3438.8	4165.3	4649.6	7361.9
97-1117	O	36	0.688	43.99	180.2	59.72	67.82	75.93	20	0.472	8	3244.1	750.9	901.1	976.2	773.3	936.7	1045.6	1655.5
		914.4	17.462	1117.4	9689.5	291.56	331.13	370.7	3413	12	203	443005.2	3340.3	4008.4	4342.4	3439.8	4166.5	4651	7364
97-775	O	28	0.812	30.52	180.2	76.57	86.61	96.66	20	0.472	2.5	2523.4	751	901.2	976.3	773.4	936.7	1045.7	1655.6
		711.2	20.638	775.2	9690.3	373.83	422.87	471.92	3413	12	64	344587.2	3340.6	4008.7	4342.8	3440.1	4166.8	4651.3	7364.6
97-1525	O	50	0.472	60.02	180.3	42.66	48.54	54.42	20	0.472	10	4506.9	751.1	901.4	976.5	773.5	936.9	1045.9	1656
		1270	12	1524.5	9692.2	208.27	236.99	265.71	3413	12	254.5	615453.6	3341.3	4009.5	4343.6	3440.7	4167.6	4652.2	7366.1
97-674	O	24	1	26.52	180.5	91.64	103.64	115.64	20	0.472	2.5	2166.1	752.1	902.5	977.7	774.5	938.1	1047.2	1658.1
		609.6	25.4	673.6	9704.7	447.41	506.01	564.6	3413	12	64	295798.7	3345.6	4014.7	4349.2	3445.2	4173	4658.2	7375.6
97-1602	O	56	0.394	63.09	180.6	37.39	42.43	47.48	20	0.472	7.1	5056.7	752.5	903	978.2	774.9	938.6	1047.7	1658.9
		1422.4	10	1602.4	9709.4	182.55	207.17	231.8	3413	12	180	690533	3347.2	4016.6	4351.4	3446.8	4175	4660.5	7379.1
97-1029	O	38	0.562	40.52	180.7	55.06	62.3	69.54	20	0.472	2.5	3433.3	752.9	903.5	978.8	775.3	939.1	1048.3	1659.9
		965.2	14.288	1029.2	9715.1	268.82	304.16	339.51	3413	12	64	468852.5	3349.2	4019	4353.9	3448.9	4177.5	4663.3	7383.5
97-1399	O	48	0.472	55.09	180.8	43.87	49.77	55.68	20	0.472	7.1	4339.3	753.4	904	979.4	775.8	939.7	1048.9	1660.8
		1219.2	12	1399.2	9720.7	214.17	243.01	271.85	3413	12	180	592572.9	3351.1	4021.3	4356.4	3450.8	4179.9	4665.9	7387.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
97-1017	O	30	0.938	40.02	180.8	73.84	83.9	93.95	20	0.472	10	2712.6	753.5	904.2	979.6	775.9	939.9	1049.2	1661.2
		762	23.812	1016.5	9722.6	360.52	409.62	458.71	3413	12	254.5	370432.9	3351.8	4022.1	4357.3	3451.5	4180.7	4666.9	7389.2
97-1385	O	44	0.562	54.51	181.2	49.09	55.87	62.64	20	0.472	10.5	3986	754.9	905.9	981.4	777.4	941.6	1051.1	1664.3
		1117.6	14.288	1384.6	9741	239.67	272.76	305.85	3413	12	267	544327.6	3358.1	4029.7	4365.5	3458.1	4188.6	4675.7	7403.2
97-1524	O	52	0.438	59.99	181.2	40.85	46.42	52	20	0.472	8	4711.5	755	906.1	981.6	777.5	941.8	1051.3	1664.6
		1320.8	11.112	1523.8	9742.5	199.44	226.66	253.89	3413	12	203	643395.5	3358.6	4030.3	4366.2	3458.6	4189.3	4676.4	7404.3
97-1522	O	56	0.375	59.94	181.2	37.06	41.97	46.88	20	0.472	3.9	5074.7	755.2	906.2	981.7	777.6	941.9	1051.5	1664.8
		1422.4	9.525	1522.4	9744	180.93	204.9	228.88	3413	12	100	692991.3	3359.1	4030.9	4366.8	3459.1	4189.9	4677.1	7405.4
98-1474	O	48	0.5	58.02	181.4	44.75	50.91	57.07	20	0.472	10	4352.8	755.7	906.8	982.4	778.2	942.6	1052.2	1666
		1219.2	12.7	1473.7	9750.8	218.48	248.57	278.66	3413	12	254.5	594408	3361.5	4033.8	4369.9	3461.5	4192.8	4680.4	7410.6
98-1014	O	36	0.625	39.94	181.4	58.83	66.6	74.37	20	0.472	3.9	3265.7	755.9	907.1	982.7	778.4	942.9	1052.5	1666.5
		914.4	15.875	1014.4	9754	287.22	325.16	363.11	3413	12	100	445954.3	3362.6	4035.1	4371.4	3462.7	4194.2	4681.9	7413.1
98-826	O	30	0.75	32.52	181.4	71.38	80.74	90.11	20	0.472	2.5	2721.6	756	907.2	982.8	778.5	943	1052.6	1666.6
		762	19.05	826	9754.7	348.49	394.23	439.96	3413	12	64	371653.8	3362.8	4035.4	4371.7	3462.9	4194.5	4682.3	7413.6
98-1016	O	32	0.812	39.99	181.6	68.42	77.67	86.93	20	0.472	8	2906.2	756.8	908.2	983.9	779.4	944	1053.8	1668.5
		812.8	20.638	1015.8	9765.5	334.03	379.23	424.42	3413	12	203	396868.5	3366.5	4039.8	4376.5	3466.7	4199.1	4687.4	7421.8
98-1639	O	54	0.438	64.51	181.9	39.89	45.42	50.94	20	0.472	10.5	4911.3	757.9	909.5	985.3	780.5	945.4	1055.3	1670.9
		1371.6	11.112	1638.6	9779.5	194.75	221.74	248.73	3413	12	267	670676.2	3371.4	4045.6	4382.8	3471.7	4205.2	4694.1	7432.4
98-1067	O	34	0.75	41.99	182.1	64.17	72.87	81.56	20	0.472	8	3095.5	758.7	910.4	986.3	781.3	946.3	1056.4	1672.6
		863.6	19.05	1066.6	9789.7	313.32	355.76	398.2	3413	12	203	422718	3374.9	4049.8	4387.3	3475.3	4209.6	4699	7440.1
98-1232	O	38	0.688	48.51	182.7	57.74	65.68	73.62	20	0.472	10.5	3470.4	761	913.3	989.4	783.7	949.3	1059.7	1677.8
		965.2	17.462	1232.2	9820	281.9	320.66	359.42	3413	12	267	473910.9	3385.3	4062.4	4400.9	3486.1	4222.6	4713.6	7463.2
98-1472	O	54	0.394	57.94	182.7	38.77	43.91	49.04	20	0.472	3.9	4933.1	761.3	913.5	989.7	783.9	949.6	1060	1678.3
		1371.6	10	1471.6	9823	189.3	214.37	239.43	3413	12	100	673662	3386.4	4063.6	4402.3	3487.2	4223.9	4715	7465.5
98-1372	O	44	0.562	54.02	182.8	49.36	56.14	62.92	20	0.472	10	4022.3	761.8	914.2	990.3	784.5	950.2	1060.7	1679.5
		1117.6	14.288	1372.1	9829.8	241	274.11	307.22	3413	12	254.5	549286.5	3388.7	4066.4	4405.3	3489.6	4226.8	4718.3	7470.6
98-1503	O	50	0.472	59.17	182.9	43.1	49.01	54.92	20	0.472	9.2	4571.3	761.9	914.3	990.5	784.6	950.3	1060.8	1679.6
		1270	12	1503	9830.8	210.43	239.29	268.15	3413	12	233	624257.5	3389.1	4066.9	4405.8	3489.9	4227.3	4718.8	7471.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
98-1249	O	40	0.625	49.17	182.9	54.39	61.82	69.25	20	0.472	9.2	3657.3	761.9	914.3	990.5	784.6	950.4	1060.9	1679.8
		1016	15.875	1249	9831.5	265.56	301.83	338.1	3413	12	233	499440.4	3389.3	4067.1	4406.1	3490.2	4227.5	4719.1	7471.9
98-1080	O	32	0.875	42.51	182.9	69.71	79.24	88.78	20	0.472	10.5	2926.9	762.2	914.7	990.9	784.9	950.7	1061.3	1680.4
		812.8	22.225	1079.8	9835.1	340.33	386.9	433.46	3413	12	267	399697.2	3390.5	4068.6	4407.7	3491.4	4229.1	4720.8	7474.7
98-1283	O	48	0.438	50.52	183	43.65	49.39	55.14	20	0.472	2.5	4391.3	762.4	914.8	991.1	785.1	950.9	1061.5	1680.7
		1219.2	11.112	1283.2	9837	213.13	241.17	269.21	3413	12	64	599665.7	3391.2	4069.4	4408.6	3492.1	4229.9	4721.8	7476.1
98-1247	O	42	0.562	49.09	183	51.01	57.87	64.72	20	0.472	7.1	3842.9	762.5	915	991.2	785.2	951.1	1061.7	1681
		1066.8	14.288	1246.8	9838.5	249.08	282.53	315.98	3413	12	180	524785	3391.7	4070	4409.2	3492.7	4230.6	4722.5	7477.3
99-942	O	30	0.875	37.09	183.3	73.54	83.36	93.19	20	0.472	7.1	2749.3	763.7	916.4	992.8	786.4	952.6	1063.3	1683.6
		762	22.225	942	9854.1	359.07	407.02	454.97	3413	12	180	375440.6	3397.1	4076.5	4416.2	3498.2	4237.3	4730	7489.1
99-1626	O	54	0.438	64.02	183.3	40.05	45.57	51.09	20	0.472	10	4949	763.7	916.5	992.9	786.5	952.6	1063.4	1683.7
		1371.6	11.112	1626.1	9854.6	195.53	222.49	249.45	3413	12	254.5	675831.7	3397.3	4076.7	4416.4	3498.4	4237.5	4730.2	7489.5
99-1062	O	30	1	41.81	183.5	75.58	85.94	96.31	20	0.472	11.8	2752.1	764.5	917.4	993.8	787.2	953.5	1064.4	1685.3
		762	25.4	1062	9864	369.02	419.61	470.21	3413	12	300	375820.2	3400.5	4080.6	4420.7	3501.7	4241.5	4734.7	7496.7
99-1621	O	52	0.472	63.81	183.6	42.03	47.89	53.74	20	0.472	11.8	4773.6	765	918	994.5	787.8	954.2	1065.2	1686.5
		1320.8	12	1620.8	9871	205.23	233.81	262.39	3413	12	300	651881.8	3402.9	4083.5	4423.8	3504.2	4244.5	4738.1	7502
99-1218	O	44	0.5	47.94	183.9	48.24	54.62	61	20	0.472	3.9	4046.4	766.4	919.6	996.3	789.2	955.9	1067	1689.5
		1117.6	12.7	1217.6	9888.5	235.53	266.67	297.81	3413	12	100	552567.3	3408.9	4090.7	4431.6	3510.4	4252	4746.5	7515.2
99-1501	O	52	0.438	59.09	184	41.08	46.61	52.14	20	0.472	7.1	4783.7	766.6	919.9	996.6	789.4	956.2	1067.4	1690.1
		1320.8	11.112	1500.8	9891.8	200.56	227.56	254.55	3413	12	180	653255.6	3410.1	4092.1	4433.1	3511.6	4253.5	4748.1	7517.8
99-1094	O	36	0.688	43.09	184	60.43	68.52	76.61	20	0.472	7.1	3312.2	766.7	920.1	996.7	789.5	956.4	1067.6	1690.3
		914.4	17.462	1094.4	9893.2	295.03	334.55	374.07	3413	12	180	452315.4	3410.5	4092.7	4433.7	3512.1	4254.1	4748.7	7518.8
99-1452	O	48	0.5	57.17	184.1	45.24	51.43	57.63	20	0.472	9.2	4417.2	766.9	920.2	996.9	789.7	956.5	1067.8	1690.6
		1219.2	12.7	1452.2	9895.1	220.87	251.12	281.38	3413	12	233	603208.2	3411.2	4093.5	4434.6	3512.8	4254.9	4749.7	7520.3
99-811	O	28	0.875	31.94	184.2	78.79	89.16	99.53	20	0.472	3.9	2579.4	767.7	921.2	998	790.5	957.5	1068.9	1692.4
		711.2	22.225	811.2	9905.4	384.66	435.3	485.93	3413	12	100	352237.4	3414.8	4097.7	4439.2	3516.4	4259.3	4754.6	7528.1
99-914	O	28	1	35.99	184.3	80.75	91.63	102.51	20	0.472	8	2580.6	768	921.6	998.4	790.9	958	1069.4	1693.2
		711.2	25.4	914.2	9910.1	394.27	447.38	500.48	3413	12	203	352403.2	3416.4	4099.7	4441.3	3518.1	4261.3	4756.8	7531.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
99-1220	O	38	0.688	48.02	184.5	58.13	66.09	74.04	20	0.472	10	3505.9	768.8	922.6	999.5	791.7	959	1070.5	1695
		965.2	17.462	1219.7	9920.6	283.83	322.67	361.5	3413	12	254.5	478767.7	3420	4104	4446	3521.8	4265.9	4761.9	7539.6
99-1367	O	42	0.625	53.81	184.6	52.74	60.04	67.34	20	0.472	11.8	3877.6	769.4	923.2	1000.2	792.3	959.6	1071.2	1696.1
		1066.8	15.875	1366.8	9927.3	257.48	293.14	328.79	3413	12	300	529520.8	3422.3	4106.8	4449	3524.2	4268.7	4765.1	7544.7
99-995	O	30	0.938	39.17	184.7	75.18	85.37	95.56	20	0.472	9.2	2771.2	769.8	923.7	1000.7	792.7	960.2	1071.8	1697.1
		762	23.812	995	9932.7	367.08	416.83	466.58	3413	12	233	378437.2	3424.2	4109	4451.4	3526.1	4271.1	4767.7	7548.9
99-1570	O	50	0.5	61.81	185	44.07	50.2	56.32	20	0.472	11.8	4623.9	770.6	924.8	1001.8	793.6	961.2	1073	1698.9
		1270	12.7	1570	9943.8	215.16	245.08	275	3413	12	300	631429.9	3428	4113.6	4456.4	3530	4275.8	4773	7557.3
99-1181	O	36	0.75	46.51	185	61.95	70.45	78.95	20	0.472	10.5	3329.8	770.8	924.9	1002	793.7	961.4	1073.2	1699.2
		914.4	19.05	1181.4	9945.5	302.48	343.96	385.45	3413	12	267	454708	3428.6	4114.3	4457.2	3530.7	4276.6	4773.8	7558.6
99-1116	O	40	0.562	43.94	185.1	53.64	60.73	67.82	20	0.472	3.9	3701.3	771.1	925.3	1002.4	794	961.8	1073.6	1699.9
		1016	14.288	1116	9949.6	261.92	296.51	331.11	3413	12	100	505440	3430	4116	4459	3532.1	4278.3	4775.8	7561.7
99-1131	O	34	0.812	44.51	185.1	65.95	74.98	84.01	20	0.472	10.5	3146.1	771.1	925.3	1002.4	794.1	961.8	1073.7	1700
		863.6	20.638	1130.6	9949.7	322.01	366.1	410.19	3413	12	267	429628.5	3430	4116	4459.1	3532.1	4278.4	4775.9	7561.8
100-1067	O	32	0.875	42.02	185.1	70.3	79.87	89.44	20	0.472	10	2961.2	771.1	925.4	1002.5	794.1	961.9	1073.7	1700
		812.8	22.225	1067.3	9950.3	343.22	389.96	436.71	3413	12	254.5	404378.3	3430.2	4116.3	4459.3	3532.3	4278.6	4776.1	7562.2
100-1486	O	56	0.375	58.52	185.6	37.77	42.74	47.71	20	0.472	2.5	5197.6	773.4	928.1	1005.5	796.5	964.7	1076.9	1705.1
		1422.4	9.525	1486.4	9980	184.43	208.69	232.95	3413	12	64	709775.3	3440.5	4128.6	4472.6	3542.9	4291.4	4790.4	7584.8
100-1351	O	44	0.562	53.17	185.7	49.96	56.79	63.62	20	0.472	9.2	4086.4	773.9	928.7	1006.1	797	965.3	1077.6	1706.2
		1117.6	14.288	1350.6	9986.2	243.93	277.26	310.6	3413	12	233	558030.5	3442.6	4131.2	4475.4	3545.1	4294.1	4793.4	7589.5
100-1605	O	54	0.438	63.17	185.8	40.43	45.97	51.51	20	0.472	9.2	5015.3	774	928.8	1006.2	797	965.4	1077.6	1706.3
		1371.6	11.112	1604.6	9986.7	197.38	224.45	251.52	3413	12	233	684887.2	3442.8	4131.3	4475.6	3545.3	4294.3	4793.6	7589.9
100-964	O	34	0.688	37.94	185.8	64.07	72.52	80.97	20	0.472	3.9	3158.3	774.1	928.9	1006.3	797.1	965.6	1077.8	1706.6
		863.6	17.462	963.6	9988.4	312.84	354.09	395.34	3413	12	100	431298.3	3443.4	4132	4476.4	3545.9	4295	4794.4	7591.2
100-993	O	32	0.812	39.09	185.8	69.4	78.67	87.94	20	0.472	7.1	2973.5	774.4	929.2	1006.7	797.4	965.9	1078.2	1707.1
		812.8	20.638	992.8	9991.7	338.84	384.11	429.37	3413	12	180	406062.7	3444.5	4133.4	4477.9	3547.1	4296.4	4796	7593.7
100-1044	O	34	0.75	41.09	186.1	65.02	73.71	82.41	20	0.472	7.1	3163.7	775.4	930.5	1008	798.5	967.2	1079.7	1709.5
		863.6	19.05	1043.6	10005.4	317.44	359.89	402.34	3413	12	180	432034.3	3449.3	4139.1	4484	3551.9	4302.3	4802.6	7604.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
100-1370	O	50	0.438	53.94	186.2	42.75	48.4	54.05	20	0.472	3.9	4654	775.7	930.8	1008.4	798.8	967.5	1080	1710
		1270	11.112	1370	10008.6	208.71	236.31	263.91	3413	12	100	635543.8	3450.3	4140.4	4485.4	3553	4303.7	4804.1	7606.5
100-1722	O	56	0.438	67.81	186.3	39.5	45	50.5	20	0.472	11.8	5215.4	776.1	931.3	1008.9	799.2	968.1	1080.6	1711
		1422.4	11.112	1722.4	10014.3	192.86	219.72	246.59	3413	12	300	712215.5	3452.3	4142.8	4488	3555.1	4306.1	4806.9	7610.9
100-1473	O	50	0.472	57.99	186.6	43.74	49.7	55.65	20	0.472	8	4664.4	777.4	932.9	1010.6	800.5	969.7	1082.4	1713.9
		1270	12	1473	10031	213.58	242.65	271.72	3413	12	203	636971.5	3458.1	4149.7	4495.5	3561	4313.4	4814.9	7623.6
101-1169	O	36	0.75	46.02	187	62.41	70.93	79.45	20	0.472	10	3365.4	779	934.8	1012.7	802.2	971.7	1084.7	1717.4
		914.4	19.05	1168.9	10051.8	304.71	346.31	387.9	3413	12	254.5	459570.5	3465.3	4158.3	4504.8	3568.4	4322.3	4824.9	7639.4
101-1118	O	34	0.812	44.02	187.1	66.48	75.54	84.6	20	0.472	10	3181.3	779.7	935.7	1013.6	802.9	972.6	1085.7	1719
		863.6	20.638	1118.1	10060.9	324.56	368.8	413.03	3413	12	254.5	434431.6	3468.4	4162.1	4508.9	3571.6	4326.2	4829.3	7646.3
101-862	O	30	0.812	33.94	187.2	74.08	83.84	93.59	20	0.472	3.9	2807.5	779.9	935.8	1013.8	803.1	972.7	1085.8	1719.3
		762	20.638	862	10062.7	361.71	409.32	456.93	3413	12	100	383387.5	3469	4162.8	4509.7	3572.2	4326.9	4830.1	7647.6
101-1436	O	54	0.394	56.52	187.3	39.56	44.76	49.96	20	0.472	2.5	5056.8	780.4	936.4	1014.5	803.6	973.4	1086.6	1720.4
		1371.6	10	1435.6	10069.3	193.13	218.52	243.91	3413	12	64	690555.2	3471.3	4165.5	4512.7	3574.6	4329.8	4833.3	7652.7
101-1219	O	40	0.625	47.99	187.4	55.45	62.97	70.49	20	0.472	8	3747.3	780.7	936.8	1014.9	803.9	973.8	1087	1721.1
		1016	15.875	1219	10073.5	270.72	307.43	344.14	3413	12	203	511731.7	3472.7	4167.2	4514.5	3576.1	4331.6	4835.3	7655.8
101-1588	O	52	0.472	62.51	187.4	42.66	48.55	54.44	20	0.472	10.5	4872.8	780.9	937.1	1015.2	804.2	974	1087.3	1721.6
		1320.8	12	1587.8	10076.2	208.27	237.04	265.81	3413	12	267	665430.2	3473.6	4168.4	4515.7	3577	4332.8	4836.6	7657.9
101-913	O	32	0.75	35.94	187.7	69.17	78.28	87.39	20	0.472	3.9	3003	782	938.4	1016.7	805.3	975.5	1088.9	1724.1
		812.8	19.05	912.8	10090.8	337.71	382.19	426.67	3413	12	100	410090.9	3478.7	4174.4	4522.3	3582.2	4339.1	4843.6	7669
101-1198	O	38	0.688	47.17	187.8	58.97	66.99	75.02	20	0.472	9.2	3568.9	782.6	939.2	1017.4	805.9	976.2	1089.7	1725.4
		965.2	17.462	1198.2	10098.6	287.9	327.09	366.29	3413	12	233	487358.5	3481.4	4177.6	4525.8	3585	4342.4	4847.3	7674.9
101-1422	O	48	0.5	55.99	187.9	45.95	52.2	58.45	20	0.472	8	4510.4	783.1	939.7	1018	806.4	976.7	1090.3	1726.3
		1219.2	12.7	1422.2	10103.9	224.35	254.85	285.35	3413	12	203	615932.4	3483.2	4179.8	4528.1	3586.9	4344.7	4849.9	7678.9
101-978	O	36	0.625	38.52	188.1	60.72	68.68	76.65	20	0.472	2.5	3385.8	783.8	940.5	1018.9	807.1	977.6	1091.3	1727.8
		914.4	15.875	978.4	10112.9	296.44	335.34	374.23	3413	12	64	462363	3486.3	4183.6	4532.2	3590.1	4348.6	4854.2	7685.8
102-1046	O	32	0.875	41.17	188.9	71.5	81.19	90.88	20	0.472	9.2	3022.1	787	944.4	1023.1	810.4	981.6	1095.8	1735
		812.8	22.225	1045.8	10154.8	349.11	396.42	443.73	3413	12	233	412691.7	3500.8	4200.9	4551	3605	4366.6	4874.3	7717.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
102-1575	O	52	0.472	62.02	188.9	42.84	48.73	54.62	20	0.472	10	4911.5	787.1	944.5	1023.2	810.5	981.8	1095.9	1735.2
		1320.8	12	1575.3	10156.1	209.18	237.93	266.68	3413	12	254.5	670710.3	3501.2	4201.4	4551.6	3605.4	4367.1	4874.9	7718.7
102-1537	O	50	0.5	60.51	188.9	44.76	50.93	57.1	20	0.472	10.5	4723.1	787.2	944.6	1023.3	810.6	981.9	1096.1	1735.4
		1270	12.7	1537	10157.3	218.52	248.66	278.8	3413	12	267	644987	3501.6	4201.9	4552.1	3605.8	4367.6	4875.5	7719.5
102-1113	O	32	0.938	43.81	189.1	72.41	82.34	92.26	20	0.472	11.8	3025.1	787.8	945.3	1024.1	811.2	982.6	1096.9	1736.7
		812.8	23.812	1112.8	10164.8	353.56	402.02	450.48	3413	12	300	413098.5	3504.2	4205	4555.5	3608.5	4370.9	4879.1	7725.3
102-891	O	28	1	35.09	189.1	82.17	93.1	104.04	20	0.472	7.1	2647.2	787.9	945.4	1024.2	811.3	982.7	1097	1736.9
		711.2	25.4	891.2	10165.9	401.18	454.57	507.96	3413	12	180	361498	3504.6	4205.5	4555.9	3608.9	4371.3	4879.6	7726.1
102-1334	O	42	0.625	52.51	189.2	53.74	61.13	68.51	20	0.472	10.5	3973.5	788.4	946.1	1024.9	811.9	983.4	1097.7	1738.1
		1066.8	15.875	1333.8	10172.9	262.4	298.46	334.51	3413	12	267	542621.8	3507	4208.4	4559.1	3611.4	4374.3	4883	7731.4
102-1575	O	54	0.438	61.99	189.3	40.98	46.56	52.13	20	0.472	8	5110.9	788.7	946.5	1025.3	812.2	983.8	1098.2	1738.8
		1371.6	11.112	1574.6	10177	200.08	227.31	254.54	3413	12	203	697936	3508.4	4210.1	4560.9	3612.8	4376.1	4884.9	7734.5
102-1029	O	30	1	40.51	189.4	77.62	88.19	98.75	20	0.472	10.5	2840.3	789	946.8	1025.7	812.5	984.1	1098.5	1739.4
		762	25.4	1029	10180.4	378.98	430.57	482.16	3413	12	267	387872.7	3509.6	4211.5	4562.4	3614	4377.6	4886.6	7737.1
102-1182	O	44	0.5	46.52	189.5	49.48	55.98	62.48	20	0.472	2.5	4169.6	789.7	947.6	1026.6	813.2	985	1099.6	1741
		1117.6	12.7	1181.6	10189.7	241.59	273.31	305.03	3413	12	64	569402.5	3512.8	4215.3	4566.6	3617.4	4381.6	4891.1	7744.2
102-1450	O	50	0.472	57.09	189.5	44.03	49.94	55.85	20	0.472	7.1	4738.4	789.7	947.7	1026.7	813.2	985.1	1099.6	1741
		1270	12	1450	10190.2	214.96	243.83	272.69	3413	12	180	647075.2	3512.9	4215.5	4566.8	3617.5	4381.8	4891.3	7744.5
102-1689	O	56	0.438	66.51	189.9	40.04	45.57	51.1	20	0.472	10.5	5317.3	791.3	949.5	1028.6	814.8	987	1101.7	1744.4
		1422.4	11.112	1689.4	10209.9	195.48	222.49	249.5	3413	12	267	726127.6	3519.7	4223.7	4575.7	3624.5	4390.3	4900.7	7759.5
102-1321	O	44	0.562	51.99	190	50.84	57.73	64.63	20	0.472	8	4179.2	791.5	949.8	1029	815.1	987.3	1102.1	1745
		1117.6	14.288	1320.6	10213.1	248.2	281.87	315.54	3413	12	203	570707.3	3520.8	4225	4577.1	3625.6	4391.6	4902.3	7761.9
102-1316	O	40	0.688	51.81	190	57.09	64.96	72.83	20	0.472	11.8	3800.3	791.7	950.1	1029.2	815.3	987.5	1102.4	1745.4
		1016	17.462	1316	10215.8	278.72	317.16	355.61	3413	12	300	518962.8	3521.8	4226.1	4578.3	3626.6	4392.8	4903.6	7764
102-1522	O	56	0.394	59.94	190.1	38.83	43.96	49.09	20	0.472	3.9	5322.4	792	950.4	1029.6	815.6	987.9	1102.8	1746.1
		1422.4	10	1522.4	10219.6	189.56	214.62	239.67	3413	12	100	726819.5	3523.1	4227.7	4580	3628	4394.4	4905.4	7766.9
102-1147	O	36	0.75	45.17	190.5	63.36	71.97	80.57	20	0.472	9.2	3428.4	793.6	952.3	1031.7	817.2	989.9	1105	1749.6
		914.4	19.05	1147.4	10240.2	309.35	351.37	393.39	3413	12	233	468182	3530.2	4236.2	4589.2	3635.3	4403.3	4915.3	7782.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
102-1525	O	50	0.5	60.02	190.5	44.97	51.14	57.31	20	0.472	10	4761.9	793.6	952.4	1031.7	817.3	989.9	1105	1749.6
		1270	12.7	1524.5	10240.6	219.55	249.68	279.81	3413	12	254.5	650275.5	3530.3	4236.4	4589.4	3635.4	4403.4	4915.5	7782.8
102-965	O	30	0.938	37.99	190.5	77.17	87.55	97.94	20	0.472	8	2857.4	793.7	952.5	1031.8	817.3	990	1105.1	1749.8
		762	23.812	965	10241.5	376.76	427.48	478.19	3413	12	203	390202.1	3530.6	4236.8	4589.8	3635.7	4403.9	4915.9	7783.6
103-1097	O	34	0.812	43.17	190.8	67.55	76.71	85.87	20	0.472	9.2	3243.6	795	954	1033.5	818.7	991.6	1106.9	1752.7
		863.6	20.638	1096.6	10258.2	329.81	374.54	419.27	3413	12	233	442949.1	3536.4	4243.7	4597.3	3641.7	4411	4923.9	7796.2
103-1196	O	40	0.625	47.09	191	56.02	63.51	71.01	20	0.472	7.1	3819.4	795.7	954.8	1034.4	819.4	992.5	1107.9	1754.2
		1016	15.875	1196	10267.2	273.5	310.1	346.71	3413	12	180	521572.7	3539.5	4247.4	4601.3	3644.8	4414.9	4928.2	7803.1
103-1321	O	42	0.625	52.02	191	54.07	61.46	68.86	20	0.472	10	4011.1	795.9	955	1034.6	819.6	992.7	1108.1	1754.5
		1066.8	15.875	1321.3	10269.1	264	300.1	336.2	3413	12	254.5	547755.2	3540.2	4248.2	4602.2	3645.5	4415.7	4929.2	7804.5
103-1399	O	48	0.5	55.09	191	46.28	52.49	58.7	20	0.472	7.1	4584.5	795.9	955.1	1034.7	819.6	992.8	1108.2	1754.7
		1219.2	12.7	1399.2	10270	225.96	256.27	286.58	3413	12	180	626057	3540.4	4248.5	4602.6	3645.8	4416.1	4929.6	7805.2
103-1334	O	50	0.438	52.52	191.2	43.7	49.44	55.18	20	0.472	2.5	4779.6	796.6	955.9	1035.6	820.3	993.6	1109.2	1756.2
		1270	11.112	1334	10278.7	213.36	241.38	269.39	3413	12	64	652694.9	3543.4	4252.1	4606.5	3648.9	4419.8	4933.8	7811.8
103-1080	O	40	0.562	42.52	191.2	55.18	62.42	69.66	20	0.472	2.5	3824.6	796.8	956.2	1035.8	820.5	993.9	1109.4	1756.6
		1016	14.288	1080	10281.3	269.43	304.77	340.12	3413	12	64	522288	3544.3	4253.2	4607.6	3649.8	4420.9	4935	7813.8
103-1677	O	56	0.438	66.02	191.3	40.19	45.72	51.24	20	0.472	10	5357	797.2	956.6	1036.3	820.9	994.3	1109.9	1757.4
		1422.4	11.112	1676.9	10286	196.24	223.22	250.19	3413	12	254.5	731540.3	3546	4255.2	4609.8	3651.5	4423	4937.3	7817.4
103-1554	O	52	0.472	61.17	191.5	43.28	49.19	55.11	20	0.472	9.2	4979.5	798	957.6	1037.4	821.7	995.4	1111.1	1759.2
		1320.8	12	1553.8	10296.7	211.29	240.17	269.06	3413	12	233	679991	3549.6	4259.6	4614.5	3655.3	4427.6	4942.4	7825.5
103-1017	O	30	1	40.02	191.7	78.34	88.96	99.57	20	0.472	10	2875.3	798.7	958.4	1038.3	822.5	996.2	1112.1	1760.8
		762	25.4	1016.5	10305.6	382.48	434.33	486.17	3413	12	254.5	392642.4	3552.7	4263.3	4618.5	3658.5	4431.4	4946.7	7832.2
103-1319	O	48	0.472	51.94	191.8	45.92	51.98	58.04	20	0.472	3.9	4602.5	799	958.8	1038.8	822.8	996.7	1112.6	1761.5
		1219.2	12	1319.2	10310.2	224.18	253.77	283.37	3413	12	100	628508.2	3554.3	4265.2	4620.6	3660.1	4433.4	4948.9	7835.7
103-1552	O	54	0.438	61.09	192.1	41.2	46.74	52.27	20	0.472	7.1	5186.6	800.4	960.5	1040.5	824.2	998.4	1114.5	1764.6
		1371.6	11.112	1551.6	10327.8	201.17	228.18	255.19	3413	12	180	708281.8	3560.4	4272.5	4628.5	3666.4	4441	4957.4	7849.1
103-1672	O	54	0.472	65.81	192.2	42.23	48.09	53.95	20	0.472	11.8	5188.7	800.7	960.9	1040.9	824.6	998.8	1114.9	1765.3
		1371.6	12	1671.6	10331.9	206.18	234.8	263.41	3413	12	300	708560.7	3561.8	4274.1	4630.3	3667.8	4442.7	4959.3	7852.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
104-1164	O	34	0.875	45.81	192.6	68.95	78.4	87.85	20	0.472	11.8	3273.8	802.4	962.9	1043.1	826.3	1000.9	1117.2	1768.9
		863.6	22.225	1163.6	10353.5	336.63	382.78	428.94	3413	12	300	447064.3	3569.2	4283.1	4640	3675.5	4452	4969.7	7868.7
104-1168	O	38	0.688	45.99	192.7	60.19	68.32	76.46	20	0.472	8	3660.5	802.7	963.3	1043.6	826.6	1001.3	1117.7	1769.7
		965.2	17.462	1168.2	10357.9	293.86	333.58	373.31	3413	12	203	499874.2	3570.8	4284.9	4642	3677.1	4453.9	4971.8	7872
104-775	O	28	0.875	30.52	192.8	82.1	92.83	103.57	20	0.472	2.5	2699.2	803.3	964	1044.3	827.2	1002	1118.5	1771
		711.2	22.225	775.2	10365.4	400.83	453.25	505.67	3413	12	64	368595.2	3573.4	4288	4645.4	3679.7	4457.1	4975.4	7877.7
104-928	O	34	0.688	36.52	193	66.27	74.95	83.63	20	0.472	2.5	3280.9	804.1	965	1045.4	828.1	1003	1119.7	1772.8
		863.6	17.462	927.6	10376	323.56	365.94	408.32	3413	12	64	448036.9	3577	4292.4	4650.1	3683.5	4461.7	4980.5	7885.8
104-1065	O	38	0.625	41.94	193	59.08	66.86	74.65	20	0.472	3.9	3667.7	804.3	965.2	1045.6	828.3	1003.2	1119.9	1773.2
		965.2	15.875	1065.2	10378.2	288.46	326.46	364.46	3413	12	100	500851.5	3577.8	4293.3	4651.1	3684.3	4462.6	4981.5	7887.4
104-1265	O	38	0.75	49.81	193.1	61.25	69.68	78.1	20	0.472	11.8	3668.9	804.6	965.5	1045.9	828.5	1003.6	1120.3	1773.7
		965.2	19.05	1265.2	10381.6	299.06	340.2	381.33	3413	12	300	501016.4	3578.9	4294.7	4652.6	3685.5	4464.1	4983.2	7890
104-1503	O	50	0.5	59.17	193.2	45.44	51.65	57.85	20	0.472	9.2	4830	805	966	1046.5	829	1004.1	1120.8	1774.7
		1270	12.7	1503	10387	221.87	252.16	282.45	3413	12	233	659577.5	3580.8	4297	4655	3687.4	4466.4	4985.8	7894.2
104-1298	O	44	0.562	51.09	193.3	51.28	58.14	65.01	20	0.472	7.1	4253.3	805.5	966.7	1047.2	829.5	1004.8	1121.6	1775.9
		1117.6	14.288	1297.6	10394.1	250.36	283.88	317.4	3413	12	180	580823.1	3583.2	4299.9	4658.2	3689.9	4469.5	4989.2	7899.5
104-1655	O	56	0.438	65.17	193.8	40.56	46.11	51.66	20	0.472	9.2	5426.5	807.5	969	1049.8	831.6	1007.2	1124.4	1780.2
		1422.4	11.112	1655.4	10419.6	198.05	225.13	252.21	3413	12	233	741041.4	3592	4310.4	4669.6	3699	4480.4	5001.4	7918.9
104-1214	O	36	0.812	47.81	193.9	65.22	74.17	83.12	20	0.472	11.8	3490.9	808.1	969.7	1050.5	832.1	1007.9	1125.1	1781.5
		914.4	20.638	1214.4	10426.7	318.41	362.12	405.83	3413	12	300	476708.7	3594.5	4313.4	4672.8	3701.5	4483.5	5004.8	7924.3
104-1621	O	52	0.5	63.81	194	44.3	50.43	56.57	20	0.472	11.8	5044	808.3	970	1050.8	832.4	1008.3	1125.5	1782
		1320.8	12.7	1620.8	10430.2	216.27	246.23	276.19	3413	12	300	688808	3595.7	4314.8	4674.4	3702.7	4485	5006.5	7926.9
104-1300	O	42	0.625	51.17	194.2	54.77	62.22	69.68	20	0.472	9.2	4077.5	809	970.8	1051.7	833.1	1009.1	1126.5	1783.6
		1066.8	15.875	1299.8	10439	267.42	303.81	340.19	3413	12	233	556815.7	3598.7	4318.5	4678.3	3705.8	4488.8	5010.7	7933.6
104-1421	O	52	0.438	55.94	194.3	42.82	48.48	54.13	20	0.472	3.9	5053	809.8	971.7	1052.7	833.9	1010.1	1127.5	1785.2
		1320.8	11.112	1420.8	10448.8	209.09	236.68	264.27	3413	12	100	690038	3602.1	4322.5	4682.7	3709.3	4493	5015.4	7941.1
105-1016	O	32	0.875	39.99	194.5	73.28	83.14	93.01	20	0.472	8	3111.3	810.2	972.3	1053.3	834.4	1010.6	1128.2	1786.2
		812.8	22.225	1015.8	10454.7	357.77	405.93	454.09	3413	12	203	424879.9	3604.1	4325	4685.4	3711.4	4495.5	5018.3	7945.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
105-1486	O	56	0.394	58.52	194.7	39.58	44.78	49.98	20	0.472	2.5	5451.3	811.2	973.4	1054.6	835.4	1011.8	1129.5	1788.4
		1422.4	10	1486.4	10467.1	193.27	218.64	244.01	3413	12	64	744422.8	3608.4	4330.1	4690.9	3715.8	4500.9	5024.2	7955
105-1080	O	32	0.938	42.51	194.8	74.26	84.37	94.47	20	0.472	10.5	3117.5	811.9	974.2	1055.4	836	1012.6	1130.4	1789.8
		812.8	23.812	1079.8	10475.5	362.57	411.92	461.26	3413	12	267	425723.3	3611.3	4333.5	4694.7	3718.8	4504.5	5028.2	7961.4
105-1283	O	40	0.688	50.51	194.9	58.25	66.22	74.19	20	0.472	10.5	3898	812.1	974.5	1055.7	836.3	1012.9	1130.7	1790.3
		1016	17.462	1283	10478.6	284.38	323.31	362.24	3413	12	267	532311	3612.4	4334.8	4696.1	3719.9	4505.8	5029.7	7963.7
105-942	O	30	0.938	37.09	195.1	78.42	88.85	99.28	20	0.472	7.1	2927.2	813.1	975.7	1057	837.3	1014.2	1132.1	1792.5
		762	23.812	942	10491.6	382.87	433.8	484.73	3413	12	180	399729.3	3616.8	4340.2	4701.9	3724.5	4511.4	5036	7973.6
105-1524	O	52	0.472	59.99	195.3	43.9	49.86	55.82	20	0.472	8	5077.5	813.7	976.4	1057.8	837.9	1015	1133	1793.9
		1320.8	12	1523.8	10499.4	214.35	243.44	272.53	3413	12	203	693378.4	3619.5	4343.4	4705.4	3727.3	4514.7	5039.7	7979.5
105-826	O	30	0.812	32.52	195.3	76.99	87.05	97.12	20	0.472	2.5	2929.8	813.8	976.6	1058	838.1	1015.1	1133.2	1794.2
		762	20.638	826	10501.2	375.88	425.04	474.2	3413	12	64	400096.9	3620.2	4344.2	4706.2	3727.9	4515.5	5040.6	7980.9
105-877	O	32	0.75	34.52	195.4	71.7	81.08	90.47	20	0.472	2.5	3126.3	814.1	977	1058.4	838.4	1015.5	1133.6	1794.9
		812.8	19.05	876.8	10505.1	350.08	395.88	441.69	3413	12	64	426928.6	3621.5	4345.8	4708	3729.3	4517.2	5042.5	7983.9
105-1167	O	42	0.562	45.94	195.5	53.82	60.91	68.01	20	0.472	3.9	4106.4	814.8	977.7	1059.2	839	1016.3	1134.4	1796.2
		1066.8	14.288	1166.8	10513.1	262.79	297.41	332.03	3413	12	100	560766.2	3624.2	4349.1	4711.5	3732.1	4520.6	5046.3	7989.9
105-1117	O	36	0.75	43.99	195.6	64.76	73.49	82.23	20	0.472	8	3520.5	814.9	977.9	1059.4	839.2	1016.5	1134.7	1796.6
		914.4	19.05	1117.4	10515.1	316.16	358.81	401.46	3413	12	203	480751.7	3625	4350	4712.5	3732.9	4521.5	5047.3	7991.5
105-1418	O	44	0.625	55.81	195.8	53.15	60.47	67.8	20	0.472	11.8	4307.3	815.8	978.9	1060.5	840.1	1017.5	1135.9	1798.5
		1117.6	15.875	1417.6	10526.2	259.48	295.26	331.04	3413	12	300	588206.1	3628.8	4354.5	4717.4	3736.8	4526.3	5052.6	7999.9
105-995	O	30	1	39.17	195.8	79.78	90.54	101.31	20	0.472	9.2	2937.4	815.9	979.1	1060.7	840.2	1017.7	1136.1	1798.8
		762	25.4	995	10528.3	389.52	442.07	494.62	3413	12	233	401126.6	3629.5	4355.4	4718.3	3737.5	4527.2	5053.6	8001.5
105-1639	O	54	0.472	64.51	196	42.84	48.74	54.63	20	0.472	10.5	5293.2	816.8	980.2	1061.9	841.2	1018.9	1137.3	1800.8
		1371.6	12	1638.6	10540	209.16	237.95	266.75	3413	12	267	722830.5	3633.5	4360.2	4723.6	3741.7	4532.2	5059.2	8010.4
105-811	O	28	0.938	31.94	196.1	84.05	95.07	106.1	20	0.472	3.9	2745	817	980.4	1062.1	841.3	1019	1137.5	1801.1
		711.2	23.812	811.2	10541.5	410.34	464.19	518.03	3413	12	100	374854.5	3634	4360.8	4724.3	3742.2	4532.8	5059.9	8011.5
105-1067	O	34	0.812	41.99	196.2	69.13	78.44	87.75	20	0.472	8	3334.9	817.4	980.8	1062.6	841.7	1019.5	1138.1	1802
		863.6	20.638	1066.6	10546.7	337.52	382.98	428.45	3413	12	203	455407.8	3635.9	4363	4726.6	3744.1	4535.1	5062.4	8015.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
106-1176	O	34.5	0.875	46.31	196.4	69.17	78.64	88.12	20	0.472	11.8	3387.2	818.2	981.8	1063.6	842.5	1020.5	1139.2	1803.7
		876.3	22.225	1176.3	10557.1	337.73	383.98	430.23	3413	12	300	462557.3	3639.4	4367.3	4731.2	3747.8	4539.5	5067.4	8023.4
106-1145	O	38	0.688	45.09	196.5	60.88	69	77.13	20	0.472	7.1	3734	818.9	982.6	1064.5	843.2	1021.4	1140.2	1805.2
		965.2	17.462	1145.2	10566	297.22	336.9	376.58	3413	12	180	509913.6	3642.5	4371	4735.2	3750.9	4543.4	5071.7	8030.1
106-1271	O	40	0.688	50.02	196.8	58.63	66.62	74.61	20	0.472	10	3936.4	820.1	984.1	1066.1	844.5	1022.9	1141.8	1807.9
		1016	17.462	1270.5	10581.7	286.25	325.26	364.27	3413	12	254.5	537548.2	3647.9	4377.5	4742.3	3756.5	4550.1	5079.2	8042.1
106-1067	O	32	0.938	42.02	197.1	74.91	85.06	95.21	20	0.472	10	3154	821.4	985.6	1067.8	845.8	1024.5	1143.6	1810.7
		812.8	23.812	1067.3	10598.2	365.72	415.28	464.83	3413	12	254.5	430709.3	3653.6	4384.3	4749.7	3762.3	4557.2	5087.1	8054.6
106-1473	O	50	0.5	57.99	197.1	46.14	52.39	58.64	20	0.472	8	4928.4	821.4	985.7	1067.8	845.8	1024.5	1143.7	1810.8
		1270	12.7	1473	10598.6	225.26	255.79	286.31	3413	12	203	673010.9	3653.7	4384.5	4749.9	3762.5	4557.4	5087.3	8054.9
106-1283	O	48	0.472	50.52	197.1	46.99	53.16	59.32	20	0.472	2.5	4731.6	821.5	985.7	1067.9	845.9	1024.6	1143.8	1811
		1219.2	12	1283.2	10599.4	229.45	259.53	289.61	3413	12	64	646140.9	3654	4384.8	4750.2	3762.8	4557.8	5087.7	8055.6
106-1519	O	48	0.562	59.81	197.2	48.86	55.61	62.35	20	0.472	11.8	4731.6	821.5	985.8	1067.9	845.9	1024.6	1143.8	1811
		1219.2	14.288	1519.2	10599.5	238.56	271.5	304.44	3413	12	300	646143.4	3654	4384.8	4750.2	3762.8	4557.8	5087.7	8055.6
106-1625	O	56	0.438	63.99	197.4	41.1	46.68	52.26	20	0.472	8	5526.7	822.4	986.9	1069.2	846.9	1025.8	1145.1	1813.1
		1422.4	11.112	1625.4	10611.9	200.68	227.91	255.15	3413	12	203	754718.8	3658.3	4390	4755.8	3767.2	4563.1	5093.7	8065
106-1626	O	54	0.472	64.02	197.6	43.02	48.91	54.81	20	0.472	10	5333.9	823.1	987.8	1070.1	847.6	1026.7	1146.1	1814.6
		1371.6	12	1626.1	10621	210.05	238.82	267.6	3413	12	254.5	728386.9	3661.5	4393.7	4759.9	3770.4	4567	5098.1	8071.9
106-1588	O	52	0.5	62.51	198	44.97	51.15	57.33	20	0.472	10.5	5148.9	825.1	990.2	1072.7	849.7	1029.2	1148.9	1819.1
		1320.8	12.7	1587.8	10646.9	219.55	249.73	279.9	3413	12	267	703123.8	3670.4	4404.5	4771.5	3779.7	4578.2	5110.5	8091.7
107-1131	O	34	0.875	44.51	198.2	70.61	80.22	89.83	20	0.472	10.5	3369.3	825.8	991	1073.6	850.4	1030.1	1149.8	1820.6
		863.6	22.225	1130.6	10655.7	344.74	391.68	438.61	3413	12	267	460113.2	3673.4	4408.1	4775.4	3782.8	4582	5114.7	8098.3
107-1232	O	38	0.75	48.51	198.3	62.57	71.12	79.66	20	0.472	10.5	3767.1	826.1	991.3	1074	850.7	1030.4	1150.3	1821.3
		965.2	19.05	1232.2	10659.6	305.5	347.22	388.93	3413	12	267	514434.3	3674.8	4409.7	4777.2	3784.2	4583.6	5116.6	8101.3
107-1501	O	52	0.472	59.09	198.3	44.18	50.1	56.01	20	0.472	7.1	5155.3	826.2	991.4	1074	850.8	1030.5	1150.3	1821.4
		1320.8	12	1500.8	10660.3	215.7	244.59	273.48	3413	12	180	704004.5	3675	4410	4777.5	3784.4	4583.9	5116.9	8101.8
107-1014	O	36	0.688	39.94	198.5	64.4	72.87	81.33	20	0.472	3.9	3573.5	827.2	992.6	1075.3	851.8	1031.8	1151.7	1823.6
		914.4	17.462	1014.4	10673.4	314.42	355.77	397.11	3413	12	100	487987	3679.5	4415.4	4783.4	3789.1	4589.6	5123.2	8111.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
107-1270	O	42	0.625	49.99	198.8	55.8	63.33	70.87	20	0.472	8	4173.8	828.1	993.8	1076.6	852.8	1033	1153.1	1825.7
		1066.8	15.875	1269.8	10685.6	272.42	309.23	346.03	3413	12	203	569970.9	3683.7	4420.5	4788.9	3793.4	4594.8	5129.1	8121.1
107-993	O	32	0.875	39.09	199	74.38	84.27	94.16	20	0.472	7.1	3183.4	829	994.8	1077.7	853.7	1034	1154.3	1827.6
		812.8	22.225	992.8	10696.9	363.13	411.43	459.74	3413	12	180	434723	3687.6	4425.2	4793.9	3797.4	4599.7	5134.5	8129.7
107-1181	O	36	0.812	46.51	199.4	66.7	75.79	84.88	20	0.472	10.5	3588.4	830.6	996.8	1079.8	855.4	1036.1	1156.6	1831.2
		914.4	20.638	1181.4	10717.9	325.67	370.05	414.44	3413	12	267	490024.5	3694.9	4433.9	4803.3	3804.9	4608.7	5144.6	8145.6
107-1385	O	52	0.438	54.52	199.4	43.74	49.48	55.21	20	0.472	2.5	5184.4	830.8	997	1080.1	855.6	1036.3	1156.8	1831.6
		1320.8	11.112	1384.8	10720.4	213.58	241.57	269.56	3413	12	64	707976.6	3695.7	4434.9	4804.5	3805.7	4609.8	5145.8	8147.5
107-1575	O	52	0.5	62.02	199.6	45.17	51.35	57.53	20	0.472	10	5189.7	831.7	998	1081.2	856.4	1037.4	1158	1833.5
		1320.8	12.7	1575.3	10731.4	220.55	250.72	280.89	3413	12	254.5	708703.1	3699.5	4439.4	4809.4	3809.7	4614.5	5151.1	8155.9
107-1094	O	36	0.75	43.09	199.7	65.57	74.31	83.05	20	0.472	7.1	3594.5	832.1	998.5	1081.7	856.8	1037.8	1158.5	1834.3
		914.4	19.05	1094.4	10736.1	320.15	362.81	405.47	3413	12	180	490855.3	3701.1	4441.4	4811.5	3811.3	4616.5	5153.3	8159.4
107-1029	O	38	0.625	40.52	199.8	60.89	68.85	76.82	20	0.472	2.5	3795.9	832.4	998.9	1082.2	857.2	1038.3	1159.1	1835.2
		965.2	15.875	1029.2	10741.2	297.27	336.18	375.08	3413	12	64	518370.6	3702.9	4443.5	4813.8	3813.1	4618.7	5155.8	8163.3
108-1605	O	54	0.472	63.17	200.2	43.44	49.36	55.28	20	0.472	9.2	5405.3	834.2	1001	1084.4	859	1040.5	1161.4	1839
		1371.6	12	1604.6	10763.3	212.1	241	269.91	3413	12	233	738146.6	3710.5	4452.6	4823.7	3821	4628.2	5166.4	8180.1
108-1249	O	40	0.688	49.17	200.2	59.44	67.5	75.56	20	0.472	9.2	4004.1	834.2	1001	1084.5	859	1040.5	1161.5	1839
		1016	17.462	1249	10763.8	290.2	329.55	368.9	3413	12	233	546801.4	3710.7	4452.8	4823.9	3821.2	4628.4	5166.6	8180.5
108-1602	O	56	0.438	63.09	200.2	41.32	46.86	52.39	20	0.472	7.1	5606	834.2	1001.1	1084.5	859.1	1040.6	1161.5	1839.1
		1422.4	11.112	1602.4	10764.2	201.75	228.77	255.79	3413	12	180	765551.7	3710.8	4453	4824.1	3821.3	4628.6	5166.8	8180.8
108-1450	O	50	0.5	57.09	200.3	46.46	52.67	58.89	20	0.472	7.1	5006.5	834.4	1001.3	1084.7	859.3	1040.8	1161.8	1839.5
		1270	12.7	1450	10766.7	226.82	257.17	287.52	3413	12	180	683686.2	3711.7	4454	4825.2	3822.2	4629.7	5168	8182.7
108-862	O	30	0.875	33.94	200.3	79.43	89.86	100.28	20	0.472	3.9	3004.4	834.6	1001.5	1084.9	859.4	1041	1162	1839.9
		762	22.225	862	10768.6	387.83	438.72	489.6	3413	12	100	410284.2	3712.4	4454.8	4826.1	3822.9	4630.5	5168.9	8184.1
108-1220	O	38	0.75	48.02	200.3	63.02	71.58	80.15	20	0.472	10	3805.7	834.6	1001.5	1085	859.4	1041	1162.1	1839.9
		965.2	19.05	1219.7	10768.9	307.68	349.49	391.31	3413	12	254.5	519706.5	3712.4	4454.9	4826.2	3823	4630.6	5169.1	8184.4
108-1118	O	34	0.875	44.02	200.4	71.18	80.83	90.48	20	0.472	10	3407	835.1	1002.1	1085.6	859.9	1041.6	1162.7	1840.9
		863.6	22.225	1118.1	10774.8	347.55	394.66	441.77	3413	12	254.5	465257.1	3714.5	4457.4	4828.8	3825.1	4633.2	5171.9	8188.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
108-1385	O	44	0.625	54.51	200.5	54.13	61.53	68.94	20	0.472	10.5	4410	835.2	1002.3	1085.8	860.1	1041.8	1162.9	1841.3
		1117.6	15.875	1384.6	10777.1	264.26	300.43	336.6	3413	12	267	602225.2	3715.3	4458.3	4829.9	3825.9	4634.2	5173	8190.6
108-1113	O	32	1	43.81	200.5	76.82	87.29	97.77	20	0.472	11.8	3207.7	835.3	1002.4	1085.9	860.2	1041.9	1163.1	1841.6
		812.8	25.4	1112.8	10778.6	375.05	426.2	477.34	3413	12	300	438041	3715.8	4458.9	4830.5	3826.4	4634.8	5173.7	8191.7
108-1044	O	34	0.812	41.09	200.5	70.08	79.41	88.74	20	0.472	7.1	3408.4	835.4	1002.5	1086	860.3	1042	1163.2	1841.7
		863.6	20.638	1043.6	10779.2	342.17	387.71	433.25	3413	12	180	465444.6	3716	4459.2	4830.8	3826.6	4635	5174	8192.2
108-1370	O	50	0.472	53.94	200.6	46.01	52.07	58.13	20	0.472	3.9	5015.1	835.9	1003	1086.6	860.7	1042.6	1163.8	1842.7
		1270	12	1370	10785.2	224.65	254.24	283.83	3413	12	100	684860.6	3718.1	4461.7	4833.5	3828.7	4637.6	5176.9	8196.8
108-1722	O	56	0.472	67.81	200.8	42.41	48.28	54.15	20	0.472	11.8	5621.4	836.5	1003.8	1087.5	861.4	1043.4	1164.7	1844.2
		1422.4	12	1722.4	10793.8	207.09	235.73	264.37	3413	12	300	767655.6	3721	4465.2	4837.3	3831.8	4641.3	5181	8203.3
108-1046	O	32	0.938	41.17	201.2	76.21	86.48	96.76	20	0.472	9.2	3218.9	838.2	1005.9	1089.7	863.2	1045.6	1167.1	1848
		812.8	23.812	1045.8	10816	372.07	422.25	472.44	3413	12	233	439564	3728.7	4474.4	4847.3	3839.7	4650.9	5191.7	8220.2
108-1169	O	36	0.812	46.02	201.5	67.21	76.33	85.45	20	0.472	10	3626.7	839.5	1007.4	1091.4	864.5	1047.2	1168.9	1850.8
		914.4	20.638	1168.9	10832.6	328.15	372.67	417.2	3413	12	254.5	495264.8	3734.4	4481.3	4854.7	3845.6	4658	5199.6	8232.7
108-1486	O	48	0.562	58.51	201.5	49.68	56.49	63.3	20	0.472	10.5	4836.7	839.7	1007.6	1091.6	864.7	1047.4	1169.2	1851.2
		1219.2	14.288	1486.2	10834.8	242.55	275.79	309.03	3413	12	267	660490.5	3735.2	4482.2	4855.7	3846.4	4659	5200.7	8234.5
108-964	O	34	0.75	37.94	201.6	69.58	78.72	87.85	20	0.472	3.9	3426.4	839.8	1007.8	1091.7	864.8	1047.5	1169.3	1851.4
		863.6	19.05	963.6	10836.1	339.72	384.33	428.94	3413	12	100	467902.7	3735.6	4482.7	4856.3	3846.8	4659.5	5201.3	8235.4
108-1131	O	42	0.562	44.52	201.8	55.3	62.54	69.77	20	0.472	2.5	4237.1	840.7	1008.8	1092.9	865.7	1048.6	1170.6	1853.4
		1066.8	14.288	1130.8	10847.7	269.99	305.33	340.67	3413	12	64	578618.7	3739.6	4487.5	4861.5	3850.9	4664.5	5206.9	8244.3
109-965	O	30	1	37.99	201.9	81.9	92.88	103.86	20	0.472	8	3028.7	841.3	1009.6	1093.7	866.4	1049.4	1171.4	1854.7
		762	25.4	965	10855.6	399.89	453.5	507.11	3413	12	203	413596.9	3742.3	4490.8	4865	3853.7	4667.9	5210.7	8250.2
109-1143	O	34.5	0.875	45.01	202	70.82	80.45	90.08	20	0.472	10.5	3485	841.8	1010.1	1094.3	866.8	1050	1172.1	1855.8
		876.3	22.225	1143.3	10861.8	345.78	392.81	439.83	3413	12	267	475908.5	3744.5	4493.4	4867.8	3855.9	4670.6	5213.7	8254.9
109-913	O	32	0.812	35.94	202.1	74.6	84.39	94.18	20	0.472	3.9	3234.1	842.2	1010.7	1094.9	867.3	1050.5	1172.7	1856.7
		812.8	20.638	912.8	10867.4	364.24	412.03	459.83	3413	12	100	441651	3746.4	4495.7	4870.3	3857.9	4673	5216.3	8259.2
109-1367	O	42	0.688	53.81	202.2	57.59	65.5	73.4	20	0.472	11.8	4246.3	842.5	1011	1095.3	867.6	1050.9	1173.1	1857.4
		1066.8	17.462	1366.8	10871.1	281.16	319.78	358.39	3413	12	300	579865.4	3747.7	4497.2	4872	3859.2	4674.6	5218.1	8262

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
109-1372	O	44	0.625	54.02	202.3	54.44	61.86	69.28	20	0.472	10	4450.2	842.8	1011.4	1095.7	867.9	1051.3	1173.5	1858.1
		1117.6	15.875	1372.1	10875.3	265.82	302.03	338.25	3413	12	254.5	607711.5	3749.1	4498.9	4873.9	3860.7	4676.4	5220.1	8265.2
109-1554	O	52	0.5	61.17	202.4	45.64	51.85	58.06	20	0.472	9.2	5261.5	843.2	1011.8	1096.2	868.3	1051.7	1174	1858.9
		1320.8	12.7	1553.8	10879.9	222.81	253.13	283.46	3413	12	233	718509.5	3750.7	4500.9	4875.9	3862.4	4678.4	5222.4	8268.7
109-1247	O	42	0.625	49.09	202.4	56.35	63.87	71.38	20	0.472	7.1	4250.8	843.4	1012.1	1096.4	868.5	1052	1174.3	1859.4
		1066.8	15.875	1246.8	10882.7	275.12	311.82	348.53	3413	12	180	580485.2	3751.7	4502	4877.2	3863.4	4679.6	5223.7	8270.9
109-1472	O	54	0.438	57.94	202.5	42.9	48.55	54.2	20	0.472	3.9	5468.6	843.9	1012.7	1097.1	869	1052.6	1175	1860.5
		1371.6	11.112	1471.6	10889.3	209.44	237.03	264.61	3413	12	100	746785.8	3753.9	4504.7	4880.1	3865.7	4682.4	5226.8	8275.8
109-1319	O	48	0.5	51.94	202.6	48.48	54.86	61.24	20	0.472	3.9	4862.5	844.2	1013	1097.4	869.3	1053	1175.4	1861.1
		1219.2	12.7	1319.2	10892.8	236.69	267.84	299	3413	12	100	664022.9	3755.1	4506.2	4881.7	3866.9	4683.9	5228.5	8278.5
109-1672	O	54	0.5	65.81	203.1	44.51	50.65	56.8	20	0.472	11.8	5482.9	846.1	1015.4	1100	871.3	1055.4	1178.1	1865.4
		1371.6	12.7	1671.6	10917.8	217.31	247.32	277.32	3413	12	300	748743.7	3763.8	4516.5	4892.9	3875.8	4694.7	5240.6	8297.5
109-1474	O	48	0.562	58.02	203.2	49.94	56.75	63.56	20	0.472	10	4877.7	846.8	1016.2	1100.9	872	1056.3	1179.1	1866.9
		1219.2	14.288	1473.7	10926.7	243.82	277.07	310.33	3413	12	254.5	666092.8	3766.9	4520.2	4896.9	3879	4698.5	5244.8	8304.3
110-1198	O	38	0.75	47.17	203.9	63.94	72.59	81.24	20	0.472	9.2	3874	849.6	1019.5	1104.4	874.9	1059.7	1182.9	1872.9
		965.2	19.05	1198.2	10962.1	312.17	354.4	396.63	3413	12	233	529031.9	3779.1	4534.9	4912.8	3891.6	4713.7	5261.8	8331.2
110-1575	O	54	0.472	61.99	204	44.05	50.01	55.97	20	0.472	8	5508.3	850	1020.1	1105.1	875.4	1060.3	1183.6	1874
		1371.6	12	1574.6	10968.4	215.08	244.18	273.28	3413	12	203	752210.1	3781.2	4537.4	4915.6	3893.8	4716.4	5264.8	8336
110-1131	O	34.5	0.875	44.52	204.3	71.39	81.06	90.73	20	0.472	10	3523.5	851.1	1021.3	1106.4	876.4	1061.6	1185	1876.3
		876.3	22.225	1130.8	10981.8	348.57	395.77	442.96	3413	12	254.5	481169.3	3785.9	4543	4921.6	3898.6	4722.2	5271.3	8346.2
110-1097	O	34	0.875	43.17	204.3	72.35	82.11	91.87	20	0.472	9.2	3473.8	851.4	1021.7	1106.8	876.8	1062	1185.5	1877
		863.6	22.225	1096.6	10986.1	353.25	400.91	448.57	3413	12	233	474379	3787.3	4544.8	4923.5	3900.1	4724	5273.3	8349.4
110-1116	O	40	0.625	43.94	204.7	59.31	67.11	74.9	20	0.472	3.9	4093.2	852.7	1023.3	1108.6	878.1	1063.7	1187.3	1879.9
		1016	15.875	1116	11003.2	289.58	327.64	365.69	3413	12	100	558961.5	3793.2	4551.8	4931.2	3906.1	4731.4	5281.5	8362.4
110-1689	O	56	0.472	66.51	204.7	43.01	48.91	54.81	20	0.472	10.5	5731.2	852.9	1023.4	1108.7	878.2	1063.8	1187.5	1880.2
		1422.4	12	1689.4	11004.6	209.99	238.81	267.62	3413	12	267	782650.6	3793.7	4552.5	4931.8	3906.7	4732	5282.2	8363.5
110-1219	O	40	0.688	47.99	205.1	60.62	68.78	76.95	20	0.472	8	4102.7	854.7	1025.7	1111.1	880.2	1066.1	1190.1	1884.3
		1016	17.462	1219	11028.7	295.97	335.83	375.7	3413	12	203	560258.4	3802	4562.4	4942.6	3915.2	4742.3	5293.8	8381.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
110-775	O	28	0.938	30.52	205.2	87.6	99.03	110.45	20	0.472	2.5	2872.5	854.9	1025.9	1111.4	880.4	1066.3	1190.3	1884.7
		711.2	23.812	775.2	11031	427.71	483.49	539.27	3413	12	64	392262.6	3802.8	4563.4	4943.6	3916	4743.3	5294.9	8383.6
110-1164	O	34	0.938	45.81	205.2	73.45	83.47	93.49	20	0.472	11.8	3488.2	854.9	1025.9	1111.4	880.4	1066.4	1190.4	1884.8
		863.6	23.812	1163.6	11031.5	358.63	407.54	456.45	3413	12	300	476341.5	3803	4563.6	4943.9	3916.2	4743.6	5295.1	8384
110-1147	O	36	0.812	45.17	205.3	68.25	77.47	86.69	20	0.472	9.2	3694.7	855.3	1026.3	1111.8	880.7	1066.8	1190.8	1885.5
		914.4	20.638	1147.4	11035.5	333.23	378.23	423.24	3413	12	233	504545.1	3804.4	4565.2	4945.7	3917.6	4745.3	5297.1	8387
110-1351	O	44	0.625	53.17	205.5	55.13	62.6	70.07	20	0.472	9.2	4521	856.3	1027.5	1113.1	881.7	1068	1192.2	1887.7
		1117.6	15.875	1350.6	11048.4	269.14	305.63	342.12	3413	12	233	617385.6	3808.8	4570.6	4951.4	3922.2	4750.8	5303.2	8396.8
111-978	O	36	0.688	38.52	205.8	66.49	75.18	83.87	20	0.472	2.5	3704.9	857.6	1029.1	1114.9	883.2	1069.7	1194.1	1890.7
		914.4	17.462	978.4	11066.1	324.65	367.07	409.48	3413	12	64	505942.4	3814.9	4577.9	4959.4	3928.5	4758.4	5311.7	8410.2
111-1334	O	50	0.472	52.52	206	47.05	53.21	59.37	20	0.472	2.5	5150.5	858.4	1030.1	1115.9	884	1070.7	1195.2	1892.4
		1270	12	1334	11076.3	229.73	259.79	289.85	3413	12	64	703342.6	3818.4	4582.1	4963.9	3932.1	4762.8	5316.6	8418
111-1218	O	44	0.562	47.94	206	53.99	61.08	68.18	20	0.472	3.9	4532.7	858.5	1030.2	1116	884	1070.8	1195.3	1892.6
		1117.6	14.288	1217.6	11077	263.58	298.23	332.88	3413	12	100	618984.9	3818.7	4582.4	4964.3	3932.3	4763.1	5317	8418.5
111-1677	O	56	0.472	66.02	206.2	43.19	49.09	54.98	20	0.472	10	5774	859.2	1031.1	1117	884.8	1071.7	1196.3	1894.2
		1422.4	12	1676.9	11086.7	210.85	239.65	268.46	3413	12	254.5	788484.7	3822	4586.4	4968.6	3935.8	4767.3	5321.6	8425.9
111-1452	O	48	0.562	57.17	206.2	50.5	57.36	64.21	20	0.472	9.2	4949.9	859.4	1031.2	1117.2	884.9	1071.9	1196.5	1894.5
		1219.2	14.288	1452.2	11088.5	246.58	280.05	313.52	3413	12	233	675954.4	3822.6	4587.1	4969.4	3936.4	4768.1	5322.5	8427.3
111-1316	O	40	0.75	51.81	206.3	61.86	70.33	78.8	20	0.472	11.8	4126.3	859.6	1031.6	1117.5	885.2	1072.2	1196.9	1895.1
		1016	19.05	1316	11092.1	302.03	343.39	384.74	3413	12	300	563478.7	3823.9	4588.6	4971	3937.7	4769.6	5324.2	8430
111-1524	O	52	0.5	59.99	206.4	46.31	52.57	58.83	20	0.472	8	5365.1	859.8	1031.8	1117.7	885.4	1072.4	1197.1	1895.5
		1320.8	12.7	1523.8	11094.1	226.1	256.66	287.21	3413	12	203	732655.2	3824.6	4589.5	4971.9	3938.4	4770.5	5325.2	8431.5
111-1080	O	32	1	42.51	206.6	78.8	89.47	100.14	20	0.472	10.5	3305.7	860.9	1033	1119.1	886.5	1073.8	1198.6	1897.9
		812.8	25.4	1079.8	11108	384.72	436.83	488.94	3413	12	267	451428	3829.3	4595.2	4978.1	3943.3	4776.4	5331.8	8442.1
111-942	O	30	1	37.09	206.8	83.27	94.31	105.35	20	0.472	7.1	3102.7	861.8	1034.2	1120.4	887.5	1075	1200	1900
		762	25.4	942	11120.6	406.57	460.46	514.35	3413	12	180	423695.3	3833.7	4600.4	4983.8	3947.8	4781.9	5337.9	8451.7
111-1552	O	54	0.472	61.09	207	44.32	50.24	56.16	20	0.472	7.1	5590	862.7	1035.2	1121.4	888.3	1076	1201.1	1901.8
		1371.6	12	1551.6	11130.9	216.39	245.3	274.21	3413	12	180	763360.4	3837.3	4604.7	4988.4	3951.5	4786.3	5342.9	8459.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
111-1016	O	32	0.938	39.99	207.1	78.12	88.59	99.06	20	0.472	8	3313.9	863	1035.6	1121.9	888.7	1076.4	1201.6	1902.5
		812.8	23.812	1015.8	11135.5	381.41	432.53	483.65	3413	12	203	452545.8	3838.8	4606.6	4990.5	3953.1	4788.3	5345	8463
111-1639	O	54	0.5	64.51	207.2	45.16	51.35	57.54	20	0.472	10.5	5593.4	863.2	1035.8	1122.1	888.9	1076.7	1201.8	1902.9
		1371.6	12.7	1638.6	11137.7	220.51	250.72	280.94	3413	12	267	763822.8	3839.6	4607.5	4991.5	3953.9	4789.2	5346.1	8464.6
111-1334	O	42	0.688	52.51	207.2	58.71	66.72	74.73	20	0.472	10.5	4351.3	863.4	1036	1122.4	889.1	1076.9	1202.1	1903.3
		1066.8	17.462	1333.8	11140.1	286.67	325.76	364.85	3413	12	267	594212	3840.4	4608.5	4992.5	3954.7	4790.2	5347.2	8466.5
111-1570	O	50	0.562	61.81	207.3	49.15	55.91	62.67	20	0.472	11.8	5182.3	863.7	1036.5	1122.8	889.4	1077.3	1202.6	1904.1
		1270	14.288	1570	11144.7	239.96	272.97	305.99	3413	12	300	707687.9	3842	4610.4	4994.6	3956.4	4792.2	5349.5	8470
112-1436	O	54	0.438	56.52	207.6	43.78	49.51	55.24	20	0.472	2.5	5605.7	865.1	1038.1	1124.6	890.8	1079	1204.5	1907.1
		1371.6	11.112	1435.6	11162.3	213.78	241.75	269.72	3413	12	64	765512.7	3848.1	4617.7	5002.5	3962.6	4799.8	5357.9	8483.4
112-811	O	28	1	31.94	207.7	89.28	100.96	112.65	20	0.472	3.9	2908.3	865.6	1038.7	1125.2	891.3	1079.6	1205.2	1908.2
		711.2	25.4	811.2	11168.4	435.9	492.94	549.98	3413	12	100	397148.7	3850.2	4620.2	5005.2	3964.8	4802.4	5360.8	8488
112-1214	O	36	0.875	47.81	207.8	69.82	79.35	88.87	20	0.472	11.8	3739.7	865.7	1038.8	1125.4	891.4	1079.8	1205.3	1908.4
		914.4	22.225	1214.4	11170	340.89	387.41	433.92	3413	12	300	510692.5	3850.7	4620.9	5005.9	3965.4	4803.1	5361.6	8489.2
112-1265	O	38	0.812	49.81	208.2	65.95	74.96	83.97	20	0.472	11.8	3954.9	867.3	1040.8	1127.5	893.1	1081.8	1207.6	1912
		965.2	20.638	1265.2	11191	321.97	365.97	409.97	3413	12	300	540079	3858	4629.6	5015.4	3972.8	4812.1	5371.7	8505.2
112-1109	O	34.5	0.875	43.67	208.2	72.55	82.33	92.11	20	0.472	9.2	3591.8	867.6	1041.1	1127.9	893.4	1082.2	1208	1912.7
		876.3	22.225	1109.3	11194.7	354.22	401.97	449.71	3413	12	233	490495.1	3859.2	4631.1	5017	3974.1	4813.7	5373.4	8508
112-1283	O	48	0.5	50.52	208.3	49.63	56.12	62.61	20	0.472	2.5	4999	867.9	1041.4	1128.2	893.7	1082.5	1208.4	1913.3
		1219.2	12.7	1283.2	11198.4	242.3	273.99	305.68	3413	12	64	682652	3860.5	4632.6	5018.6	3975.4	4815.3	5375.2	8510.8
112-1626	O	54	0.5	64.02	208.8	45.36	51.55	57.74	20	0.472	10	5636.4	869.8	1043.8	1130.7	895.7	1084.9	1211.1	1917.6
		1371.6	12.7	1626.1	11223.3	221.48	251.69	281.9	3413	12	254.5	769694.4	3869.1	4642.9	5029.8	3984.3	4826	5387.2	8529.7
112-1655	O	56	0.472	65.17	208.9	43.6	49.52	55.45	20	0.472	9.2	5848.9	870.4	1044.5	1131.5	896.3	1085.6	1211.9	1918.8
		1422.4	12	1655.4	11230.7	212.85	241.78	270.71	3413	12	233	798725.4	3871.6	4646	5033.1	3986.9	4829.2	5390.7	8535.3
112-826	O	30	0.875	32.52	209	82.57	93.34	104.1	20	0.472	2.5	3135.4	870.9	1045.1	1132.2	896.9	1086.3	1212.7	1920.1
		762	22.225	826	11237.9	403.15	455.72	508.28	3413	12	64	428165.9	3874.1	4649	5036.4	3989.5	4832.3	5394.2	8540.8
112-1067	O	32	1	42.02	209	79.5	90.22	100.94	20	0.472	10	3344.5	871	1045.1	1132.2	896.9	1086.4	1212.7	1920.1
		812.8	25.4	1067.3	11238.1	388.13	440.49	492.84	3413	12	254.5	456715.1	3874.2	4649	5036.4	3989.5	4832.4	5394.3	8540.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)	k-ft/ft (kN-m/m)
112-1196	O	40	0.688	47.09	209.1	61.29	69.44	77.6	20	0.472	7.1	4181.6	871.2	1045.4	1132.5	897.1	1086.6	1213	1920.5
		1016	17.462	1196	11240.8	299.23	339.05	378.87	3413	12	180	571032.6	3875.1	4650.2	5037.7	3990.5	4833.5	5395.6	8543
112-1168	O	38	0.75	45.99	209.1	65.29	74.06	82.83	20	0.472	8	3973.5	871.4	1045.7	1132.8	897.3	1086.9	1213.3	1921
		965.2	19.05	1168.2	11243.6	318.76	361.6	404.43	3413	12	203	542617.7	3876.1	4651.3	5038.9	3991.5	4834.8	5396.9	8545.2
112-1321	O	42	0.688	52.02	209.2	59.09	67.11	75.13	20	0.472	10	4392.5	871.5	1045.8	1133	897.5	1087.1	1213.5	1921.3
		1066.8	17.462	1321.3	11245.5	288.49	327.66	366.82	3413	12	254.5	599833.5	3876.7	4652.1	5039.8	3992.1	4835.6	5397.8	8546.6
113-928	O	34	0.75	36.52	209.4	71.99	81.39	90.78	20	0.472	2.5	3559.4	872.4	1046.9	1134.1	898.4	1088.2	1214.7	1923.3
		863.6	19.05	927.6	11256.6	351.49	397.36	443.23	3413	12	64	486061.9	3880.6	4656.7	5044.8	3996.1	4840.4	5403.2	8555
113-1421	O	52	0.472	55.94	209.4	46.1	52.16	58.22	20	0.472	3.9	5445.6	872.7	1047.2	1134.5	898.7	1088.5	1215.1	1923.9
		1320.8	12	1420.8	11260.5	225.08	254.67	284.26	3413	12	100	743644.4	3881.9	4658.3	5046.5	3997.5	4842	5405	8558
113-1501	O	52	0.5	59.09	209.5	46.62	52.84	59.07	20	0.472	7.1	5447.3	873	1047.6	1134.9	899	1088.9	1215.5	1924.5
		1320.8	12.7	1500.8	11264.1	227.63	258.01	288.39	3413	12	180	743883.3	3883.2	4659.8	5048.1	3998.8	4843.6	5406.8	8560.7
113-1067	O	34	0.875	41.99	210.1	74.06	83.99	93.92	20	0.472	8	3571.5	875.4	1050.4	1138	901.4	1091.9	1218.8	1929.8
		863.6	22.225	1066.6	11295.1	361.62	410.09	458.57	3413	12	203	487721.7	3893.8	4672.6	5062	4009.8	4856.9	5421.6	8584.3
113-1321	O	44	0.625	51.99	210.2	56.12	63.67	71.23	20	0.472	8	4623.7	875.7	1050.8	1138.4	901.8	1092.3	1219.3	1930.6
		1117.6	15.875	1320.6	11299.4	273.99	310.89	347.78	3413	12	203	631410.7	3895.3	4674.4	5063.9	4011.3	4858.7	5423.7	8587.5
113-877	O	32	0.812	34.52	210.4	77.36	87.45	97.54	20	0.472	2.5	3366.9	876.8	1052.2	1139.8	902.9	1093.7	1220.8	1933
		812.8	20.638	876.8	11313.6	377.69	426.95	476.21	3413	12	64	459784.4	3900.2	4680.3	5070.3	4016.3	4864.8	5430.5	8598.3
113-1422	O	48	0.562	55.99	210.6	51.33	58.25	65.17	20	0.472	8	5054.3	877.5	1053	1140.7	903.6	1094.5	1221.8	1934.5
		1219.2	14.288	1422.2	11322.4	250.61	284.39	318.17	3413	12	203	690213.1	3903.3	4683.9	5074.2	4019.4	4868.6	5434.7	8605
113-1522	O	56	0.438	59.94	210.7	42.96	48.61	54.26	20	0.472	3.9	5900.6	878.1	1053.7	1141.5	904.2	1095.2	1222.6	1935.8
		1422.4	11.112	1522.4	11329.9	209.77	237.35	264.93	3413	12	100	805780.3	3905.8	4687	5077.6	4022.1	4871.8	5438.3	8610.7
113-1117	O	36	0.812	43.99	210.8	69.78	79.14	88.5	20	0.472	8	3793.9	878.2	1053.9	1141.7	904.4	1095.4	1222.8	1936.1
		914.4	20.638	1117.4	11331.8	340.68	386.39	432.11	3413	12	203	518091.1	3906.5	4687.8	5078.5	4022.8	4872.7	5439.3	8612.2
114-1131	O	34	0.938	44.51	211.2	75.25	85.44	95.63	20	0.472	10.5	3590	879.9	1055.9	1143.9	906.1	1097.5	1225.1	1939.8
		863.6	23.812	1130.6	11353.5	367.39	417.16	466.92	3413	12	267	490245	3914	4696.8	5088.2	4030.5	4882	5449.7	8628.7
114-1065	O	38	0.688	41.94	211.3	64.69	73.18	81.66	20	0.472	3.9	4014.5	880.4	1056.4	1144.5	906.6	1098.1	1225.8	1940.8
		965.2	17.462	1065.2	11359.5	315.86	357.28	398.71	3413	12	100	548209.7	3916.1	4699.3	5090.9	4032.6	4884.6	5452.6	8633.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
114-1080	O	40	0.625	42.52	211.5	61.04	69.01	76.98	20	0.472	2.5	4229.6	881.2	1057.4	1145.5	907.4	1099.1	1226.9	1942.6
		1016	15.875	1080	11370	298.02	336.94	375.85	3413	12	64	577593.5	3919.7	4703.6	5095.5	4036.3	4889.1	5457.6	8641.2
114-1605	O	54	0.5	63.17	211.6	45.82	52.03	58.25	20	0.472	9.2	5711.9	881.5	1057.8	1145.9	907.7	1099.5	1227.3	1943.2
		1371.6	12.7	1604.6	11373.7	223.69	254.04	284.4	3413	12	233	780007.5	3920.9	4705.1	5097.2	4037.7	4890.7	5459.4	8644
114-1283	O	40	0.75	50.51	211.6	63.14	71.73	80.31	20	0.472	10.5	4232.4	881.8	1058.1	1146.3	908	1099.8	1227.7	1943.9
		1016	19.05	1283	11377.4	308.29	350.21	392.13	3413	12	267	577971.9	3922.2	4706.7	5098.9	4039	4892.3	5461.2	8646.8
114-1537	O	50	0.562	60.51	211.7	49.94	56.77	63.59	20	0.472	10.5	5293.6	882.3	1058.7	1146.9	908.5	1100.5	1228.4	1945
		1270	14.288	1537	11384	243.85	277.16	310.47	3413	12	267	722882.2	3924.5	4709.4	5101.8	4041.3	4895.1	5464.3	8651.8
114-993	O	32	0.938	39.09	211.9	79.33	89.84	100.35	20	0.472	7.1	3390.7	883	1059.6	1147.9	909.3	1101.4	1229.4	1946.6
		812.8	23.812	992.8	11393.5	387.32	438.65	489.97	3413	12	180	463029.8	3927.8	4713.3	5106.1	4044.7	4899.2	5468.9	8659
114-1370	O	50	0.5	53.94	212	48.58	54.97	61.35	20	0.472	3.9	5298.9	883.1	1059.8	1148.1	909.4	1101.6	1229.7	1947
		1270	12.7	1370	11395.4	237.2	268.36	299.52	3413	12	100	723609.5	3928.4	4714.1	5107	4045.4	4900	5469.8	8660.5
114-1722	O	56	0.5	67.81	212.2	44.71	50.86	57.02	20	0.472	11.8	5940.5	884	1060.8	1149.2	910.3	1102.6	1230.9	1948.9
		1422.4	12.7	1722.4	11406.6	218.29	248.33	278.38	3413	12	300	811234.3	3932.3	4718.7	5112	4049.3	4904.8	5475.1	8669
114-1182	O	44	0.562	46.52	212.3	55.4	62.64	69.88	20	0.472	2.5	4670.8	884.6	1061.6	1150	911	1103.4	1231.7	1950.2
		1117.6	14.288	1181.6	11414.5	270.5	305.83	341.17	3413	12	64	637843.6	3935	4722	5115.5	4052.2	4908.2	5479	8675
114-1300	O	42	0.688	51.17	212.6	59.87	67.96	76.05	20	0.472	9.2	4465.1	885.9	1063.1	1151.7	912.3	1105.1	1233.6	1953.1
		1066.8	17.462	1299.8	11431.5	292.32	331.82	371.32	3413	12	233	609755.3	3940.9	4729	5123.1	4058.2	4915.5	5487.1	8687.9
114-1625	O	56	0.472	63.99	212.7	44.19	50.15	56.12	20	0.472	8	5956.9	886.4	1063.7	1152.4	912.8	1105.7	1234.3	1954.2
		1422.4	12	1625.4	11438	215.75	244.87	273.99	3413	12	203	813467.5	3943.1	4731.7	5126	4060.5	4918.3	5490.2	8692.8
115-862	O	30	0.938	33.94	213.3	84.76	95.85	106.94	20	0.472	3.9	3198.8	888.6	1066.3	1155.1	915	1108.3	1237.2	1958.9
		762	23.812	862	11465.3	413.85	467.98	522.11	3413	12	100	436827.1	3952.5	4743	5138.3	4070.2	4930.1	5503.3	8713.6
115-1046	O	32	1	41.17	213.3	80.89	91.75	102.62	20	0.472	9.2	3413.2	888.9	1066.6	1155.5	915.3	1108.7	1237.6	1959.6
		812.8	25.4	1045.8	11469.1	394.94	447.98	501.02	3413	12	233	466104.4	3953.8	4744.6	5140	4071.5	4931.7	5505.2	8716.5
115-1145	O	38	0.75	45.09	213.3	66.08	74.85	83.63	20	0.472	7.1	4053.3	888.9	1066.7	1155.5	915.3	1108.7	1237.6	1959.6
		965.2	19.05	1145.2	11469.4	322.62	365.47	408.32	3413	12	180	553515.5	3954	4744.7	5140.1	4071.7	4931.9	5505.3	8716.8
115-1525	O	50	0.562	60.02	213.5	50.2	57.02	63.85	20	0.472	10	5337	889.5	1067.4	1156.3	916	1109.5	1238.5	1961
		1270	14.288	1524.5	11477.3	245.08	278.41	311.73	3413	12	254.5	728809.4	3956.7	4748	5143.7	4074.4	4935.2	5509.1	8722.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
115-1118	O	34	0.938	44.02	213.5	75.87	86.11	96.34	20	0.472	10	3630.1	889.7	1067.7	1156.7	916.2	1109.8	1238.8	1961.5
		863.6	23.812	1118.1	11480.4	370.45	420.42	470.39	3413	12	254.5	495725.8	3957.7	4749.3	5145.1	4075.6	4936.6	5510.6	8725.1
115-1181	O	36	0.875	46.51	213.6	71.43	81.12	90.8	20	0.472	10.5	3844.2	889.9	1067.8	1156.8	916.3	1109.9	1239	1961.8
		914.4	22.225	1181.4	11482	348.77	396.05	443.32	3413	12	267	524957.7	3958.3	4749.9	5145.8	4076.1	4937.3	5511.4	8726.3
115-1271	O	40	0.75	50.02	213.7	63.58	72.18	80.79	20	0.472	10	4274	890.4	1068.5	1157.6	916.9	1110.6	1239.8	1963
		1016	19.05	1270.5	11489.3	310.4	352.43	394.45	3413	12	254.5	583658.4	3960.8	4753	5149.1	4078.7	4940.4	5514.9	8731.9
115-1232	O	38	0.812	48.51	213.7	67.39	76.54	85.68	20	0.472	10.5	4060.8	890.5	1068.6	1157.7	917	1110.8	1239.9	1963.2
		965.2	20.638	1232.2	11490.7	329.03	373.68	418.33	3413	12	267	554543.1	3961.3	4753.5	5149.7	4079.2	4941	5515.6	8733
115-1298	O	44	0.625	51.09	213.9	56.65	64.19	71.73	20	0.472	7.1	4705.7	891.2	1069.5	1158.6	917.8	1111.6	1240.9	1964.8
		1117.6	15.875	1297.6	11499.7	276.61	313.41	350.21	3413	12	180	642602.5	3964.4	4757.2	5153.7	4082.4	4944.9	5519.8	8739.8
115-1079	O	34.5	0.875	42.49	214	74.25	84.19	94.14	20	0.472	8	3691.7	891.7	1070	1159.2	918.2	1112.2	1241.6	1965.8
		876.3	22.225	1079.3	11505.8	362.52	411.07	459.63	3413	12	203	504128.8	3966.5	4759.8	5156.4	4084.6	4947.5	5522.8	8744.4
115-1399	O	48	0.562	55.09	214.1	51.75	58.64	65.53	20	0.472	7.1	5137.4	891.9	1070.3	1159.5	918.5	1112.5	1241.9	1966.3
		1219.2	14.288	1399.2	11508.5	252.65	286.3	319.94	3413	12	180	701558.7	3967.4	4760.9	5157.6	4085.5	4948.7	5524.1	8746.5
115-1418	O	44	0.688	55.81	214.4	58.05	65.99	73.94	20	0.472	11.8	4717.8	893.5	1072.2	1161.6	920.1	1114.5	1244.1	1969.9
		1117.6	17.462	1417.6	11529.4	283.43	322.21	360.98	3413	12	300	644262.8	3974.6	4769.5	5167	4092.9	4957.6	5534.1	8762.3
115-1044	O	34	0.875	41.09	214.7	75.13	85.08	95.04	20	0.472	7.1	3650.2	894.7	1073.6	1163.1	921.3	1115.9	1245.7	1972.4
		863.6	22.225	1043.6	11544	366.8	415.42	464.04	3413	12	180	498470.7	3979.7	4775.6	5173.6	4098.1	4963.9	5541.1	8773.5
116-1385	O	52	0.472	54.52	214.9	47.1	53.26	59.41	20	0.472	2.5	5587.2	895.4	1074.5	1164	922	1116.8	1246.7	1973.9
		1320.8	12	1384.8	11553.2	229.98	260.03	290.07	3413	12	64	762976.6	3982.8	4779.4	5177.7	4101.4	4967.9	5545.6	8780.5
116-1094	O	36	0.812	43.09	215.2	70.7	80.08	89.46	20	0.472	7.1	3873.6	896.7	1076	1165.7	923.4	1118.4	1248.5	1976.8
		914.4	20.638	1094.4	11570	345.19	390.97	436.76	3413	12	180	528979.3	3988.6	4786.3	5185.2	4107.3	4975.1	5553.6	8793.2
116-1014	O	36	0.75	39.94	215.4	69.95	79.11	88.27	20	0.472	3.9	3877.9	897.7	1077.2	1167	924.4	1119.7	1249.9	1979
		914.4	19.05	1014.4	11582.8	341.53	386.26	430.99	3413	12	100	529566.2	3993	4791.6	5190.9	4111.9	4980.6	5559.8	8802.9
116-1575	O	54	0.5	61.99	215.6	46.47	52.73	59	20	0.472	8	5820.7	898.3	1077.9	1167.7	925	1120.4	1250.7	1980.3
		1371.6	12.7	1574.6	11590.4	226.89	257.47	288.05	3413	12	203	794868.5	3995.6	4794.8	5194.3	4114.6	4983.9	5563.4	8808.7
116-1602	O	56	0.472	63.09	215.8	44.45	50.38	56.3	20	0.472	7.1	6042.4	899.2	1079	1168.9	925.9	1121.6	1252	1982.3
		1422.4	12	1602.4	11602.1	217.04	245.97	274.9	3413	12	180	825143.5	3999.7	4799.6	5199.6	4118.8	4988.9	5569	8817.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
116-1486	O	56	0.438	58.52	215.8	43.82	49.55	55.27	20	0.472	2.5	6043.5	899.3	1079.2	1169.1	926.1	1121.8	1252.2	1982.6
		1422.4	11.112	1486.4	11604.3	213.96	241.92	269.87	3413	12	64	825296	4000.4	4800.5	5200.6	4119.5	4989.8	5570.1	8819.2
116-1169	O	36	0.875	46.02	215.8	71.99	81.71	91.43	20	0.472	10	3885.3	899.4	1079.2	1169.2	926.1	1121.8	1252.3	1982.7
		914.4	22.225	1168.9	11604.8	351.5	398.95	446.39	3413	12	254.5	530571.5	4000.6	4800.7	5200.8	4119.7	4990.1	5570.3	8819.6
116-1220	O	38	0.812	48.02	215.9	67.88	77.06	86.23	20	0.472	10	4102.5	899.7	1079.6	1169.6	926.4	1122.2	1252.7	1983.4
		965.2	20.638	1219.7	11608.5	331.44	376.23	421.02	3413	12	254.5	560226.3	4001.9	4802.3	5202.5	4121	4991.7	5572.1	8822.5
116-1167	O	42	0.625	45.94	216.3	59.52	67.33	75.13	20	0.472	3.9	4542.3	901.2	1081.5	1171.6	928.1	1124.1	1254.9	1986.9
		1066.8	15.875	1166.8	11628.9	290.61	328.71	366.81	3413	12	100	620285.4	4008.9	4810.7	5211.6	4128.3	5000.4	5581.9	8838
116-1689	O	56	0.5	66.51	216.3	45.35	51.54	57.74	20	0.472	10.5	6056.6	901.3	1081.5	1171.7	928.1	1124.2	1254.9	1986.9
		1422.4	12.7	1689.4	11629.4	221.41	251.66	281.91	3413	12	267	827080.6	4009.1	4810.9	5211.8	4128.4	5000.6	5582.1	8838.3
116-913	O	32	0.875	35.94	216.4	80.01	90.48	100.94	20	0.472	3.9	3462.4	901.7	1082	1172.2	928.5	1124.7	1255.5	1987.8
		812.8	22.225	912.8	11634.4	390.65	441.75	492.85	3413	12	100	472823.2	4010.8	4813	5214.1	4130.2	5002.8	5584.5	8842.2
116-1503	O	50	0.562	59.17	216.5	50.75	57.62	64.48	20	0.472	9.2	5413.3	902.2	1082.7	1172.9	929.1	1125.4	1256.2	1989
		1270	14.288	1503	11641.5	247.77	281.3	314.83	3413	12	233	739234.9	4013.3	4815.9	5217.2	4132.7	5005.8	5587.9	8847.5
117-964	O	34	0.812	37.94	217.1	75.06	84.89	94.71	20	0.472	3.9	3691.4	904.7	1085.7	1176.2	931.7	1128.5	1259.7	1994.6
		863.6	20.638	963.6	11674.1	366.5	414.46	462.42	3413	12	100	504086.8	4024.5	4829.4	5231.8	4144.3	5019.9	5603.6	8872.3
117-775	O	28	1	30.52	217.4	93.08	105.19	117.3	20	0.472	2.5	3043.3	905.7	1086.9	1177.5	932.7	1129.8	1261.1	1996.8
		711.2	25.4	775.2	11687.1	454.45	513.58	572.7	3413	12	64	415592.1	4029	4834.8	5237.7	4148.9	5025.4	5609.8	8882.2
117-1249	O	40	0.75	49.17	217.4	64.47	73.16	81.85	20	0.472	9.2	4347.6	905.8	1086.9	1177.5	932.7	1129.8	1261.1	1996.8
		1016	19.05	1249	11687.1	314.76	357.19	399.61	3413	12	233	593705.4	4029	4834.8	5237.7	4148.9	5025.5	5609.8	8882.2
117-1621	O	52	0.562	63.81	217.5	49.42	56.19	62.97	20	0.472	11.8	5654.1	906.1	1087.3	1177.9	933.1	1130.2	1261.6	1997.6
		1320.8	14.288	1620.8	11691.6	241.27	274.36	307.44	3413	12	300	772112.5	4030.5	4836.6	5239.7	4150.5	5027.4	5612	8885.6
117-1270	O	42	0.688	49.99	217.6	61.02	69.21	77.4	20	0.472	8	4570.6	906.9	1088.2	1178.9	933.9	1131.2	1262.7	1999.3
		1066.8	17.462	1269.8	11701.6	297.91	337.91	377.9	3413	12	203	624161.3	4034	4840.8	5244.2	4154.1	5031.7	5616.7	8893.2
117-1164	O	34	1	45.81	217.7	77.94	88.52	99.1	20	0.472	11.8	3700.1	906.9	1088.3	1178.9	933.9	1131.2	1262.7	1999.3
		863.6	25.4	1163.6	11701.7	380.55	432.2	483.85	3413	12	300	505279.3	4034	4840.8	5244.2	4154.1	5031.7	5616.8	8893.3
117-1334	O	50	0.5	52.52	217.7	49.69	56.18	62.67	20	0.472	2.5	5441.9	907	1088.4	1179.1	934	1131.3	1262.8	1999.5
		1270	12.7	1334	11702.9	242.62	274.29	305.97	3413	12	64	743137.2	4034.5	4841.3	5244.8	4154.5	5032.3	5617.4	8894.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
117-1097	O	34	0.938	43.17	217.7	77.13	87.49	97.85	20	0.472	9.2	3701.3	907.2	1088.6	1179.3	934.2	1131.5	1263.1	1999.9
		863.6	23.812	1096.6	11705.5	376.6	427.18	477.76	3413	12	233	505445	4035.3	4842.4	5245.9	4155.5	5033.4	5618.7	8896.2
117-1677	O	56	0.5	66.02	217.9	45.54	51.74	57.93	20	0.472	10	6101.7	908	1089.6	1180.4	935	1132.6	1264.3	2001.7
		1422.4	12.7	1676.9	11716.1	222.37	252.6	282.84	3413	12	254.5	833245.9	4039	4846.8	5250.7	4159.2	5037.9	5623.7	8904.2
117-1519	O	48	0.625	59.81	218.2	53.88	61.26	68.63	20	0.472	11.8	5236.8	909.2	1091	1181.9	936.2	1134	1265.9	2004.3
		1219.2	15.875	1519.2	11731.1	263.07	299.08	335.08	3413	12	300	715126.4	4044.1	4853	5257.4	4164.5	5044.4	5630.9	8915.6
117-1472	O	54	0.472	57.94	218.3	46.18	52.24	58.3	20	0.472	3.9	5893.9	909.5	1091.5	1182.4	936.6	1134.5	1266.4	2005.2
		1371.6	12	1471.6	11736.1	225.48	255.08	284.67	3413	12	100	804858.7	4045.9	4855	5259.6	4166.3	5046.5	5633.3	8919.4
118-1056	O	34.5	0.875	41.59	218.7	75.3	85.28	95.25	20	0.472	7.1	3772	911.1	1093.3	1184.5	938.2	1136.5	1268.6	2008.6
		876.3	22.225	1056.3	11756.4	367.66	416.36	465.05	3413	12	180	515105.7	4052.9	4863.4	5268.7	4173.5	5055.2	5643.1	8934.8
118-1029	O	38	0.688	40.52	218.7	66.69	75.39	84.08	20	0.472	2.5	4154.9	911.2	1093.4	1184.5	938.3	1136.5	1268.7	2008.7
		965.2	17.462	1029.2	11756.8	325.63	368.08	410.53	3413	12	64	567385.3	4053	4863.6	5268.9	4173.7	5055.4	5643.3	8935.2
118-1552	O	54	0.5	61.09	218.8	46.78	53	59.23	20	0.472	7.1	5907	911.6	1093.9	1185	938.7	1137	1269.2	2009.6
		1371.6	12.7	1551.6	11762.2	228.38	258.79	289.2	3413	12	180	806651.2	4054.9	4865.8	5271.3	4175.6	5057.7	5645.9	8939.3
118-1385	O	44	0.688	54.51	219.6	59.15	67.18	75.22	20	0.472	10.5	4830.3	914.8	1097.8	1189.3	942.1	1141.1	1273.8	2016.8
		1117.6	17.462	1384.6	11804.2	288.79	328.03	367.26	3413	12	267	659617.9	4069.4	4883.2	5290.2	4190.5	5075.8	5666	8971.2
118-1367	O	42	0.75	53.81	219.6	62.42	70.94	79.45	20	0.472	11.8	4611.5	915	1098	1189.5	942.2	1141.3	1274	2017.2
		1066.8	19.05	1366.8	11806.3	304.77	346.34	387.91	3413	12	300	629747.6	4070.1	4884.1	5291.1	4191.2	5076.7	5667	8972.8
118-1016	O	32	1	39.99	219.6	82.94	94.01	105.09	20	0.472	8	3514	915.1	1098.1	1189.6	942.3	1141.4	1274.2	2017.4
		812.8	25.4	1015.8	11807.8	404.96	459.02	513.08	3413	12	203	479870.1	4070.6	4884.7	5291.8	4191.8	5077.4	5667.8	8973.9
118-1198	O	38	0.812	47.17	219.8	68.89	78.16	87.43	20	0.472	9.2	4176.1	915.8	1099	1190.5	943.1	1142.3	1275.1	2019
		965.2	20.638	1198.2	11816.8	336.37	381.62	426.87	3413	12	233	570278.8	4073.7	4888.4	5295.8	4195	5081.2	5672.1	8980.8
118-1147	O	36	0.875	45.17	219.9	73.12	82.95	92.78	20	0.472	9.2	3958.1	916.2	1099.5	1191.1	943.5	1142.8	1275.7	2019.9
		914.4	22.225	1147.4	11822.3	357.02	405	452.97	3413	12	233	540513.3	4075.6	4890.7	5298.2	4196.9	5083.6	5674.7	8984.9
119-1655	O	56	0.5	65.17	220.7	45.98	52.21	58.43	20	0.472	9.2	6181	919.8	1103.7	1195.7	947.2	1147.3	1280.7	2027.7
		1422.4	12.7	1655.4	11868.2	224.51	254.9	285.28	3413	12	233	844067.9	4091.4	4909.7	5318.9	4213.2	5103.3	5696.7	9019.8
119-1473	O	50	0.562	57.99	220.9	51.55	58.48	65.41	20	0.472	8	5523.6	920.6	1104.7	1196.8	948	1148.3	1281.8	2029.5
		1270	14.288	1473	11878.6	251.69	285.52	319.35	3413	12	203	754290.6	4095	4914	5323.5	4216.9	5107.8	5701.7	9027.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
119-1421	O	52	0.5	55.94	221.3	48.68	55.06	61.45	20	0.472	3.9	5754.1	922.1	1106.5	1198.8	949.6	1150.2	1283.9	2032.9
		1320.8	12.7	1420.8	11898.4	237.68	268.85	300.01	3413	12	100	785768.6	4101.8	4922.2	5332.4	4223.9	5116.3	5711.2	9042.8
119-1214	O	36	0.938	47.81	221.4	74.41	84.51	94.61	20	0.472	11.8	3985.9	922.7	1107.2	1199.5	950.1	1150.9	1284.7	2034.1
		914.4	23.812	1214.4	11905.2	363.28	412.6	461.92	3413	12	300	544305.8	4104.2	4925	5335.4	4226.3	5119.2	5714.5	9048
119-1372	O	44	0.688	54.02	221.6	59.51	67.56	75.61	20	0.472	10	4874.3	923.2	1107.8	1200.1	950.6	1151.5	1285.4	2035.2
		1117.6	17.462	1372.1	11911.7	290.57	329.88	369.18	3413	12	254.5	665627.1	4106.4	4927.7	5338.3	4228.7	5122	5717.6	9052.9
119-1247	O	42	0.688	49.09	221.7	61.67	69.85	78.03	20	0.472	7.1	4655	923.6	1108.3	1200.7	951.1	1152	1286	2036.1
		1066.8	17.462	1246.8	11917.4	301.08	341.03	380.98	3413	12	180	635675.3	4108.4	4930.1	5340.9	4230.7	5124.5	5720.4	9057.2
119-1588	O	52	0.562	62.51	222	50.19	57.03	63.86	20	0.472	10.5	5771.6	924.9	1109.9	1202.4	952.5	1153.7	1287.8	2039.1
		1320.8	14.288	1587.8	11934.6	245.07	278.44	311.81	3413	12	267	788159.7	4114.3	4937.2	5348.6	4236.8	5131.9	5728.6	9070.3
120-1316	O	40	0.812	51.81	222.5	66.62	75.68	84.75	20	0.472	11.8	4449.1	926.9	1112.3	1205	954.5	1156.1	1290.6	2043.4
		1016	20.638	1316	11959.9	325.26	369.53	413.79	3413	12	300	607563.1	4123	4947.6	5359.9	4245.8	5142.8	5740.8	9089.5
120-826	O	30	0.938	32.52	222.5	88.13	99.59	111.06	20	0.472	2.5	3338.2	927.3	1112.7	1205.5	954.9	1156.6	1291.1	2044.3
		762	23.812	826	11965	430.3	486.26	542.22	3413	12	64	455865.6	4124.8	4949.7	5362.2	4247.6	5144.9	5743.2	9093.4
120-1219	O	40	0.75	47.99	222.7	65.77	74.58	83.39	20	0.472	8	4454.6	928	1113.7	1206.5	955.7	1157.6	1292.2	2045.9
		1016	19.05	1219	11974.7	321.14	364.15	407.16	3413	12	203	608316.7	4128.1	4953.8	5366.6	4251	5149.1	5747.9	9100.8
120-1486	O	48	0.625	58.51	223	54.81	62.26	69.71	20	0.472	10.5	5353	929.3	1115.2	1208.2	957	1159.2	1294	2048.8
		1219.2	15.875	1486.2	11991.6	267.61	303.98	340.36	3413	12	267	731005.2	4133.9	4960.7	5374.1	4257	5156.4	5755.9	9113.6
120-1265	O	38	0.875	49.81	223.1	70.62	80.22	89.81	20	0.472	11.8	4238	929.4	1115.3	1208.2	957.1	1159.3	1294.1	2048.9
		965.2	22.225	1265.2	11992.1	344.81	391.66	438.51	3413	12	300	578740.9	4134.1	4961	5374.4	4257.2	5156.6	5756.2	9114
120-1131	O	42	0.625	44.52	223.2	61.18	69.15	77.12	20	0.472	2.5	4686.9	929.9	1115.9	1208.9	957.6	1159.9	1294.8	2050.1
		1066.8	15.875	1130.8	11999.1	298.7	337.63	376.56	3413	12	64	640032.7	4136.6	4963.9	5377.5	4259.7	5159.6	5759.6	9119.3
120-978	O	36	0.75	38.52	223.4	72.25	81.66	91.06	20	0.472	2.5	4020.6	930.7	1116.8	1209.9	958.4	1160.9	1295.9	2051.8
		914.4	19.05	978.4	12009	352.75	398.68	444.61	3413	12	64	549051.5	4140	4967.9	5381.9	4263.2	5163.9	5764.3	9126.8
120-1575	O	52	0.562	62.02	223.7	50.44	57.28	64.12	20	0.472	10	5817.4	932.3	1118.7	1212	960	1162.8	1298.1	2055.3
		1320.8	14.288	1575.3	12029.3	246.27	279.66	313.04	3413	12	254.5	794413.8	4147	4976.3	5391	4270.4	5172.6	5774.1	9142.3
120-1436	O	54	0.472	56.52	223.8	47.15	53.3	59.45	20	0.472	2.5	6041.7	932.4	1118.8	1212.1	960.1	1162.9	1298.2	2055.4
		1371.6	12	1435.6	12030.4	230.22	260.25	290.28	3413	12	64	825041.8	4147.3	4976.8	5391.5	4270.8	5173.1	5774.6	9143.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
120-1067	O	34	0.938	41.99	223.8	78.98	89.53	100.07	20	0.472	8	3805.4	932.7	1119.2	1212.5	960.5	1163.4	1298.7	2056.2
		863.6	23.812	1066.6	12034.8	385.62	437.1	488.58	3413	12	203	519661.5	4148.8	4978.6	5393.5	4272.3	5175	5776.7	9146.4
120-1131	O	34	1	44.51	224	79.87	90.64	101.41	20	0.472	10.5	3808.1	933.4	1120	1213.4	961.1	1164.2	1299.6	2057.6
		863.6	25.4	1130.6	12043.2	389.95	442.54	495.12	3413	12	267	520027.4	4151.8	4982.1	5397.3	4275.4	5178.6	5780.8	9152.9
120-1116	O	40	0.688	43.94	224.1	64.96	73.46	81.96	20	0.472	3.9	4481.3	933.6	1120.3	1213.7	961.4	1164.5	1299.9	2058.2
		1016	17.462	1116	12046.6	317.16	358.66	400.16	3413	12	100	611966.8	4152.9	4983.5	5398.8	4276.5	5180	5782.4	9155.4
121-1450	O	50	0.562	57.09	224.4	51.96	58.86	65.76	20	0.472	7.1	5611.2	935.2	1122.2	1215.8	963	1166.5	1302.1	2061.7
		1270	14.288	1450	12067	253.67	287.38	321.08	3413	12	180	766255.2	4160	4991.9	5407.9	4283.8	5188.8	5792.2	9170.9
121-993	O	32	1	39.09	224.7	84.26	95.39	106.52	20	0.472	7.1	3595.4	936.3	1123.6	1217.2	964.2	1167.9	1303.7	2064.2
		812.8	25.4	992.8	12081.4	411.41	465.75	520.08	3413	12	180	490987.1	4164.9	4997.9	5414.4	4288.9	5195	5799.1	9181.8
121-1625	O	56	0.5	63.99	224.8	46.62	52.89	59.16	20	0.472	8	6295.1	936.8	1124.1	1217.8	964.7	1168.5	1304.3	2065.2
		1422.4	12.7	1625.4	12087.3	227.63	258.23	288.84	3413	12	203	859646.9	4166.9	5000.3	5417	4291	5197.5	5801.9	9186.3
121-1474	O	48	0.625	58.02	224.9	55.11	62.57	70.03	20	0.472	10	5398.4	937.2	1124.7	1218.4	965.1	1169	1305	2066.2
		1219.2	15.875	1473.7	12093.3	269.09	305.5	341.92	3413	12	254.5	737205.7	4169	5002.8	5419.7	4293.1	5200.1	5804.8	9190.9
121-1334	O	42	0.75	52.51	225	63.67	72.29	80.92	20	0.472	10.5	4725.6	937.6	1125.2	1218.9	965.5	1169.5	1305.5	2067.1
		1066.8	19.05	1333.8	12098.4	310.86	352.97	395.09	3413	12	267	645328.4	4170.8	5004.9	5422	4294.9	5202.3	5807.2	9194.8
121-1351	O	44	0.688	53.17	225.1	60.27	68.39	76.51	20	0.472	9.2	4951.9	937.9	1125.4	1219.2	965.8	1169.8	1305.8	2067.6
		1117.6	17.462	1350.6	12101.3	294.29	333.92	373.55	3413	12	233	676223.2	4171.8	5006.1	5423.3	4296	5203.6	5808.6	9197
121-877	O	32	0.875	34.52	225.3	82.99	93.78	104.58	20	0.472	2.5	3604.6	938.7	1126.4	1220.3	966.6	1170.9	1307	2069.4
		812.8	22.225	876.8	12112.1	405.19	457.89	510.59	3413	12	64	492236.5	4175.5	5010.6	5428.2	4299.8	5208.2	5813.8	9205.2
121-1168	O	38	0.812	45.99	225.4	70.37	79.78	89.19	20	0.472	8	4283.3	939.3	1127.2	1221.1	967.3	1171.6	1307.9	2070.8
		965.2	20.638	1168.2	12120.3	343.57	389.51	435.45	3413	12	203	584923.8	4178.3	5014	5431.8	4302.7	5211.7	5817.7	9211.4
121-928	O	34	0.812	36.52	225.6	77.69	87.8	97.9	20	0.472	2.5	3834.6	939.9	1127.8	1221.8	967.8	1172.3	1308.6	2072
		863.6	20.638	927.6	12127.1	379.31	428.66	478	3413	12	64	523650.3	4180.7	5016.8	5434.9	4305.1	5214.7	5821	9216.6
121-1117	O	36	0.875	43.99	225.8	74.78	84.77	94.76	20	0.472	8	4064.4	940.8	1129	1223.1	968.8	1173.5	1310	2074.1
		914.4	22.225	1117.4	12139.7	365.11	413.88	462.64	3413	12	203	555025.1	4185	5022	5440.5	4309.6	5220.1	5827	9226.1
122-862	O	30	1	33.94	226	90.07	101.82	113.57	20	0.472	3.9	3390.6	941.8	1130.2	1224.4	969.9	1174.8	1311.4	2076.3
		762	25.4	862	12152.7	439.75	497.12	554.49	3413	12	100	463017.4	4189.5	5027.4	5446.3	4314.2	5225.7	5833.3	9236

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
122-1118	O	34	1	44.02	226.5	80.55	91.37	102.18	20	0.472	10	3850.7	943.8	1132.5	1226.9	971.9	1177.2	1314.1	2080.7
		863.6	25.4	1118.1	12177.9	393.26	446.09	498.91	3413	12	254.5	525841.2	4198.2	5037.8	5457.6	4323.1	5236.5	5845.4	9255.2
122-1554	O	52	0.562	61.17	226.8	50.98	57.86	64.73	20	0.472	9.2	5897.9	945.2	1134.2	1228.7	973.3	1178.9	1316	2083.7
		1320.8	14.288	1553.8	12195.7	248.89	282.47	316.06	3413	12	233	805406.1	4204.3	5045.2	5465.6	4329.5	5244.2	5854	9268.8
122-1196	O	40	0.75	47.09	227	66.54	75.35	84.17	20	0.472	7.1	4540.3	945.9	1135.1	1229.7	974	1179.8	1317	2085.3
		1016	19.05	1196	12205	324.88	367.91	410.94	3413	12	180	620015.1	4207.5	5049	5469.8	4332.8	5248.2	5858.4	9275.8
122-1319	O	48	0.562	51.94	227	54.27	61.38	68.49	20	0.472	3.9	5449	946	1135.2	1229.8	974.2	1180	1317.2	2085.5
		1219.2	14.288	1319.2	12206.4	264.99	299.69	334.38	3413	12	100	744103.2	4208	5049.6	5470.4	4333.3	5248.8	5859.1	9276.9
122-1385	O	52	0.5	54.52	227.1	49.75	56.24	62.72	20	0.472	2.5	5903.7	946.1	1135.3	1229.9	974.3	1180.1	1317.3	2085.7
		1320.8	12.7	1384.8	12207.7	242.91	274.57	306.23	3413	12	64	806195.8	4208.5	5050.1	5471	4333.7	5249.3	5859.7	9277.8
122-1522	O	56	0.472	59.94	227.1	46.26	52.32	58.38	20	0.472	3.9	6359.9	946.4	1135.7	1230.3	974.6	1180.5	1317.8	2086.4
		1422.4	12	1522.4	12211.8	225.86	255.45	285.04	3413	12	100	868503.7	4209.9	5051.8	5472.8	4335.2	5251.1	5861.7	9281
122-1321	O	42	0.75	52.02	227.2	64.09	72.74	81.38	20	0.472	10	4770.3	946.5	1135.8	1230.4	974.7	1180.6	1317.9	2086.6
		1066.8	19.05	1321.3	12212.9	312.92	355.13	397.35	3413	12	254.5	651433.4	4210.2	5052.3	5473.3	4335.6	5251.5	5862.2	9281.8
122-1181	O	36	0.938	46.51	227.6	76.15	86.42	96.69	20	0.472	10.5	4097.2	948.4	1138.1	1233	976.7	1183	1320.6	2090.9
		914.4	23.812	1181.4	12237.7	371.8	421.94	472.09	3413	12	267	559509.9	4218.8	5062.6	5484.5	4344.4	5262.2	5874.1	9300.7
122-1672	O	54	0.562	65.81	227.7	49.67	56.46	63.25	20	0.472	11.8	6146.8	948.6	1138.3	1233.2	976.8	1183.2	1320.8	2091.2
		1371.6	14.288	1671.6	12239.8	242.51	275.66	308.81	3413	12	300	839405.4	4219.5	5063.4	5485.4	4345.1	5263.1	5875.1	9302.2
123-1218	O	44	0.625	47.94	227.9	59.72	67.53	75.34	20	0.472	3.9	5014.9	949.8	1139.7	1234.7	978.1	1184.7	1322.4	2093.9
		1117.6	15.875	1217.6	12255.3	291.56	329.7	367.84	3413	12	100	684823.4	4224.9	5069.8	5492.3	4350.6	5269.8	5882.5	9314
123-1602	O	56	0.5	63.09	228.1	46.92	53.15	59.39	20	0.472	7.1	6385.4	950.2	1140.3	1235.3	978.5	1185.2	1323	2094.8
		1422.4	12.7	1602.4	12260.8	229.08	259.52	289.96	3413	12	180	871985.8	4226.8	5072.1	5494.8	4352.6	5272.1	5885.2	9318.2
123-1283	O	40	0.812	50.51	228.2	68.02	77.22	86.42	20	0.472	10.5	4563.5	950.7	1140.9	1236	979	1185.9	1323.8	2096
		1016	20.638	1283	12267.5	332.12	377.02	421.92	3413	12	267	623190.2	4229.1	5074.9	5497.8	4355	5275	5888.4	9323.3
123-1452	O	48	0.625	57.17	228.3	55.76	63.27	70.78	20	0.472	9.2	5478.4	951.1	1141.3	1236.4	979.4	1186.3	1324.3	2096.8
		1219.2	15.875	1452.2	12272.3	272.23	308.9	345.57	3413	12	233	748120.1	4230.7	5076.9	5499.9	4356.7	5277.1	5890.7	9327
123-1044	O	34	0.938	41.09	228.8	80.15	90.74	101.32	20	0.472	7.1	3889.3	953.3	1143.9	1239.2	981.6	1189	1327.3	2101.5
		863.6	23.812	1043.6	12300	391.34	443.02	494.71	3413	12	180	531114.4	4240.3	5088.3	5512.4	4366.5	5289	5904	9348

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
123-1232	O	38	0.875	48.51	229	72.19	81.94	91.68	20	0.472	10.5	4351.5	954.3	1145.1	1240.6	982.7	1190.3	1328.7	2103.8
		965.2	22.225	1232.2	12313.3	352.47	400.06	447.64	3413	12	267	594240.4	4244.9	5093.8	5518.3	4371.2	5294.7	5910.4	9358.1
123-1065	O	38	0.75	41.94	229.4	70.29	79.47	88.65	20	0.472	3.9	4357.7	955.6	1146.8	1242.3	984.1	1192	1330.6	2106.8
		965.2	19.05	1065.2	12330.8	343.16	388	432.84	3413	12	100	595086.4	4250.9	5101.1	5526.2	4377.4	5302.3	5918.8	9371.4
123-1570	O	50	0.625	61.81	229.5	54.21	61.61	69	20	0.472	11.8	5736.5	956.1	1147.3	1242.9	984.5	1192.5	1331.2	2107.8
		1270	15.875	1570	12336.5	264.69	300.8	336.91	3413	12	300	783369.4	4252.9	5103.4	5528.7	4379.5	5304.7	5921.5	9375.8
124-1145	O	38	0.812	45.09	230	71.26	80.69	90.11	20	0.472	7.1	4369.3	958.2	1149.8	1245.6	986.7	1195.2	1334.1	2112.4
		965.2	20.638	1145.2	12363.7	347.94	393.95	439.96	3413	12	180	596671.3	4262.2	5114.7	5540.9	4389.1	5316.4	5934.6	9396.4
124-1169	O	36	0.938	46.02	230.1	76.76	87.07	97.38	20	0.472	10	4141	958.6	1150.3	1246.1	987.1	1195.6	1334.7	2113.2
		914.4	23.812	1168.9	12368.6	374.77	425.12	475.47	3413	12	254.5	565493.2	4263.9	5116.7	5543.1	4390.9	5318.5	5936.9	9400.1
124-1321	O	44	0.688	51.99	230.2	61.38	69.6	77.81	20	0.472	8	5064.4	959.2	1151	1246.9	987.7	1196.4	1335.5	2114.5
		1117.6	17.462	1320.6	12376.3	299.71	339.82	379.93	3413	12	203	691584.9	4266.6	5119.9	5546.5	4393.6	5321.8	5940.6	9406
124-1824	O	60	0.5	71.81	230.4	45.08	51.25	57.41	20	0.472	11.8	6912	960	1152	1248	988.6	1197.4	1336.7	2116.4
		1524	12.7	1824	12387	220.09	250.2	280.32	3413	12	300	943892.5	4270.3	5124.3	5551.4	4397.4	5326.4	5945.8	9414.2
124-1271	O	40	0.812	50.02	230.4	68.5	77.73	86.95	20	0.472	10	4608.4	960.1	1152.1	1248.1	988.7	1197.5	1336.8	2116.6
		1016	20.638	1270.5	12388.2	334.47	379.5	424.54	3413	12	254.5	629321.5	4270.7	5124.8	5551.9	4397.8	5326.9	5946.3	9415
124-913	O	32	0.938	35.94	230.5	85.4	96.54	107.68	20	0.472	3.9	3687.9	960.4	1152.5	1248.5	989	1197.9	1337.2	2117.2
		812.8	23.812	912.8	12392	416.96	471.35	525.74	3413	12	100	503610.9	4272	5126.4	5553.6	4399.2	5328.6	5948.2	9417.9
124-1094	O	36	0.875	43.09	230.5	75.81	85.82	95.84	20	0.472	7.1	4149.8	960.6	1152.7	1248.8	989.2	1198.2	1337.5	2117.7
		914.4	22.225	1094.4	12394.8	370.13	419.03	467.94	3413	12	180	566689.5	4273	5127.5	5554.8	4400.1	5329.8	5949.5	9420
124-1472	O	54	0.5	57.94	230.7	48.77	55.16	61.54	20	0.472	3.9	6228.1	961.1	1153.4	1249.5	989.7	1198.8	1338.2	2118.9
		1371.6	12.7	1471.6	12401.6	238.12	269.3	300.47	3413	12	100	850502.9	4275.3	5130.4	5557.9	4402.6	5332.7	5952.8	9425.2
124-1300	O	42	0.75	51.17	230.9	64.96	73.68	82.41	20	0.472	9.2	4849.3	962.2	1154.6	1250.8	990.8	1200.1	1339.7	2121.1
		1066.8	19.05	1299.8	12414.9	317.15	359.75	402.35	3413	12	233	662208.8	4279.9	5135.8	5563.8	4407.3	5338.4	5959.1	9435.3
124-1097	O	34	1	43.17	231	81.9	92.85	103.81	20	0.472	9.2	3926.2	962.3	1154.7	1251	990.9	1200.3	1339.9	2121.4
		863.6	25.4	1096.6	12416.6	399.86	453.34	506.83	3413	12	233	536150.8	4280.5	5136.6	5564.6	4407.9	5339.2	5960	9436.7
124-1524	O	52	0.562	59.99	231.3	51.76	58.69	65.63	20	0.472	8	6014	963.8	1156.5	1252.9	992.5	1202.1	1341.9	2124.7
		1320.8	14.288	1523.8	12435.8	252.69	286.57	320.45	3413	12	203	821262.6	4287.1	5144.5	5573.2	4414.7	5347.4	5969.2	9451.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
124-1220	O	38	0.875	48.02	231.4	72.74	82.52	92.3	20	0.472	10	4396.1	964.1	1156.9	1253.3	992.8	1202.5	1342.3	2125.3
		965.2	22.225	1219.7	12439.5	355.13	402.88	450.63	3413	12	254.5	600330.4	4288.4	5146	5574.9	4416	5349	5971	9454
124-1080	O	40	0.688	42.52	231.5	66.88	75.58	84.28	20	0.472	2.5	4630.7	964.7	1157.7	1254.2	993.5	1203.3	1343.3	2126.8
		1016	17.462	1080	12448.1	326.52	369	411.47	3413	12	64	632365.7	4291.3	5149.6	5578.7	4419.1	5352.7	5975.1	9460.6
125-1014	O	36	0.812	39.94	232.2	75.48	85.34	95.19	20	0.472	3.9	4179.1	967.4	1160.9	1257.6	996.2	1206.7	1347	2132.7
		914.4	20.638	1014.4	12482.4	368.53	416.64	464.75	3413	12	100	570697	4303.2	5163.8	5594.1	4431.3	5367.4	5991.6	9486.7
125-1639	O	54	0.562	64.51	232.2	50.43	57.27	64.12	20	0.472	10.5	6270.6	967.7	1161.2	1258	996.5	1207	1347.4	2133.3
		1371.6	14.288	1638.6	12486.3	246.21	279.64	313.06	3413	12	267	856310.3	4304.5	5165.4	5595.8	4432.6	5369.1	5993.4	9489.6
125-964	O	34	0.875	37.94	232.5	80.53	91.03	101.54	20	0.472	3.9	3953.3	968.9	1162.7	1259.6	997.8	1208.6	1349.1	2136.1
		863.6	22.225	963.6	12502.4	393.17	444.47	495.77	3413	12	100	539854.7	4310.1	5172.1	5603.1	4438.4	5376	6001.2	9501.8
125-1486	O	56	0.472	58.52	232.6	47.2	53.35	59.49	20	0.472	2.5	6514	969.3	1163.2	1260.1	998.2	1209.1	1349.7	2137
		1422.4	12	1486.4	12507.6	230.45	260.46	290.47	3413	12	64	889538.5	4311.8	5174.2	5605.4	4440.2	5378.3	6003.6	9505.8
125-1418	O	44	0.75	55.81	232.9	62.94	71.5	80.05	20	0.472	11.8	5124.7	970.6	1164.7	1261.8	999.5	1210.6	1351.4	2139.7
		1117.6	19.05	1417.6	12523.8	307.32	349.08	390.84	3413	12	300	699827.9	4317.4	5180.9	5612.6	4445.9	5385.2	6011.4	9518.1
125-1422	O	48	0.625	55.99	233.1	56.69	64.28	71.87	20	0.472	8	5593.9	971.2	1165.4	1262.5	1000.1	1211.4	1352.2	2141
		1219.2	15.875	1422.2	12531.2	276.79	313.85	350.91	3413	12	203	763901	4320	5184	5616	4448.6	5388.4	6015	9523.7
125-1283	O	48	0.562	50.52	233.4	55.59	62.82	70.06	20	0.472	2.5	5601.8	972.5	1167	1264.3	1001.5	1213.1	1354.1	2144
		1219.2	14.288	1283.2	12548.9	271.4	306.73	342.05	3413	12	64	764979	4326.1	5191.3	5623.9	4454.8	5396	6023.5	9537.1
126-1626	O	54	0.562	64.02	234	50.67	57.52	64.37	20	0.472	10	6318.8	975.1	1170.2	1267.7	1004.2	1216.3	1357.7	2149.7
		1371.6	14.288	1626.1	12582.3	247.38	280.83	314.27	3413	12	254.5	862892.8	4337.6	5205.1	5638.9	4466.7	5410.4	6039.5	9562.5
126-1298	O	44	0.688	51.09	234.3	62.01	70.22	78.43	20	0.472	7.1	5154.1	976.2	1171.4	1269	1005.2	1217.6	1359.2	2152
		1117.6	17.462	1297.6	12595.6	302.78	342.85	382.93	3413	12	180	703843.2	4342.2	5210.6	5644.8	4471.4	5416.1	6045.9	9572.7
126-1147	O	36	0.938	45.17	234.4	77.98	88.41	98.85	20	0.472	9.2	4218.6	976.5	1171.8	1269.5	1005.6	1218.1	1359.7	2152.8
		914.4	23.812	1147.4	12600.4	380.72	431.66	482.6	3413	12	233	576089.4	4343.8	5212.6	5647	4473.1	5418.2	6048.2	9576.3
126-1537	O	50	0.625	60.51	234.4	55.12	62.59	70.06	20	0.472	10.5	5859.7	976.6	1171.9	1269.6	1005.7	1218.1	1359.8	2153
		1270	15.875	1537	12601.4	269.12	305.58	342.05	3413	12	267	800188.7	4344.2	5213	5647.4	4473.5	5418.6	6048.7	9577.1
126-1249	O	40	0.812	49.17	234.4	69.48	78.8	88.11	20	0.472	9.2	4687.8	976.6	1171.9	1269.6	1005.7	1218.2	1359.8	2153
		1016	20.638	1249	12601.5	339.25	384.73	430.21	3413	12	233	640154.5	4344.2	5213	5647.5	4473.5	5418.6	6048.7	9577.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
126-1791	O	60	0.5	70.51	234.6	45.69	51.9	58.1	20	0.472	10.5	7039.3	977.7	1173.2	1271	1006.8	1219.5	1361.3	2155.4
		1524	12.7	1791	12615.3	223.07	253.37	283.68	3413	12	267	961284.2	4349	5218.8	5653.7	4478.4	5424.6	6055.3	9587.6
126-1501	O	52	0.562	59.09	234.9	52.15	59.07	65.98	20	0.472	7.1	6106.1	978.5	1174.3	1272.1	1007.7	1220.6	1362.5	2157.3
		1320.8	14.288	1500.8	12626.4	254.63	288.38	322.14	3413	12	180	833848.6	4352.8	5223.4	5658.6	4482.4	5429.4	6060.7	9596.1
126-1182	O	44	0.625	46.52	234.9	61.31	69.28	77.26	20	0.472	2.5	5167.6	978.7	1174.5	1272.3	1007.9	1220.8	1362.7	2157.7
		1117.6	15.875	1181.6	12628.6	299.33	338.26	377.2	3413	12	64	705688.1	4353.6	5224.3	5659.6	4483.2	5430.3	6061.7	9597.8
126-1214	O	36	1	47.81	235	78.98	89.65	100.32	20	0.472	11.8	4229.3	979	1174.8	1272.7	1008.2	1221.1	1363.1	2158.3
		914.4	25.4	1214.4	12632.4	385.6	437.7	489.81	3413	12	300	577552.6	4354.9	5225.8	5661.3	4484.5	5431.9	6063.5	9600.6
126-1214	O	36	1	47.81	235	78.98	89.65	100.32	20	0.472	11.8	4229.3	979	1174.8	1272.7	1008.2	1221.1	1363.1	2158.3
		914.4	25.4	1214.4	12632.4	385.6	437.7	489.81	3413	12	300	577552.7	4354.9	5225.8	5661.3	4484.5	5431.9	6063.5	9600.6
127-1198	O	38	0.875	47.17	235.5	73.83	83.72	93.6	20	0.472	9.2	4475	981.4	1177.6	1275.8	1010.6	1224.1	1366.4	2163.5
		965.2	22.225	1198.2	12662.7	360.48	408.74	457.01	3413	12	233	611102.5	4365.3	5238.4	5674.9	4495.3	5445	6078.1	9623.7
127-826	O	30	1	32.52	235.9	93.67	105.82	117.97	20	0.472	2.5	3538.4	982.9	1179.5	1277.7	1012.1	1226	1368.5	2166.8
		762	25.4	826	12682.3	457.32	516.66	576	3413	12	64	483197.3	4372.1	5246.5	5683.7	4502.2	5453.4	6087.5	9638.6
127-1779	O	60	0.5	70.02	236.3	45.87	52.08	58.29	20	0.472	10	7088.8	984.6	1181.5	1279.9	1013.9	1228.1	1370.9	2170.5
		1524	12.7	1778.5	12703.9	223.98	254.28	284.58	3413	12	254.5	968040.5	4379.5	5255.4	5693.4	4509.9	5462.7	6097.9	9655
127-1525	O	50	0.625	60.02	236.3	55.41	62.89	70.37	20	0.472	10	5907.7	984.6	1181.5	1280	1013.9	1228.1	1370.9	2170.7
		1270	15.875	1524.5	12704.7	270.56	307.06	343.57	3413	12	254.5	806749.8	4379.8	5255.8	5693.7	4510.2	5463	6098.3	9655.6
127-1270	O	42	0.75	49.99	236.4	66.22	75.06	83.91	20	0.472	8	4963.8	984.9	1181.9	1280.4	1014.2	1228.5	1371.3	2171.3
		1066.8	19.05	1269.8	12708.2	323.33	366.49	409.66	3413	12	203	677854	4381	5257.2	5695.3	4511.4	5464.5	6099.9	9658.2
127-1436	O	54	0.5	56.52	236.5	49.81	56.29	62.77	20	0.472	2.5	6384.3	985.2	1182.3	1280.8	1014.6	1228.9	1371.8	2172
		1371.6	12.7	1435.6	12712.6	243.18	274.83	306.48	3413	12	64	871830.6	4382.5	5259	5697.3	4513	5466.4	6102.1	9661.6
127-976	O	34.5	0.875	38.44	236.6	80.65	91.16	101.68	20	0.472	3.9	4081.1	985.8	1182.9	1281.5	1015.1	1229.6	1372.6	2173.2
		876.3	22.225	976.3	12719.7	393.76	445.11	496.45	3413	12	100	557314.6	4385	5262	5700.5	4515.5	5469.5	6105.5	9667
127-1367	O	42	0.812	53.81	236.8	67.24	76.36	85.48	20	0.472	11.8	4973.5	986.8	1184.2	1282.8	1016.2	1230.9	1374	2175.5
		1066.8	20.638	1366.8	12732.8	328.31	372.82	417.33	3413	12	300	679169.6	4389.5	5267.4	5706.3	4520.2	5475.1	6111.8	9677
127-1167	O	42	0.688	45.94	236.9	65.2	73.72	82.23	20	0.472	3.9	4974.1	986.9	1184.3	1283	1016.3	1231	1374.2	2175.8
		1066.8	17.462	1166.8	12734.5	318.35	359.92	401.49	3413	12	100	679259.5	4390.1	5268.1	5707.1	4520.8	5475.8	6112.6	9678.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
127-1399	O	48	0.625	55.09	236.9	57.2	64.77	72.34	20	0.472	7.1	5685.9	987.1	1184.6	1283.3	1016.5	1231.3	1374.4	2176.2
		1219.2	15.875	1399.2	12737.2	279.27	316.24	353.21	3413	12	180	776458	4391	5269.2	5708.3	4521.7	5477	6113.8	9680.3
128-1605	O	54	0.562	63.17	237.2	51.19	58.08	64.97	20	0.472	9.2	6403.5	988.2	1185.8	1284.7	1017.6	1232.6	1375.9	2178.5
		1371.6	14.288	1604.6	12750.9	249.93	283.57	317.21	3413	12	233	874454.7	4395.7	5274.8	5714.4	4526.6	5482.9	6120.4	9690.7
128-1029	O	38	0.75	40.52	237.4	72.48	81.9	91.32	20	0.472	2.5	4510.2	989.1	1186.9	1285.8	1018.5	1233.7	1377.1	2180.5
		965.2	19.05	1029.2	12762.2	353.89	399.87	445.85	3413	12	64	615901.7	4399.6	5279.5	5719.5	4530.6	5487.7	6125.8	9699.2
128-1067	O	34	1	41.99	237.4	83.88	95.04	106.19	20	0.472	8	4036.6	989.4	1187.2	1286.2	1018.8	1234.1	1377.5	2181.1
		863.6	25.4	1066.6	12765.9	409.54	464.01	518.47	3413	12	203	551231	4400.9	5281.1	5721.1	4531.9	5489.3	6127.6	9702.1
128-1370	O	50	0.562	53.94	237.6	54.4	61.51	68.62	20	0.472	3.9	5938.8	989.8	1187.8	1286.7	1019.3	1234.6	1378.2	2182.1
		1270	14.288	1370	12771.7	265.62	300.33	335.05	3413	12	100	811000	4402.9	5283.4	5723.7	4533.9	5491.8	6130.4	9706.5
128-1265	O	38	0.938	49.81	237.8	75.28	85.46	95.64	20	0.472	11.8	4518.2	990.8	1189	1288.1	1020.3	1235.9	1379.6	2184.4
		965.2	23.812	1265.2	12785	367.56	417.26	466.95	3413	12	300	617005.2	4407.5	5289	5729.7	4538.7	5497.6	6136.8	9716.6
128-1722	O	56	0.562	67.81	237.9	49.91	56.71	63.51	20	0.472	11.8	6660.7	991.2	1189.4	1288.5	1020.7	1236.3	1380.1	2185.1
		1422.4	14.288	1722.4	12789.3	243.67	276.88	310.09	3413	12	300	909573.9	4409	5290.7	5731.6	4540.2	5499.4	6138.9	9719.9
128-1316	O	40	0.875	51.81	238.4	71.36	81.02	90.68	20	0.472	11.8	4768.8	993.5	1192.2	1291.5	1023.1	1239.2	1383.3	2190.2
		1016	22.225	1316	12819.3	348.42	395.58	442.74	3413	12	300	651218.8	4419.3	5303.1	5745.1	4550.8	5512.3	6153.2	9742.6
128-1385	O	44	0.75	54.51	238.5	64.16	72.82	81.48	20	0.472	10.5	5246.9	993.7	1192.5	1291.8	1023.3	1239.5	1383.6	2190.7
		1117.6	19.05	1384.6	12822.2	313.25	355.54	397.83	3413	12	267	716507.3	4420.3	5304.4	5746.4	4551.9	5513.6	6154.7	9744.9
129-1519	O	48	0.688	59.81	239.1	58.89	66.89	74.89	20	0.472	11.8	5737.9	996.2	1195.4	1295	1025.8	1242.5	1387	2196.1
		1219.2	17.462	1519.2	12853.6	287.52	326.58	365.64	3413	12	300	783557.1	4431.1	5317.4	5760.5	4563	5527.1	6169.7	9768.8
129-1757	O	60	0.5	69.17	239.2	46.29	52.53	58.76	20	0.472	9.2	7175.6	996.6	1195.9	1295.6	1026.3	1243.1	1387.6	2197.1
		1524	12.7	1757	12859.4	226.02	256.46	286.9	3413	12	233	979886.2	4433.1	5319.7	5763.1	4565.1	5529.5	6172.5	9773.1
129-1503	O	50	0.625	59.17	239.7	56.04	63.57	71.1	20	0.472	9.2	5992.2	998.7	1198.4	1298.3	1028.4	1245.7	1390.6	2201.7
		1270	15.875	1503	12886.5	273.61	310.37	347.13	3413	12	233	818290.1	4442.5	5330.9	5775.2	4574.7	5541.2	6185.5	9793.7
129-877	O	32	0.938	34.52	240	88.6	100.09	111.59	20	0.472	2.5	3839.3	999.8	1199.8	1299.8	1029.6	1247.1	1392.1	2204.2
		812.8	23.812	876.8	12900.8	432.58	488.71	544.83	3413	12	64	524288.3	4447.4	5336.9	5781.6	4579.8	5547.3	6192.4	9804.6
129-1522	O	56	0.5	59.94	240	48.86	55.24	61.63	20	0.472	3.9	6721	1000.1	1200.2	1300.2	1029.9	1247.5	1392.6	2204.9
		1422.4	12.7	1522.4	12905.1	238.54	269.72	300.89	3413	12	100	917807.4	4448.9	5338.6	5783.5	4581.3	5549.2	6194.4	9807.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
129-1219	O	40	0.812	47.99	240.2	70.91	80.36	89.81	20	0.472	8	4803.1	1000.7	1200.8	1300.8	1030.4	1248.1	1393.3	2206
		1016	20.638	1219	12911.6	346.22	392.37	438.51	3413	12	203	655908.9	4451.1	5341.3	5786.4	4583.6	5552	6197.6	9812.8
129-1117	O	36	0.938	43.99	240.7	79.77	90.38	100.99	20	0.472	8	4331.9	1002.7	1203.3	1303.6	1032.6	1250.8	1396.2	2210.6
		914.4	23.812	1117.4	12938.7	389.45	441.26	493.07	3413	12	203	591556.3	4460.5	5352.5	5798.6	4593.2	5563.6	6210.6	9833.4
129-1372	O	44	0.75	54.02	240.7	64.57	73.25	81.93	20	0.472	10	5294.7	1002.8	1203.3	1303.6	1032.6	1250.8	1396.2	2210.7
		1117.6	19.05	1372.1	12939.1	315.25	357.64	400.03	3413	12	254.5	723034.8	4460.6	5352.7	5798.8	4593.4	5563.8	6210.7	9833.7
129-978	O	36	0.812	38.52	240.7	77.98	88.11	98.23	20	0.472	2.5	4332.9	1003	1203.6	1303.9	1032.8	1251	1396.5	2211.2
		914.4	20.638	978.4	12941.7	380.75	430.18	479.61	3413	12	64	591695.6	4461.5	5353.8	5800	4594.3	5564.9	6212	9835.7
129-1247	O	42	0.75	49.09	240.7	66.97	75.81	84.66	20	0.472	7.1	5055.4	1003.1	1203.7	1304	1032.9	1251.1	1396.6	2211.3
		1066.8	19.05	1246.8	12942.6	326.96	370.15	413.33	3413	12	180	690358.5	4461.8	5354.2	5800.3	4594.6	5565.3	6212.5	9836.4
129-1621	O	52	0.625	63.81	240.8	54.52	61.94	69.35	20	0.472	11.8	6259.6	1003.1	1203.8	1304.1	1033	1251.2	1396.7	2211.5
		1320.8	15.875	1620.8	12943.7	266.21	302.42	338.62	3413	12	300	854800.1	4462.2	5354.6	5800.8	4595	5565.8	6213	9837.2
130-1181	O	36	1	46.51	241.5	80.85	91.71	102.56	20	0.472	10.5	4347.5	1006.4	1207.6	1308.3	1036.3	1255.3	1401.2	2218.6
		914.4	25.4	1181.4	12985.2	394.73	447.75	500.77	3413	12	267	593685.3	4476.5	5371.8	5819.5	4609.8	5583.7	6232.9	9868.8
130-1181	O	36	1	46.51	241.5	80.85	91.71	102.56	20	0.472	10.5	4347.5	1006.4	1207.6	1308.3	1036.3	1255.3	1401.2	2218.6
		914.4	25.4	1181.4	12985.2	394.73	447.75	500.77	3413	12	267	593685.5	4476.5	5371.8	5819.5	4609.8	5583.7	6232.9	9868.8
130-928	O	34	0.875	36.52	241.6	83.36	94.18	105	20	0.472	2.5	4106.7	1006.5	1207.9	1308.5	1036.5	1255.5	1401.5	2219
		863.6	22.225	927.6	12987.6	407.02	459.83	512.64	3413	12	64	560806.4	4477.3	5372.8	5820.5	4610.6	5584.7	6234.1	9870.6
130-1168	O	38	0.875	45.99	241.6	75.43	85.48	95.52	20	0.472	8	4589.9	1006.6	1207.9	1308.5	1036.5	1255.5	1401.5	2219
		965.2	22.225	1168.2	12987.9	368.3	417.33	466.36	3413	12	203	626795.9	4477.4	5372.9	5820.6	4610.7	5584.8	6234.2	9870.8
130-1575	O	54	0.562	61.99	241.7	51.95	58.9	65.84	20	0.472	8	6525.5	1007	1208.4	1309.1	1037	1256.1	1402.1	2220.1
		1371.6	14.288	1574.6	12993.8	253.63	287.56	321.48	3413	12	203	891115.2	4479.5	5375.3	5823.3	4612.8	5587.3	6237	9875.3
130-1689	O	56	0.562	66.51	242.5	50.65	57.5	64.36	20	0.472	10.5	6790.8	1010.5	1212.6	1313.7	1040.6	1260.5	1407	2227.8
		1422.4	14.288	1689.4	13039.1	247.28	280.76	314.24	3413	12	267	927341.1	4495.1	5394.1	5843.6	4628.9	5606.8	6258.8	9909.7
130-1044	O	34	1	41.09	242.7	85.16	96.37	107.58	20	0.472	7.1	4125.5	1011.2	1213.4	1314.5	1041.3	1261.2	1407.9	2229.2
		863.6	25.4	1043.6	13047.2	415.78	470.52	525.26	3413	12	180	563379.6	4497.9	5397.4	5847.2	4631.8	5610.3	6262.7	9915.9
130-1334	O	42	0.812	52.51	242.7	68.61	77.85	87.1	20	0.472	10.5	5096.5	1011.2	1213.5	1314.6	1041.3	1261.3	1408	2229.3
		1066.8	20.638	1333.8	13047.9	334.98	380.11	425.24	3413	12	267	695973.2	4498.1	5397.7	5847.5	4632	5610.6	6263	9916.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
131-1116	O	40	0.75	43.94	243.3	70.59	79.79	89	20	0.472	3.9	4865.7	1013.7	1216.4	1317.8	1043.9	1264.4	1411.4	2234.8
		1016	19.05	1116	13079.9	344.65	389.59	434.52	3413	12	100	664460.6	4509.1	5411	5861.9	4643.4	5624.4	6278.4	9940.7
131-1727	O	60	0.5	67.99	243.3	46.9	53.18	59.45	20	0.472	8	7300.2	1013.9	1216.7	1318.1	1044.1	1264.7	1411.7	2235.3
		1524	12.7	1727	13082.8	228.98	259.62	290.27	3413	12	203	996907.9	4510.1	5412.2	5863.2	4644.4	5625.6	6279.7	9942.9
131-1334	O	50	0.562	52.52	244	55.67	62.9	70.14	20	0.472	2.5	6099.1	1016.5	1219.8	1321.5	1046.8	1267.9	1415.4	2241
		1270	14.288	1334	13116.3	271.8	307.12	342.45	3413	12	64	832886.1	4521.7	5426	5878.2	4656.3	5640	6295.8	9968.4
131-1169	O	36	1	46.02	244.1	81.51	92.41	103.32	20	0.472	10	4394	1017.1	1220.5	1322.3	1047.4	1268.7	1416.2	2242.3
		914.4	25.4	1168.9	13124.1	397.95	451.2	504.45	3413	12	254.5	600034.1	4524.4	5429.2	5881.7	4659.1	5643.4	6299.6	9974.3
131-1169	O	36	1	46.02	244.1	81.51	92.41	103.32	20	0.472	10	4394	1017.1	1220.5	1322.3	1047.4	1268.7	1416.2	2242.3
		914.4	25.4	1168.9	13124.1	397.95	451.2	504.45	3413	12	254.5	600034.2	4524.4	5429.2	5881.7	4659.1	5643.4	6299.6	9974.3
131-1232	O	38	0.938	48.51	244.2	76.98	87.32	97.66	20	0.472	10.5	4639.2	1017.4	1220.9	1322.6	1047.7	1269	1416.6	2242.9
		965.2	23.812	1232.2	13127.4	375.84	426.34	476.84	3413	12	267	633529.5	4525.5	5430.6	5883.2	4660.2	5644.8	6301.2	9976.8
131-1677	O	56	0.562	66.02	244.3	50.88	57.74	64.6	20	0.472	10	6841.4	1018.1	1221.7	1323.5	1048.4	1269.9	1417.5	2244.4
		1422.4	14.288	1676.9	13136.3	248.43	281.93	315.42	3413	12	254.5	934253.7	4528.6	5434.3	5887.2	4663.4	5648.6	6305.4	9983.6
131-1486	O	48	0.688	58.51	244.4	59.93	68.02	76.11	20	0.472	10.5	5865.3	1018.3	1221.9	1323.8	1048.6	1270.1	1417.8	2244.9
		1219.2	17.462	1486.2	13139	292.6	332.1	371.59	3413	12	267	800955.5	4529.5	5435.4	5888.4	4664.4	5649.8	6306.7	9985.7
131-1131	O	42	0.688	44.52	244.4	67.04	75.75	84.45	20	0.472	2.5	5132.5	1018.3	1222	1323.9	1048.7	1270.2	1417.9	2245
		1066.8	17.462	1130.8	13139.9	327.33	369.83	412.34	3413	12	64	700884.3	4529.8	5435.8	5888.8	4664.7	5650.2	6307.2	9986.4
131-913	O	32	1	35.94	244.4	90.77	102.58	114.39	20	0.472	3.9	3910.5	1018.4	1222	1323.9	1048.7	1270.2	1417.9	2245.1
		812.8	25.4	912.8	13140.2	443.16	500.83	558.49	3413	12	100	534018.4	4529.9	5435.9	5888.9	4664.8	5650.3	6307.3	9986.6
131-1351	O	44	0.75	53.17	244.5	65.41	74.17	82.93	20	0.472	9.2	5379	1018.7	1222.5	1324.4	1049.1	1270.7	1418.5	2245.9
		1117.6	19.05	1350.6	13145	319.36	362.12	404.89	3413	12	233	734544.6	4531.6	5437.9	5891.1	4666.5	5652.4	6309.6	9990.2
131-1473	O	50	0.625	57.99	244.6	56.95	64.55	72.16	20	0.472	8	6114.3	1019	1222.8	1324.8	1049.4	1271.1	1418.9	2246.6
		1270	15.875	1473	13148.9	278.05	315.18	352.31	3413	12	203	834955.9	4532.9	5439.5	5892.8	4667.9	5654	6311.5	9993.2
131-1283	O	40	0.875	50.51	244.6	72.89	82.69	92.5	20	0.472	10.5	4891.4	1019	1222.9	1324.8	1049.4	1271.1	1418.9	2246.6
		1016	22.225	1283	13149	355.88	403.75	451.62	3413	12	267	667968.8	4533	5439.5	5892.8	4667.9	5654.1	6311.5	9993.2
132-1196	O	40	0.812	47.09	244.8	71.78	81.24	90.71	20	0.472	7.1	4895.5	1019.9	1223.9	1325.9	1050.3	1272.1	1420.1	2248.4
		1016	20.638	1196	13159.9	350.45	396.67	442.89	3413	12	180	668522.6	4536.7	5444.1	5897.7	4671.8	5658.8	6316.7	10001.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
132-1321	O	42	0.812	52.02	245	69.08	78.35	87.62	20	0.472	10	5144.7	1020.8	1224.9	1327	1051.2	1273.2	1421.3	2250.4
		1066.8	20.638	1321.3	13171.3	337.26	382.52	427.78	3413	12	254.5	702557.3	4540.6	5448.8	5902.8	4675.8	5663.7	6322.2	10010.2
132-1552	O	54	0.562	61.09	245.3	52.33	59.26	66.18	20	0.472	7.1	6622.2	1021.9	1226.3	1328.5	1052.4	1274.7	1422.9	2253
		1371.6	14.288	1551.6	13186.4	255.52	289.32	323.12	3413	12	180	904324.6	4545.9	5455	5909.6	4681.2	5670.2	6329.5	10021.7
132-940	O	34.5	0.875	37.02	245.6	83.45	94.27	105.1	20	0.472	2.5	4237.4	1023.5	1228.2	1330.6	1054	1276.7	1425.1	2256.4
		876.3	22.225	940.3	13206.7	407.44	460.28	513.12	3413	12	64	578651.7	4552.9	5463.4	5918.7	4688.4	5678.9	6339.2	10037.1
132-1094	O	36	0.938	43.09	245.7	80.9	91.55	102.2	20	0.472	7.1	4422.9	1023.8	1228.6	1331	1054.3	1277	1425.5	2257.1
		914.4	23.812	1094.4	13210.6	394.98	446.99	499	3413	12	180	603988.5	4554.2	5465	5920.4	4689.8	5680.6	6341.1	10040.1
132-1588	O	52	0.625	62.51	245.8	55.41	62.89	70.38	20	0.472	10.5	6389.7	1024	1228.8	1331.2	1054.5	1277.2	1425.8	2257.5
		1320.8	15.875	1587.8	13212.7	270.53	307.08	343.63	3413	12	267	872565.8	4554.9	5465.9	5921.4	4690.5	5681.5	6342.1	10041.6
132-1486	O	56	0.5	58.52	245.8	49.86	56.34	62.82	20	0.472	2.5	6883.7	1024.4	1229.2	1331.7	1054.9	1277.7	1426.3	2258.3
		1422.4	12.7	1486.4	13217.6	243.43	275.07	306.71	3413	12	64	940036.3	4556.6	5467.9	5923.6	4692.3	5683.6	6344.5	10045.4
132-1145	O	38	0.875	45.09	246.4	76.43	86.5	96.57	20	0.472	7.1	4682.1	1026.8	1232.1	1334.8	1057.3	1280.7	1429.6	2263.6
		965.2	22.225	1145.2	13248.7	373.16	422.33	471.5	3413	12	180	639384.4	4567.3	5480.8	5937.5	4703.3	5697	6359.4	10069
133-1474	O	48	0.688	58.02	246.5	60.28	68.38	76.48	20	0.472	10	5915	1026.9	1232.3	1335	1057.5	1280.9	1429.8	2263.9
		1219.2	17.462	1473.7	13250.5	294.29	333.86	373.42	3413	12	254.5	807749.2	4567.9	5481.5	5938.3	4703.9	5697.7	6360.2	10070.4
133-1704	O	60	0.5	67.09	246.6	47.18	53.43	59.67	20	0.472	7.1	7398.7	1027.6	1233.1	1335.9	1058.2	1281.8	1430.8	2265.4
		1524	12.7	1704	13259.4	230.36	260.85	291.34	3413	12	180	1010363.8	4571	5485.2	5942.3	4707.1	5701.5	6364.5	10077.1
133-1220	O	38	0.938	48.02	246.7	77.57	87.95	98.34	20	0.472	10	4686.8	1027.8	1233.4	1336.1	1058.4	1282	1431.1	2265.9
		965.2	23.812	1219.7	13262	378.73	429.43	480.13	3413	12	254.5	640022.1	4571.9	5486.3	5943.5	4708	5702.6	6365.7	10079.1
133-1271	O	40	0.875	50.02	247	73.42	83.26	93.09	20	0.472	10	4939.6	1029.1	1234.9	1337.8	1059.7	1283.6	1432.8	2268.7
		1016	22.225	1270.5	13278.4	358.46	406.49	454.52	3413	12	254.5	674540.7	4577.6	5493.1	5950.8	4713.8	5709.7	6373.6	10091.6
133-1065	O	38	0.812	41.94	247.2	75.86	85.74	95.62	20	0.472	3.9	4697.5	1030.2	1236.2	1339.2	1060.8	1284.9	1434.3	2271
		965.2	20.638	1065.2	13292.2	370.38	418.62	466.86	3413	12	100	641483.3	4582.3	5498.8	5957	4718.7	5715.7	6380.3	10102.1
133-1655	O	56	0.562	65.17	247.5	51.39	58.29	65.19	20	0.472	9.2	6930.3	1031.3	1237.5	1340.7	1062	1286.4	1435.9	2273.5
		1422.4	14.288	1655.4	13306.9	250.91	284.6	318.29	3413	12	233	946387.6	4587.4	5504.9	5963.6	4724	5722	6387.3	10113.3
133-1575	O	52	0.625	62.02	247.7	55.7	63.19	70.69	20	0.472	10	6440.4	1032.1	1238.5	1341.7	1062.8	1287.4	1437.1	2275.4
		1320.8	15.875	1575.3	13317.5	271.93	308.52	345.12	3413	12	254.5	879489.6	4591.1	5509.3	5968.4	4727.7	5726.5	6392.4	10121.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
133-964	O	34	0.938	37.94	247.8	85.97	97.16	108.34	20	0.472	3.9	4212.2	1032.4	1238.9	1342.1	1063.1	1287.7	1437.5	2276
		863.6	23.812	963.6	13321.2	419.75	474.37	528.98	3413	12	100	575208.6	4592.3	5510.8	5970	4729	5728.1	6394.2	10124.1
133-1421	O	52	0.562	55.94	248.1	54.52	61.64	68.75	20	0.472	3.9	6450	1033.6	1240.4	1343.7	1064.4	1289.3	1439.2	2278.8
		1320.8	14.288	1420.8	13337.4	266.2	300.93	335.66	3413	12	100	880799.5	4597.9	5517.5	5977.3	4734.8	5735.1	6401.9	10136.4
134-1450	O	50	0.625	57.09	248.4	57.44	65.03	72.62	20	0.472	7.1	6211.2	1035.2	1242.2	1345.8	1066	1291.2	1441.4	2282.2
		1270	15.875	1450	13357.5	280.45	317.5	354.55	3413	12	180	848200	4604.8	5525.8	5986.3	4741.9	5743.7	6411.6	10151.7
134-1147	O	36	1	45.17	248.7	82.82	93.85	104.89	20	0.472	9.2	4476.3	1036.2	1243.4	1347	1067	1292.5	1442.7	2284.3
		914.4	25.4	1147.4	13370	404.34	458.23	512.12	3413	12	233	611277.5	4609.2	5531	5991.9	4746.4	5749.1	6417.6	10161.2
134-1147	O	36	1	45.17	248.7	82.82	93.85	104.89	20	0.472	9.2	4476.3	1036.2	1243.4	1347	1067	1292.5	1442.7	2284.3
		914.4	25.4	1147.4	13370	404.34	458.23	512.12	3413	12	233	611277.7	4609.2	5531	5991.9	4746.4	5749.1	6417.6	10161.2
134-1014	O	36	0.875	39.94	248.7	80.99	91.54	102.08	20	0.472	3.9	4477.1	1036.4	1243.6	1347.3	1067.2	1292.7	1443	2284.7
		914.4	22.225	1014.4	13372.3	395.44	446.91	498.39	3413	12	100	611381.1	4609.9	5531.9	5992.9	4747.2	5750.1	6418.7	10162.9
134-1300	O	42	0.812	51.17	249	70.03	79.39	88.74	20	0.472	9.2	5229.8	1037.7	1245.2	1349	1068.6	1294.3	1444.8	2287.6
		1066.8	20.638	1299.8	13389.2	341.9	387.59	433.29	3413	12	233	714178.3	4615.8	5538.9	6000.5	4753.2	5757.3	6426.8	10175.8
134-1218	O	44	0.688	47.94	249.7	65.43	73.95	82.48	20	0.472	3.9	5492.8	1040.3	1248.4	1352.4	1071.3	1297.6	1448.5	2293.4
		1117.6	17.462	1217.6	13423.2	319.45	361.08	402.71	3413	12	100	750087.9	4627.5	5553	6015.7	4765.2	5772	6443.1	10201.6
134-1321	O	44	0.75	51.99	250.1	66.64	75.51	84.38	20	0.472	8	5501.2	1041.9	1250.3	1354.4	1072.9	1299.6	1450.7	2296.9
		1117.6	19.05	1320.6	13443.7	325.35	368.66	411.98	3413	12	203	751231.3	4634.5	5561.4	6024.9	4772.5	5780.8	6453	10217.2
134-1452	O	48	0.688	57.17	250.1	60.99	69.16	77.33	20	0.472	9.2	6002.6	1042.1	1250.5	1354.8	1073.1	1299.9	1451	2297.4
		1219.2	17.462	1452.2	13446.7	297.8	337.67	377.54	3413	12	233	819708	4635.6	5562.7	6026.2	4773.6	5782.1	6454.4	10219.5
135-1198	O	38	0.938	47.17	251.1	78.75	89.25	99.75	20	0.472	9.2	4770.9	1046.2	1255.5	1360.1	1077.4	1305	1456.8	2306.5
		965.2	23.812	1198.2	13499.9	384.5	435.77	487.04	3413	12	233	651506.4	4653.9	5584.7	6050.1	4792.5	5805	6480	10259.9
135-1554	O	52	0.625	61.17	251.1	56.31	63.85	71.39	20	0.472	9.2	6529.5	1046.4	1255.7	1360.3	1077.5	1305.2	1457	2306.8
		1320.8	15.875	1553.8	13501.8	274.91	311.74	348.58	3413	12	233	891659.2	4654.6	5585.5	6051	4793.1	5805.8	6480.9	10261.4
135-1249	O	40	0.875	49.17	251.2	74.48	84.42	94.36	20	0.472	9.2	5024.6	1046.8	1256.1	1360.8	1078	1305.7	1457.5	2307.7
		1016	22.225	1249	13506.9	363.65	412.18	460.71	3413	12	233	686152.1	4656.4	5587.6	6053.3	4795	5808	6483.3	10265.3
135-1418	O	44	0.812	55.81	251.3	67.82	76.98	86.15	20	0.472	11.8	5528	1047	1256.4	1361.1	1078.1	1305.9	1457.8	2308.1
		1117.6	20.638	1417.6	13509.4	331.13	375.87	420.61	3413	12	300	754902.7	4657.2	5588.6	6054.3	4795.8	5809	6484.5	10267.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
135-1319	O	48	0.625	51.94	251.3	60.06	67.89	75.71	20	0.472	3.9	6030.7	1047	1256.4	1361.1	1078.2	1305.9	1457.8	2308.2
		1219.2	15.875	1319.2	13509.6	293.22	331.44	369.67	3413	12	100	823544.6	4657.3	5588.7	6054.4	4795.9	5809.1	6484.6	10267.3
135-1080	O	40	0.75	42.52	251.4	72.69	82.12	91.55	20	0.472	2.5	5027.9	1047.5	1257	1361.7	1078.7	1306.6	1458.5	2309.3
		1016	19.05	1080	13515.9	354.92	400.95	446.98	3413	12	64	686609.3	4659.5	5591.3	6057.3	4798.2	5811.9	6487.6	10272.1
135-1570	O	50	0.688	61.81	251.5	59.27	67.29	75.32	20	0.472	11.8	6286.4	1047.7	1257.3	1362.1	1078.9	1306.9	1458.8	2309.8
		1270	17.462	1570	13519.1	289.36	328.55	367.75	3413	12	300	858465	4660.6	5592.7	6058.7	4799.3	5813.2	6489.2	10274.5
136-1672	O	54	0.625	65.81	252.1	54.82	62.25	69.68	20	0.472	11.8	6806.1	1050.3	1260.4	1365.4	1081.6	1310.1	1462.4	2315.5
		1371.6	15.875	1671.6	13552.4	267.64	303.93	340.23	3413	12	300	929426.9	4672	5606.4	6073.7	4811.1	5827.6	6505.2	10299.9
136-1625	O	56	0.562	63.99	252.1	52.13	59.09	66.04	20	0.472	8	7058.2	1050.3	1260.4	1365.4	1081.6	1310.1	1462.4	2315.5
		1422.4	14.288	1625.4	13552.5	254.52	288.48	322.45	3413	12	203	963855.1	4672.1	5606.5	6073.7	4811.1	5827.6	6505.2	10299.9
136-1265	O	38	1	49.81	252.4	79.93	90.69	101.44	20	0.472	11.8	4795.5	1051.7	1262	1367.2	1083	1311.8	1464.3	2318.5
		965.2	25.4	1265.2	13569.7	390.24	442.77	495.3	3413	12	300	654874.3	4678	5613.6	6081.4	4817.2	5835	6513.5	10313
137-1367	O	42	0.875	53.81	253.9	72.05	81.77	91.48	20	0.472	11.8	5332	1057.9	1269.5	1375.3	1089.4	1319.6	1473	2332.3
		1066.8	22.225	1366.8	13650.8	351.77	399.21	446.66	3413	12	300	728135.1	4706	5647.1	6117.7	4846	5869.9	6552.4	10374.6
137-1316	O	40	0.938	51.81	254.3	76.09	86.34	96.59	20	0.472	11.8	5085.3	1059.4	1271.3	1377.3	1091	1321.5	1475.1	2335.6
		1016	23.812	1316	13670.3	371.51	421.55	471.59	3413	12	300	694449.1	4712.7	5655.2	6126.4	4852.9	5878.2	6561.7	10389.4
137-877	O	32	1	34.52	254.4	94.19	106.38	118.57	20	0.472	2.5	4071.1	1060.2	1272.2	1378.2	1091.7	1322.4	1476.2	2337.2
		812.8	25.4	876.8	13679.7	459.86	519.39	578.92	3413	12	64	555944.3	4715.9	5659.1	6130.7	4856.3	5882.3	6566.3	10396.6
137-1298	O	44	0.75	51.09	254.5	67.36	76.23	85.11	20	0.472	7.1	5598.7	1060.4	1272.4	1378.5	1091.9	1322.6	1476.4	2337.6
		1117.6	19.05	1297.6	13681.9	328.87	372.21	415.54	3413	12	180	764546.9	4716.7	5660	6131.7	4857.1	5883.2	6567.3	10398.3
137-1385	O	52	0.562	54.52	254.5	55.75	62.98	70.21	20	0.472	2.5	6617.6	1060.5	1272.6	1378.7	1092.1	1322.8	1476.6	2338
		1320.8	14.288	1384.8	13684.1	272.17	307.49	342.81	3413	12	64	903697.3	4717.4	5660.9	6132.6	4857.9	5884.2	6568.4	10399.9
137-1270	O	42	0.812	49.99	254.9	71.41	80.9	90.39	20	0.472	8	5353.4	1062.2	1274.6	1380.8	1093.8	1324.9	1478.9	2341.7
		1066.8	20.638	1269.8	13705.5	348.66	395	441.33	3413	12	203	731051.3	4724.8	5669.8	6142.2	4865.5	5893.4	6578.6	10416.2
137-1117	O	36	1	43.99	255.4	84.73	95.96	107.2	20	0.472	8	4596.5	1064	1276.8	1383.2	1095.7	1327.2	1481.5	2345.7
		914.4	25.4	1117.4	13729	413.7	468.54	523.38	3413	12	203	627689.1	4732.9	5679.5	6152.8	4873.8	5903.5	6589.9	10434
137-1117	O	36	1	43.99	255.4	84.73	95.96	107.2	20	0.472	8	4596.5	1064	1276.8	1383.2	1095.7	1327.2	1481.5	2345.7
		914.4	25.4	1117.4	13729	413.7	468.54	523.38	3413	12	203	627689.3	4732.9	5679.5	6152.8	4873.8	5903.5	6589.9	10434

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
137-1422	O	48	0.688	55.99	255.4	62.04	70.3	78.56	20	0.472	8	6129.2	1064.1	1276.9	1383.3	1095.8	1327.3	1481.6	2345.9
		1219.2	17.462	1422.2	13730.3	302.91	343.23	383.55	3413	12	203	836999	4733.4	5680	6153.4	4874.3	5904	6590.5	10435
137-1602	O	56	0.562	63.09	255.7	52.51	59.44	66.37	20	0.472	7.1	7159.5	1065.4	1278.5	1385	1097.1	1328.9	1483.4	2348.7
		1422.4	14.288	1602.4	13747	256.36	290.2	324.05	3413	12	180	977689.7	4739.1	5686.9	6160.9	4880.2	5911.2	6598.6	10447.8
138-1029	O	38	0.812	40.52	255.9	78.25	88.39	98.53	20	0.472	2.5	4861.8	1066.2	1279.4	1386	1097.9	1329.9	1484.5	2350.5
		965.2	20.638	1029.2	13757.2	382.06	431.56	481.06	3413	12	64	663921.5	4742.6	5691.1	6165.4	4883.8	5915.6	6603.4	10455.5
138-1524	O	52	0.625	59.99	256.1	57.19	64.81	72.43	20	0.472	8	6658	1067	1280.4	1387.1	1098.8	1330.9	1485.6	2352.3
		1320.8	15.875	1523.8	13767.6	279.22	316.42	353.61	3413	12	203	909213.8	4746.2	5695.5	6170.1	4887.5	5920.1	6608.5	10463.4
138-1537	O	50	0.688	60.51	256.9	60.28	68.39	76.51	20	0.472	10.5	6421.4	1070.2	1284.3	1391.3	1102.1	1334.9	1490.1	2359.4
		1270	17.462	1537	13809.4	294.32	333.93	373.55	3413	12	267	876896.6	4760.6	5712.7	6188.8	4902.3	5938	6628.5	10495.1
138-1639	O	54	0.625	64.51	257.2	55.68	63.18	70.68	20	0.472	10.5	6943.1	1071.5	1285.8	1392.9	1103.4	1336.5	1491.9	2362.1
		1371.6	15.875	1638.6	13825.4	271.85	308.48	345.11	3413	12	267	948144.8	4766.1	5719.4	6196	4908	5944.9	6636.2	10507.3
138-1167	O	42	0.75	45.94	257.2	70.87	80.09	89.31	20	0.472	3.9	5402	1071.8	1286.2	1393.4	1103.7	1336.9	1492.4	2362.9
		1066.8	19.05	1166.8	13830	346.01	391.03	436.06	3413	12	100	737692	4767.7	5721.3	6198	4909.6	5946.9	6638.4	10510.8
138-1385	O	44	0.812	54.51	257.3	69.15	78.44	87.72	20	0.472	10.5	5659.8	1071.9	1286.3	1393.5	1103.8	1337	1492.5	2363.1
		1117.6	20.638	1384.6	13831.3	337.63	382.97	428.31	3413	12	267	772894.7	4768.2	5721.8	6198.6	4910.1	5947.5	6639	10511.8
138-1182	O	44	0.688	46.52	257.3	67.19	75.9	84.61	20	0.472	2.5	5660.1	1072	1286.4	1393.6	1103.9	1337.1	1492.6	2363.3
		1117.6	17.462	1181.6	13832.2	328.07	370.59	413.12	3413	12	64	772940.9	4768.5	5722.2	6199	4910.4	5947.8	6639.4	10512.4
138-928	O	34	0.938	36.52	257.4	89.02	100.54	112.07	20	0.472	2.5	4375.6	1072.5	1287	1394.2	1104.4	1337.7	1493.3	2364.3
		863.6	23.812	927.6	13838.2	434.62	490.89	547.15	3413	12	64	597532.3	4770.5	5724.6	6201.7	4912.6	5950.4	6642.3	10517
138-1219	O	40	0.875	47.99	257.4	76.03	86.12	96.22	20	0.472	8	5148.2	1072.6	1287.1	1394.3	1104.5	1337.8	1493.4	2364.5
		1016	22.225	1219	13839.3	371.23	420.5	469.77	3413	12	203	703038.6	4770.9	5725.1	6202.2	4913	5950.9	6642.9	10517.9
138-1168	O	38	0.938	45.99	257.5	80.48	91.15	101.83	20	0.472	8	4893.4	1073.1	1287.7	1395	1105.1	1338.5	1494.2	2365.8
		965.2	23.812	1168.2	13846.6	392.94	445.05	497.16	3413	12	203	668237.5	4773.5	5728.1	6205.5	4915.5	5954	6646.4	10523.4
139-978	O	36	0.875	38.52	257.9	83.7	94.54	105.37	20	0.472	2.5	4641.8	1074.5	1289.4	1396.8	1106.5	1340.2	1496.1	2368.8
		914.4	22.225	978.4	13864.3	408.65	461.57	514.49	3413	12	64	633876.7	4779.6	5735.5	6213.4	4921.8	5961.7	6654.9	10536.9
139-1283	O	48	0.625	50.52	258.3	61.53	69.51	77.49	20	0.472	2.5	6199.9	1076.4	1291.6	1399.3	1108.4	1342.6	1498.7	2372.9
		1219.2	15.875	1283.2	13888.6	300.42	339.38	378.33	3413	12	64	846649	4787.9	5745.5	6224.3	4930.5	5972.1	6666.5	10555.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
139-1824	O	60	0.562	71.81	258.4	50.34	57.17	63.99	20	0.472	11.8	7751.6	1076.6	1291.9	1399.6	1108.7	1342.9	1499	2373.5
		1524	14.288	1824	13891.8	245.8	279.12	312.45	3413	12	300	1058552.6	4789	5746.8	6225.7	4931.6	5973.5	6668	10557.7
139-1472	O	54	0.562	57.94	258.6	54.63	61.75	68.87	20	0.472	3.9	6982.2	1077.5	1293	1400.8	1109.6	1344	1500.3	2375.4
		1371.6	14.288	1471.6	13903.3	266.74	301.49	336.24	3413	12	100	953486	4793	5751.6	6230.9	4935.7	5978.4	6673.6	10566.5
139-1624	O	60	0.5	63.94	258.8	49.01	55.4	61.79	20	0.472	3.9	7763.2	1078.2	1293.9	1401.7	1110.3	1344.9	1501.3	2377
		1524	12.7	1624	13912.5	239.29	270.48	301.66	3413	12	100	1060135.5	4796.2	5755.4	6235	4939	5982.4	6678	10573.5
139-1525	O	50	0.688	60.02	259	60.62	68.75	76.87	20	0.472	10	6474	1079	1294.8	1402.7	1111.1	1345.9	1502.4	2378.7
		1270	17.462	1524.5	13922.6	295.96	335.65	375.33	3413	12	254.5	884086.6	4799.7	5759.6	6239.5	4942.5	5986.7	6682.9	10581.2
139-1626	O	54	0.625	64.02	259.1	55.96	63.47	70.98	20	0.472	10	6996.5	1079.7	1295.6	1403.6	1111.8	1346.7	1503.3	2380.3
		1371.6	15.875	1626.1	13931.7	273.22	309.89	346.57	3413	12	254.5	955433.2	4802.8	5763.3	6243.6	4945.7	5990.6	6687.2	10588.1
139-1232	O	38	1	48.51	259.2	81.75	92.69	103.63	20	0.472	10.5	4924	1079.8	1295.8	1403.8	1112	1346.9	1503.5	2380.5
		965.2	25.4	1232.2	13933.1	399.12	452.53	505.95	3413	12	267	672412.8	4803.3	5763.9	6244.3	4946.3	5991.2	6687.9	10589.2
140-1399	O	48	0.688	55.09	259.6	62.63	70.89	79.14	20	0.472	7.1	6230	1081.6	1297.9	1406.1	1113.8	1349.1	1506	2384.4
		1219.2	17.462	1399.2	13956	305.81	346.1	386.39	3413	12	180	850757.6	4811.2	5773.4	6254.5	4954.4	6001.1	6698.9	10606.6
140-1372	O	44	0.812	54.02	259.6	69.61	78.92	88.23	20	0.472	10	5711.4	1081.7	1298	1406.2	1113.9	1349.2	1506.1	2384.7
		1117.6	20.638	1372.1	13957.3	339.85	385.32	430.79	3413	12	254.5	779935.9	4811.6	5773.9	6255.1	4954.9	6001.7	6699.5	10607.6
140-1247	O	42	0.812	49.09	259.6	72.25	81.76	91.26	20	0.472	7.1	5452.1	1081.8	1298.1	1406.3	1114	1349.3	1506.2	2384.8
		1066.8	20.638	1246.8	13958.3	352.76	399.17	445.59	3413	12	180	744537.2	4812	5774.4	6255.6	4955.2	6002.1	6700	10608.3
140-1519	O	48	0.75	59.81	259.8	63.88	72.51	81.13	20	0.472	11.8	6235	1082.5	1299	1407.2	1114.7	1350.2	1507.2	2386.4
		1219.2	19.05	1519.2	13967.2	311.9	354.01	396.12	3413	12	300	851441.5	4815	5778	6259.5	4958.4	6005.9	6704.3	10615.1
140-1501	O	52	0.625	59.09	260	57.67	65.27	72.87	20	0.472	7.1	6760.1	1083.3	1300	1408.3	1115.6	1351.3	1508.4	2388.3
		1320.8	15.875	1500.8	13978.6	281.56	318.68	355.8	3413	12	180	923147.7	4819	5782.7	6264.6	4962.4	6010.8	6709.7	10623.7
140-1334	O	42	0.875	52.51	260.2	73.53	83.39	93.25	20	0.472	10.5	5463.9	1084.1	1300.9	1409.4	1116.4	1352.2	1509.5	2390
		1066.8	22.225	1333.8	13988.6	359.02	407.16	455.29	3413	12	267	746150.1	4822.4	5786.9	6269.1	4965.9	6015.1	6714.5	10631.3
140-1094	O	36	1	43.09	260.7	85.97	97.26	108.54	20	0.472	7.1	4693.1	1086.4	1303.6	1412.3	1118.7	1355	1512.6	2395
		914.4	25.4	1094.4	14017.5	419.74	474.85	529.95	3413	12	180	640880.7	4832.4	5798.8	6282.1	4976.2	6027.5	6728.4	10653.3
140-1094	O	36	1	43.09	260.7	85.97	97.26	108.54	20	0.472	7.1	4693.1	1086.4	1303.6	1412.3	1118.7	1355	1512.6	2395
		914.4	25.4	1094.4	14017.5	419.74	474.85	529.95	3413	12	180	640880.8	4832.4	5798.8	6282.1	4976.2	6027.5	6728.4	10653.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
140-1283	O	40	0.938	50.51	260.8	77.74	88.15	98.56	20	0.472	10.5	5216.1	1086.7	1304	1412.7	1119	1355.5	1513.1	2395.7
		1016	23.812	1283	14021.9	379.56	430.39	481.21	3413	12	267	712311	4833.9	5800.6	6284	4977.8	6029.4	6730.5	10656.6
141-1220	O	38	1	48.02	261.8	82.39	93.37	104.36	20	0.472	10	4974.4	1090.9	1309.1	1418.2	1123.4	1360.7	1518.9	2404.9
		965.2	25.4	1219.7	14075.9	402.25	455.89	509.53	3413	12	254.5	679303.9	4852.5	5823	6308.3	4997	6052.6	6756.4	10697.7
141-1116	O	40	0.812	43.94	262.3	76.2	86.11	96.01	20	0.472	3.9	5246.4	1093	1311.6	1420.9	1125.5	1363.3	1521.9	2409.6
		1016	20.638	1116	14103.3	372.05	420.41	468.77	3413	12	100	716445.3	4861.9	5834.3	6320.5	5006.7	6064.4	6769.6	10718.5
141-1196	O	40	0.875	47.09	262.4	77	87.12	97.24	20	0.472	7.1	5247.3	1093.2	1311.8	1421.1	1125.7	1363.5	1522.1	2410
		1016	22.225	1196	14105.5	375.93	425.34	474.75	3413	12	180	716558.5	4862.7	5835.2	6321.5	5007.4	6065.4	6770.6	10720.2
141-1605	O	54	0.625	63.17	262.6	56.55	64.11	71.67	20	0.472	9.2	7090.2	1094.2	1313	1422.4	1126.7	1364.8	1523.5	2412.2
		1371.6	15.875	1604.6	14118.3	276.12	313.03	349.94	3413	12	233	968235.1	4867.1	5840.5	6327.3	5012	6070.9	6776.8	10729.9
141-1321	O	42	0.875	52.02	262.6	74.05	83.94	93.83	20	0.472	10	5515.6	1094.4	1313.2	1422.7	1126.9	1365	1523.8	2412.6
		1066.8	22.225	1321.3	14120.9	361.53	409.83	458.12	3413	12	254.5	753209	4868	5841.6	6328.4	5012.9	6072	6778	10731.9
141-1503	O	50	0.688	59.17	262.7	61.32	69.51	77.69	20	0.472	9.2	6566.6	1094.4	1313.3	1422.8	1127	1365.1	1523.9	2412.8
		1270	17.462	1503	14121.8	299.38	339.36	379.34	3413	12	233	896733.2	4868.3	5842	6328.8	5013.2	6072.4	6778.5	10732.6
141-1145	O	38	0.938	45.09	262.7	81.58	92.29	103.01	20	0.472	7.1	4991.7	1094.7	1313.6	1423.1	1127.3	1365.4	1524.2	2413.3
		965.2	23.812	1145.2	14124.7	398.3	450.61	502.92	3413	12	180	681658.2	4869.3	5843.2	6330.1	5014.3	6073.6	6779.9	10734.8
141-964	O	34	1	37.94	262.8	91.39	103.26	115.12	20	0.472	3.9	4468.1	1095.1	1314.1	1423.6	1127.7	1366	1524.8	2414.3
		863.6	25.4	963.6	14130.4	446.22	504.14	562.07	3413	12	100	610152.6	4871.3	5845.6	6332.7	5016.3	6076.1	6782.6	10739.1
141-1370	O	50	0.625	53.94	263	60.21	68.04	75.88	20	0.472	3.9	6573.9	1095.7	1314.8	1424.4	1128.3	1366.6	1525.6	2415.5
		1270	15.875	1370	14137.5	293.96	332.22	370.48	3413	12	100	897729.9	4873.7	5848.5	6335.8	5018.8	6079.1	6786	10744.5
141-1791	O	60	0.562	70.51	263.1	51.05	57.93	64.8	20	0.472	10.5	7894.4	1096.5	1315.7	1425.4	1129.1	1367.6	1526.7	2417.2
		1524	14.288	1791	14147.7	249.25	282.83	316.41	3413	12	267	1078057	4877.3	5852.7	6340.4	5022.4	6083.5	6790.9	10752.3
142-1271	O	40	0.938	50.02	263.4	78.32	88.77	99.22	20	0.472	10	5267.5	1097.4	1316.9	1426.6	1130.1	1368.8	1528	2419.3
		1016	23.812	1270.5	14159.8	382.37	433.39	484.41	3413	12	254.5	719319.2	4881.4	5857.7	6345.9	5026.7	6088.7	6796.7	10761.5
142-1722	O	56	0.625	67.81	263.4	55.09	62.54	69.99	20	0.472	11.8	7376	1097.6	1317.1	1426.9	1130.3	1369.1	1528.3	2419.8
		1422.4	15.875	1722.4	14162.7	268.98	305.36	341.74	3413	12	300	1007251.5	4882.4	5858.9	6347.1	5027.8	6090	6798.1	10763.7
142-1351	O	44	0.812	53.17	263.7	70.53	79.93	89.33	20	0.472	9.2	5802.3	1098.9	1318.7	1428.6	1131.6	1370.7	1530.1	2422.6
		1117.6	20.638	1350.6	14179.5	344.35	390.24	436.13	3413	12	233	792351.5	4888.2	5865.9	6354.7	5033.7	6097.2	6806.2	10776.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
142-1621	O	52	0.688	63.81	263.9	59.62	67.67	75.72	20	0.472	11.8	6860.7	1099.5	1319.4	1429.3	1132.2	1371.4	1530.9	2423.8
		1320.8	17.462	1620.8	14186.6	291.09	330.4	369.72	3413	12	300	936883	4890.7	5868.8	6357.9	5036.2	6100.2	6809.6	10781.8
142-1588	O	60	0.5	62.52	264.6	49.95	56.43	62.9	20	0.472	2.5	7939.2	1102.7	1323.2	1433.5	1135.5	1375.4	1535.3	2430.9
		1524	12.7	1588	14227.9	243.89	275.51	307.12	3413	12	64	1084168.8	4904.9	5885.9	6376.4	5050.9	6118	6829.4	10813.2
142-1065	O	38	0.875	41.94	264.9	81.41	91.99	102.56	20	0.472	3.9	5033.8	1103.9	1324.7	1435.1	1136.8	1376.9	1537	2433.6
		965.2	22.225	1065.2	14243.8	397.5	449.13	500.76	3413	12	100	687404.2	4910.4	5892.4	6383.5	5056.5	6124.8	6837	10825.3
142-1779	O	60	0.562	70.02	265	51.27	58.15	65.04	20	0.472	10	7949.9	1104.2	1325	1435.4	1137	1377.2	1537.4	2434.2
		1524	14.288	1778.5	14247.2	250.34	283.94	317.53	3413	12	254.5	1085634	4911.5	5893.8	6385	5057.7	6126.3	6838.6	10827.8
143-1436	O	54	0.562	56.52	265.1	55.82	63.05	70.28	20	0.472	2.5	7157.3	1104.5	1325.4	1435.9	1137.4	1377.7	1537.9	2435
		1371.6	14.288	1435.6	14251.9	272.52	307.83	343.15	3413	12	64	977396.2	4913.2	5895.8	6387.1	5059.4	6128.3	6840.9	10831.5
143-1014	O	36	0.938	39.94	265.1	86.48	97.71	108.94	20	0.472	3.9	4771.7	1104.6	1325.5	1435.9	1137.4	1377.8	1538	2435.1
		914.4	23.812	1014.4	14252.4	422.25	477.08	531.9	3413	12	100	651621.6	4913.4	5896	6387.4	5059.6	6128.6	6841.2	10831.9
143-1131	O	42	0.75	44.52	265.4	72.89	82.32	91.76	20	0.472	2.5	5574	1105.9	1327.1	1437.7	1138.9	1379.5	1539.9	2438.1
		1066.8	19.05	1130.8	14270.3	355.86	401.93	448.01	3413	12	64	761177	4919.5	5903.4	6395.4	5066	6136.2	6849.7	10845.4
143-1486	O	48	0.75	58.51	265.6	65.03	73.76	82.49	20	0.472	10.5	6373.4	1106.5	1327.8	1438.4	1139.4	1380.2	1540.6	2439.4
		1219.2	19.05	1486.2	14277.3	317.53	360.14	402.75	3413	12	267	870347.2	4921.9	5906.3	6398.5	5068.5	6139.3	6853.1	10850.8
143-1198	O	38	1	47.17	266.5	83.66	94.77	105.88	20	0.472	9.2	5063.7	1110.5	1332.6	1443.6	1143.5	1385.1	1546.2	2448.1
		965.2	25.4	1198.2	14328.5	408.44	462.71	516.97	3413	12	233	691493.1	4939.6	5927.5	6421.4	5086.6	6161.3	6877.7	10889.7
144-1300	O	42	0.875	51.17	267	75.08	85.07	95.06	20	0.472	9.2	5606.9	1112.5	1335	1446.2	1145.6	1387.6	1549	2452.5
		1066.8	22.225	1299.8	14354.5	366.57	415.35	464.13	3413	12	233	765667.8	4948.5	5938.2	6433.1	5095.8	6172.4	6890.1	10909.4
144-1575	O	54	0.625	61.99	267.6	57.41	65.04	72.68	20	0.472	8	7225.3	1115	1338	1449.5	1148.2	1390.8	1552.5	2458.1
		1371.6	15.875	1574.6	14387.3	280.32	317.58	354.83	3413	12	203	986682.3	4959.9	5951.8	6447.8	5107.5	6186.5	6905.9	10934.4
144-1474	O	48	0.75	58.02	267.8	65.42	74.17	82.92	20	0.472	10	6427.5	1115.9	1339.1	1450.6	1149.1	1391.9	1553.7	2460
		1219.2	19.05	1473.7	14398.5	319.42	362.13	404.84	3413	12	254.5	877729.5	4963.7	5956.4	6452.8	5111.4	6191.3	6911.3	10942.8
144-1249	O	40	0.938	49.17	267.9	79.46	90.03	100.59	20	0.472	9.2	5358.1	1116.3	1339.5	1451.2	1149.5	1392.4	1554.3	2460.9
		1016	23.812	1249	14403.6	387.97	439.54	491.12	3413	12	233	731701.4	4965.5	5958.5	6455.1	5113.3	6193.5	6913.7	10946.7
144-1473	O	50	0.688	57.99	268	62.33	70.61	78.89	20	0.472	8	6700.4	1116.7	1340.1	1451.7	1150	1392.9	1554.9	2461.9
		1270	17.462	1473	14409.4	304.34	344.76	385.17	3413	12	203	914996.6	4967.5	5961	6457.7	5115.3	6196	6916.5	10951.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
144-1757	O	60	0.562	69.17	268.2	51.76	58.68	65.59	20	0.472	9.2	8047.2	1117.7	1341.2	1453	1150.9	1394.1	1556.2	2464
		1524	14.288	1757	14421.5	252.71	286.48	320.26	3413	12	233	1098918.6	4971.6	5966	6463.1	5119.6	6201.2	6922.3	10960.3
144-1689	O	56	0.625	66.51	268.6	55.93	63.45	70.97	20	0.472	10.5	7520	1119.1	1342.9	1454.8	1152.4	1395.8	1558.1	2467
		1422.4	15.875	1689.4	14439.4	273.09	309.8	346.51	3413	12	267	1026926.7	4977.8	5973.3	6471.1	5126	6208.9	6930.9	10973.9
145-1522	O	56	0.562	59.94	269.1	54.74	61.86	68.98	20	0.472	3.9	7535.7	1121.4	1345.7	1457.8	1154.8	1398.7	1561.4	2472.2
		1422.4	14.288	1522.4	14469.4	267.25	302.01	336.78	3413	12	100	1029065.9	4988.2	5985.8	6484.6	5136.6	6221.9	6945.3	10996.8
145-1588	O	52	0.688	62.51	269.4	60.61	68.75	76.88	20	0.472	10.5	7003.2	1122.3	1346.8	1459	1155.7	1399.9	1562.7	2474.2
		1320.8	17.462	1587.8	14481.4	295.92	335.65	375.37	3413	12	267	956354.7	4992.3	5990.8	6490	5140.9	6227	6951.1	11005.9
145-1418	O	44	0.875	55.81	269.4	72.68	82.46	92.23	20	0.472	11.8	5927.8	1122.7	1347.2	1459.5	1156.1	1400.4	1563.2	2475.1
		1117.6	22.225	1417.6	14486.3	354.88	402.58	450.29	3413	12	300	809494.9	4994	5992.8	6492.2	5142.6	6229.1	6953.4	11009.6
145-1321	O	44	0.812	51.99	269.7	71.87	81.4	90.92	20	0.472	8	5934.1	1123.9	1348.7	1461	1157.3	1401.8	1564.8	2477.7
		1117.6	20.638	1320.6	14501.6	350.91	397.42	443.93	3413	12	203	810351.4	4999.3	5999.1	6499	5148.1	6235.7	6960.8	11021.2
145-1316	O	40	1	51.81	269.9	80.8	91.64	102.48	20	0.472	11.8	5398.8	1124.8	1349.7	1462.2	1158.2	1402.9	1566.1	2479.6
		1016	25.4	1316	14512.9	394.52	447.44	500.36	3413	12	300	737255.3	5003.1	6003.8	6504.1	5152.1	6240.5	6966.2	11029.8
145-1316	O	40	1	51.81	269.9	80.8	91.64	102.48	20	0.472	11.8	5398.8	1124.8	1349.7	1462.2	1158.2	1402.9	1566.1	2479.6
		1016	25.4	1316	14512.9	394.52	447.44	500.36	3413	12	300	737255.7	5003.2	6003.8	6504.1	5152.1	6240.5	6966.2	11029.8
145-1334	O	50	0.625	52.52	270.1	61.63	69.61	77.59	20	0.472	2.5	6751.3	1125.2	1350.3	1462.8	1158.7	1403.5	1566.7	2480.6
		1270	15.875	1334	14519	300.91	339.87	378.83	3413	12	64	921956.5	5005.3	6006.3	6506.8	5154.2	6243.2	6969.1	11034.4
145-1677	O	56	0.625	66.02	270.6	56.21	63.73	71.26	20	0.472	10	7576.1	1127.4	1352.9	1465.6	1161	1406.2	1569.7	2485.4
		1422.4	15.875	1676.9	14547	274.43	311.18	347.93	3413	12	254.5	1034581.7	5014.9	6017.9	6519.4	5164.2	6255.2	6982.6	11055.7
146-1367	O	42	0.938	53.81	270.8	76.84	87.15	97.47	20	0.472	11.8	5687.3	1128.4	1354.1	1467	1162	1407.5	1571.2	2487.7
		1066.8	23.812	1366.8	14560.3	375.16	425.53	475.89	3413	12	300	776646.2	5019.5	6023.4	6525.3	5168.9	6260.9	6988.9	11065.8
146-1080	O	40	0.812	42.52	271.1	78.49	88.65	98.8	20	0.472	2.5	5421.3	1129.4	1355.3	1468.3	1163.1	1408.8	1572.6	2489.9
		1016	20.638	1080	14573.4	383.24	432.8	482.37	3413	12	64	740326.9	5024	6028.8	6531.2	5173.5	6266.5	6995.2	11075.8
146-1218	O	44	0.75	47.94	271.2	71.12	80.36	89.6	20	0.472	3.9	5966.5	1130	1356	1469	1163.7	1409.5	1573.4	2491.2
		1117.6	19.05	1217.6	14580.9	347.25	392.36	437.47	3413	12	100	814779.9	5026.6	6031.9	6534.6	5176.2	6269.8	6998.8	11081.5
146-1575	O	52	0.688	62.02	271.5	60.94	69.09	77.24	20	0.472	10	7058.8	1131.2	1357.5	1470.6	1164.9	1411	1575.1	2493.9
		1320.8	17.462	1575.3	14596.4	297.53	337.32	377.11	3413	12	254.5	963943.4	5031.9	6038.3	6541.5	5181.7	6276.4	7006.3	11093.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
146-1552	O	54	0.625	61.09	271.6	57.88	65.5	73.11	20	0.472	7.1	7332.4	1131.5	1357.9	1471	1165.2	1411.4	1575.5	2494.6
		1371.6	15.875	1551.6	14600.6	282.6	319.79	356.97	3413	12	180	1001308.3	5033.4	6040	6543.4	5183.2	6278.3	7008.3	11096.4
146-1452	O	48	0.75	57.17	271.8	66.22	75.04	83.86	20	0.472	9.2	6522.6	1132.4	1358.9	1472.1	1166.1	1412.5	1576.7	2496.5
		1219.2	19.05	1452.2	14611.6	323.31	366.37	409.43	3413	12	233	890724.4	5037.2	6044.6	6548.3	5187.1	6283	7013.6	11104.8
146-1450	O	50	0.688	57.09	272.3	62.91	71.18	79.46	20	0.472	7.1	6806.7	1134.4	1361.3	1474.8	1168.2	1415	1579.6	2501
		1270	17.462	1450	14638	307.17	347.55	387.94	3413	12	180	929510.3	5046.3	6055.5	6560.1	5196.5	6294.3	7026.2	11124.8
147-1727	O	60	0.562	67.99	272.9	52.46	59.43	66.4	20	0.472	8	8187	1137.1	1364.5	1478.2	1170.9	1418.3	1583.2	2506.8
		1524	14.288	1727	14672	256.13	290.17	324.21	3413	12	203	1118008.1	5058	6069.6	6575.4	5208.6	6309	7042.6	11150.7
147-928	O	34	1	36.52	273	94.65	106.88	119.11	20	0.472	2.5	4641.5	1137.6	1365.1	1478.9	1171.5	1419	1584	2508
		863.6	25.4	927.6	14678.8	462.12	521.82	581.52	3413	12	64	633832.5	5060.4	6072.4	6578.5	5211	6311.9	7045.8	11155.9
147-1570	O	50	0.75	61.81	273.3	64.31	72.96	81.62	20	0.472	11.8	6832.1	1138.7	1366.4	1480.3	1172.6	1420.3	1585.5	2510.3
		1270	19.05	1570	14692.7	313.97	356.24	398.51	3413	12	300	932987.3	5065.1	6078.2	6584.7	5215.9	6317.9	7052.5	11166.5
147-1270	O	42	0.875	49.99	273.3	76.58	86.72	96.86	20	0.472	8	5739.3	1138.8	1366.5	1480.4	1172.7	1420.4	1585.6	2510.5
		1066.8	22.225	1269.8	14693.6	373.92	423.41	472.9	3413	12	203	783757.3	5065.4	6078.5	6585.1	5216.2	6318.3	7052.9	11167.1
147-1168	O	38	1	45.99	273.4	85.51	96.81	108.11	20	0.472	8	5193.7	1139	1366.8	1480.7	1172.9	1420.7	1585.9	2511
		965.2	25.4	1168.2	14696.5	417.5	472.68	527.86	3413	12	203	709251	5066.4	6079.7	6586.3	5217.2	6319.5	7054.3	11169.3
147-1655	O	56	0.625	65.17	274.1	56.79	64.36	71.93	20	0.472	9.2	7674.5	1142	1370.4	1484.6	1176	1424.5	1590.1	2517.7
		1422.4	15.875	1655.4	14735.9	277.26	314.23	351.21	3413	12	233	1048018.6	5080	6096	6604	5231.3	6336.4	7073.2	11199.3
147-1029	O	38	0.875	40.52	274.2	84	94.86	105.71	20	0.472	2.5	5209.8	1142.5	1371	1485.3	1176.5	1425.1	1590.8	2518.7
		965.2	22.225	1029.2	14742	410.12	463.13	516.14	3413	12	64	711448.7	5082.1	6098.5	6606.8	5233.4	6339.1	7076.2	11203.9
148-1219	O	40	0.938	47.99	274.5	81.14	91.87	102.6	20	0.472	8	5490	1143.8	1372.5	1486.9	1177.8	1426.6	1592.5	2521.5
		1016	23.812	1219	14758	396.15	448.53	500.92	3413	12	203	749708.8	5087.7	6105.2	6614	5239.1	6346	7083.9	11216.1
148-1298	O	44	0.812	51.09	274.5	72.69	82.23	91.77	20	0.472	7.1	6039.3	1143.8	1372.6	1486.9	1177.8	1426.7	1592.6	2521.6
		1117.6	20.638	1297.6	14758.7	354.89	401.48	448.07	3413	12	180	824714.9	5087.9	6105.4	6614.2	5239.3	6346.2	7084.2	11216.6
148-1421	O	52	0.625	55.94	274.6	60.35	68.19	76.03	20	0.472	3.9	7140.7	1144.3	1373.2	1487.6	1178.4	1427.4	1593.3	2522.8
		1320.8	15.875	1420.8	14765.7	294.65	332.94	371.23	3413	12	100	975126.7	5090.3	6108.3	6617.4	5241.8	6349.3	7087.5	11221.9
148-978	O	36	0.938	38.52	274.9	89.39	100.94	112.49	20	0.472	2.5	4947.3	1145.2	1374.2	1488.8	1179.3	1428.4	1594.5	2524.7
		914.4	23.812	978.4	14776.9	436.45	492.84	549.23	3413	12	64	675597.9	5094.1	6113	6622.4	5245.8	6354	7092.9	11230.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
148-1554	O	52	0.688	61.17	275.2	61.62	69.83	78.04	20	0.472	9.2	7156.5	1146.9	1376.2	1490.9	1181	1430.5	1596.9	2528.4
		1320.8	17.462	1553.8	14798.3	300.86	340.94	381.02	3413	12	233	977281.5	5101.5	6121.8	6632	5253.4	6363.3	7103.2	11246.7
148-1319	O	48	0.688	51.94	275.3	65.82	74.37	82.92	20	0.472	3.9	6607.8	1147.2	1376.6	1491.3	1181.3	1430.9	1597.3	2529
		1219.2	17.462	1319.2	14802.3	321.38	363.12	404.86	3413	12	100	902349.9	5102.9	6123.5	6633.8	5254.8	6365	7105.1	11249.8
148-1486	O	56	0.562	58.52	275.7	55.88	63.11	70.35	20	0.472	2.5	7718.2	1148.5	1378.2	1493.1	1182.7	1432.6	1599.2	2532
		1422.4	14.288	1486.4	14819.9	272.84	308.15	343.46	3413	12	64	1053989.5	5109	6130.8	6641.7	5261.1	6372.5	7113.5	11263.1
148-1385	O	44	0.875	54.51	275.9	74.13	84.04	93.95	20	0.472	10.5	6069.1	1149.4	1379.3	1494.3	1183.7	1433.7	1600.4	2534
		1117.6	22.225	1384.6	14831.6	361.94	410.32	458.7	3413	12	267	828788.1	5113	6135.6	6646.9	5265.2	6377.6	7119.2	11272
149-1672	O	54	0.688	65.81	276.3	59.95	68.03	76.1	20	0.472	11.8	7460.6	1151.3	1381.6	1496.7	1185.6	1436.1	1603.1	2538.2
		1371.6	17.462	1671.6	14855.9	292.71	332.14	371.57	3413	12	300	1018814.3	5121.4	6145.6	6657.8	5273.8	6388	7130.8	11290.4
149-1704	O	60	0.562	67.09	276.6	52.82	59.77	66.72	20	0.472	7.1	8297.5	1152.4	1382.9	1498.2	1186.7	1437.5	1604.6	2540.6
		1524	14.288	1704	14870.1	257.88	291.81	325.74	3413	12	180	1133098.6	5126.3	6151.5	6664.2	5278.9	6394.1	7137.6	11301.2
149-1283	O	40	1	50.51	276.9	82.57	93.59	104.6	20	0.472	10.5	5537.7	1153.7	1384.4	1499.8	1188	1439	1606.3	2543.4
		1016	25.4	1283	14886.2	403.16	456.94	510.71	3413	12	267	756218.2	5131.8	6158.2	6671.4	5284.6	6401.1	7145.4	11313.5
149-1283	O	40	1	50.51	276.9	82.57	93.59	104.6	20	0.472	10.5	5537.7	1153.7	1384.4	1499.8	1188	1439	1606.3	2543.4
		1016	25.4	1283	14886.2	403.16	456.94	510.71	3413	12	267	756218.6	5131.8	6158.2	6671.4	5284.6	6401.1	7145.4	11313.5
149-1167	O	42	0.812	45.94	277.4	76.52	86.44	96.37	20	0.472	3.9	5826	1155.9	1387.1	1502.7	1190.4	1441.8	1609.5	2548.4
		1066.8	20.638	1166.8	14915.4	373.58	422.05	470.52	3413	12	100	795585.4	5141.9	6170.3	6684.5	5295	6413.6	7159.4	11335.7
149-1422	O	48	0.75	55.99	277.5	67.38	76.3	85.23	20	0.472	8	6660.2	1156.3	1387.5	1503.2	1190.7	1442.3	1610	2549.1
		1219.2	19.05	1422.2	14919.8	328.95	372.53	416.11	3413	12	203	909513.4	5143.4	6172.1	6686.5	5296.5	6415.5	7161.5	11339.1
149-1334	O	42	0.938	52.51	277.5	78.44	88.92	99.39	20	0.472	10.5	5828	1156.3	1387.6	1503.2	1190.8	1442.3	1610	2549.2
		1066.8	23.812	1333.8	14920.5	382.99	434.12	485.25	3413	12	267	795861.4	5143.7	6172.4	6686.8	5296.8	6415.8	7161.9	11339.6
150-1247	O	42	0.875	49.09	278.3	77.52	87.68	97.85	20	0.472	7.1	5845.2	1159.8	1391.7	1507.7	1194.3	1446.6	1614.8	2556.8
		1066.8	22.225	1246.8	14964.7	378.48	428.11	477.74	3413	12	180	798215.4	5158.9	6190.7	6706.6	5312.5	6434.8	7183	11373.1
150-1372	O	44	0.875	54.02	278.4	74.63	84.57	94.51	20	0.472	10	6124.4	1159.9	1391.9	1507.9	1194.4	1446.8	1615	2557.1
		1117.6	22.225	1372.1	14966.7	364.38	412.92	461.45	3413	12	254.5	836338.5	5159.6	6191.5	6707.5	5313.2	6435.7	7184	11374.7
150-1145	O	38	1	45.09	278.8	86.71	98.06	109.42	20	0.472	7.1	5298	1161.9	1394.2	1510.4	1196.4	1449.2	1617.7	2561.4
		965.2	25.4	1145.2	14991.6	423.35	478.79	534.23	3413	12	180	723495.5	5168.2	6201.8	6718.6	5322	6446.4	7196	11393.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
150-1625	O	56	0.625	63.99	279.1	57.62	65.27	72.91	20	0.472	8	7816.1	1163.1	1395.7	1512	1197.7	1450.8	1619.5	2564.2
		1422.4	15.875	1625.4	15007.9	281.34	318.66	355.98	3413	12	203	1067361.9	5173.8	6208.5	6725.9	5327.8	6453.4	7203.8	11406
150-1537	O	50	0.75	60.51	279.2	65.43	74.19	82.94	20	0.472	10.5	6978.8	1163.1	1395.8	1512.1	1197.8	1450.8	1619.5	2564.2
		1270	19.05	1537	15008.2	319.45	362.21	404.97	3413	12	267	953018.9	5173.9	6208.7	6726	5327.9	6453.5	7203.9	11406.2
150-1182	O	44	0.75	46.52	279.5	73.06	82.51	91.95	20	0.472	2.5	6148.3	1164.4	1397.3	1513.8	1199.1	1452.4	1621.3	2567.1
		1117.6	19.05	1181.6	15025.1	356.72	402.83	448.94	3413	12	64	839603.9	5179.7	6215.7	6733.6	5333.9	6460.8	7212.1	11419.1
150-1271	O	40	1	50.02	279.6	83.2	94.26	105.32	20	0.472	10	5592.2	1165	1398	1514.5	1199.7	1453.2	1622.1	2568.4
		1016	25.4	1270.5	15032.6	406.2	460.2	514.2	3413	12	254.5	763658.4	5182.3	6218.8	6737	5336.6	6464	7215.7	11424.8
150-1271	O	40	1	50.02	279.6	83.2	94.26	105.32	20	0.472	10	5592.2	1165	1398	1514.5	1199.7	1453.2	1622.1	2568.4
		1016	25.4	1270.5	15032.7	406.2	460.2	514.2	3413	12	254.5	763658.8	5182.3	6218.8	6737	5336.6	6464	7215.7	11424.8
150-1196	O	40	0.938	47.09	279.8	82.2	92.97	103.74	20	0.472	7.1	5595.6	1165.7	1398.9	1515.5	1200.4	1454.1	1623.1	2570
		1016	23.812	1196	15041.9	401.34	453.92	506.5	3413	12	180	764126.3	5185.5	6222.6	6741.1	5339.9	6468	7220.1	11431.8
151-1321	O	42	0.938	52.02	280.1	79	89.51	100.03	20	0.472	10	5883.1	1167.3	1400.7	1517.5	1202	1456	1625.3	2573.4
		1066.8	23.812	1321.3	15061.7	385.73	437.05	488.37	3413	12	254.5	803390.6	5192.3	6230.8	6750	5346.9	6476.5	7229.6	11446.9
151-1519	O	48	0.812	59.81	280.3	68.86	78.11	87.36	20	0.472	11.8	6728.1	1168.1	1401.7	1518.5	1202.8	1457	1626.4	2575.1
		1219.2	20.638	1519.2	15071.8	336.22	381.37	426.52	3413	12	300	918779.6	5195.8	6235	6754.6	5350.5	6480.9	7234.5	11454.6
151-1524	O	52	0.688	59.99	280.7	62.61	70.9	79.2	20	0.472	8	7297.4	1169.5	1403.3	1520.3	1204.3	1458.7	1628.3	2578.1
		1320.8	17.462	1523.8	15089.7	305.68	346.19	386.69	3413	12	203	996521.9	5202	6242.4	6762.6	5356.8	6488.6	7243	11468.1
151-1116	O	40	0.875	43.94	281.2	81.8	92.4	103	20	0.472	3.9	5623.4	1171.5	1405.8	1523	1206.4	1461.3	1631.2	2582.7
		1016	22.225	1116	15116.6	399.36	451.14	502.91	3413	12	100	767924.7	5211.3	6253.5	6774.7	5366.4	6500.2	7256	11488.6
151-1014	O	36	1	39.94	281.3	91.96	103.87	115.78	20	0.472	3.9	5063.2	1172	1406.4	1523.6	1206.9	1461.9	1631.9	2583.8
		914.4	25.4	1014.4	15123	448.97	507.13	565.29	3413	12	100	691423.3	5213.5	6256.2	6777.5	5368.7	6502.9	7259	11493.5
151-1014	O	36	1	39.94	281.3	91.96	103.87	115.78	20	0.472	3.9	5063.2	1172	1406.4	1523.6	1206.9	1461.9	1631.9	2583.8
		914.4	25.4	1014.4	15123	448.97	507.13	565.29	3413	12	100	691423.5	5213.5	6256.2	6777.5	5368.7	6502.9	7259	11493.5
151-1525	O	50	0.75	60.02	281.4	65.81	74.58	83.36	20	0.472	10	7036	1172.7	1407.2	1524.5	1207.6	1462.7	1632.8	2585.2
		1270	19.05	1524.5	15131.2	321.3	364.15	407.01	3413	12	254.5	960833.1	5216.3	6259.6	6781.2	5371.6	6506.4	7263	11499.7
151-1385	O	52	0.625	54.52	281.8	61.72	69.7	77.69	20	0.472	2.5	7326.3	1174.1	1408.9	1526.3	1209	1464.5	1634.8	2588.4
		1320.8	15.875	1384.8	15149.6	301.36	340.33	379.3	3413	12	64	1000476.6	5222.6	6267.1	6789.4	5378.1	6514.3	7271.8	11513.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
152-1639	O	54	0.688	64.51	281.9	60.92	69.08	77.23	20	0.472	10.5	7610.9	1174.5	1409.4	1526.9	1209.5	1465	1635.4	2589.3
		1371.6	17.462	1638.6	15155	297.43	337.26	377.09	3413	12	267	1039332.4	5224.5	6269.4	6791.9	5380	6516.7	7274.4	11517.8
152-1399	O	48	0.75	55.09	282.1	68.06	76.99	85.92	20	0.472	7.1	6769.7	1175.3	1410.4	1527.9	1210.3	1466	1636.4	2591
		1219.2	19.05	1399.2	15165.1	332.28	375.88	419.48	3413	12	180	924464	5228	6273.6	6796.4	5383.6	6521	7279.2	11525.5
152-1065	O	38	0.938	41.94	282.5	86.95	98.22	109.48	20	0.472	3.9	5366.6	1176.9	1412.3	1529.9	1211.9	1468	1638.6	2594.5
		965.2	23.812	1065.2	15185.5	424.52	479.53	534.54	3413	12	100	732853	5235	6282	6805.5	5390.9	6529.8	7289	11541
152-1351	O	44	0.875	53.17	282.8	75.63	85.67	95.71	20	0.472	9.2	6221.9	1178.4	1414.1	1531.9	1213.5	1469.8	1640.7	2597.8
		1117.6	22.225	1350.6	15204.9	369.28	418.28	467.29	3413	12	233	849652	5241.7	6290.1	6814.2	5397.8	6538.1	7298.4	11555.8
152-1283	O	48	0.688	50.52	283	67.46	76.18	84.9	20	0.472	2.5	6793.2	1179.4	1415.2	1533.2	1214.5	1471.1	1642.1	2600
		1219.2	17.462	1283.2	15217.6	329.37	371.94	414.51	3413	12	64	927665.2	5246.1	6295.3	6819.9	5402.2	6543.6	7304.5	11565.4
152-1602	O	56	0.625	63.09	283.2	58.08	65.71	73.34	20	0.472	7.1	7928.3	1179.8	1415.8	1533.8	1214.9	1471.6	1642.7	2601
		1422.4	15.875	1602.4	15223.3	283.57	320.82	358.07	3413	12	180	1082682.2	5248.1	6297.7	6822.5	5404.3	6546	7307.2	11569.7
153-1626	O	54	0.688	64.02	284.1	61.24	69.41	77.58	20	0.472	10	7669.4	1183.5	1420.3	1538.6	1218.8	1476.3	1647.9	2609.2
		1371.6	17.462	1626.1	15271.5	299	338.89	378.79	3413	12	254.5	1047321.8	5264.7	6317.6	6844.1	5421.4	6566.8	7330.3	11606.4
153-1249	O	40	1	49.17	284.4	84.43	95.61	106.8	20	0.472	9.2	5688.4	1185.1	1422.1	1540.6	1220.4	1478.2	1650.1	2612.6
		1016	25.4	1249	15291.4	412.21	466.82	521.42	3413	12	233	776803.8	5271.5	6325.8	6853	5428.5	6575.3	7339.9	11621.5
153-1249	O	40	1	49.17	284.4	84.43	95.61	106.8	20	0.472	9.2	5688.4	1185.1	1422.1	1540.6	1220.4	1478.2	1650.1	2612.6
		1016	25.4	1249	15291.4	412.21	466.82	521.42	3413	12	233	776804.2	5271.5	6325.8	6853	5428.5	6575.3	7339.9	11621.5
153-1300	O	42	0.938	51.17	284.8	80.12	90.74	101.36	20	0.472	9.2	5980.4	1186.6	1423.9	1542.6	1221.9	1480.1	1652.2	2615.9
		1066.8	23.812	1299.8	15310.8	391.17	443.02	494.87	3413	12	233	816679.5	5278.2	6333.9	6861.7	5435.3	6583.7	7349.2	11636.2
153-1501	O	52	0.688	59.09	285	63.17	71.46	79.75	20	0.472	7.1	7409.2	1187.4	1424.8	1543.6	1222.7	1481	1653.3	2617.7
		1320.8	17.462	1500.8	15320.9	308.43	348.91	389.39	3413	12	180	1011793.7	5281.7	6338	6866.2	5438.9	6588	7354	11643.9
153-1503	O	50	0.75	59.17	285.5	66.58	75.43	84.28	20	0.472	9.2	7136.7	1189.4	1427.3	1546.3	1224.9	1483.6	1656.1	2622.2
		1270	19.05	1503	15347.7	325.09	368.28	411.47	3413	12	233	974577.5	5290.9	6349.1	6878.2	5448.4	6599.5	7366.9	11664.2
154-1824	O	60	0.625	71.81	286.2	55.6	63.08	70.56	20	0.472	11.8	8586	1192.5	1431	1550.2	1228	1487.4	1660.4	2628.9
		1524	15.875	1824	15387	271.45	307.98	344.51	3413	12	300	1172489	5304.5	6365.4	6895.8	5462.4	6616.4	7385.8	11694.1
154-1131	O	42	0.812	44.52	286.3	78.71	88.88	99.04	20	0.472	2.5	6011.4	1192.7	1431.3	1550.6	1228.2	1487.7	1660.7	2629.5
		1066.8	20.638	1130.8	15390.2	384.31	433.94	483.57	3413	12	64	820913.5	5305.6	6366.7	6897.3	5463.5	6617.8	7387.3	11696.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
154-1472	O	54	0.625	57.94	286.3	60.48	68.33	76.18	20	0.472	3.9	7731	1193.1	1431.7	1551	1228.6	1488.1	1661.2	2630.2
		1371.6	15.875	1471.6	15394.3	295.29	333.61	371.93	3413	12	100	1055742	5307	6368.4	6899.1	5465	6619.6	7389.3	11699.7
154-1486	O	48	0.812	58.51	286.6	70.13	79.49	88.85	20	0.472	10.5	6877.5	1194	1432.8	1552.2	1229.5	1489.3	1662.5	2632.3
		1219.2	20.638	1486.2	15406.5	342.38	388.1	433.82	3413	12	267	939180.5	5311.2	6373.4	6904.6	5469.3	6624.8	7395.1	11708.9
154-1621	O	52	0.75	63.81	286.8	64.7	73.39	82.08	20	0.472	11.8	7457.3	1195.1	1434.1	1553.6	1230.7	1490.7	1664	2634.6
		1320.8	19.05	1620.8	15420.4	315.91	358.32	400.74	3413	12	300	1018361.3	5316	6379.2	6910.8	5474.2	6630.8	7401.8	11719.5
155-1418	O	44	0.938	55.81	287.5	77.53	87.91	98.29	20	0.472	11.8	6324.1	1197.7	1437.3	1557.1	1233.4	1494	1667.7	2640.5
		1117.6	23.812	1417.6	15454.7	378.55	429.22	479.88	3413	12	300	863607.5	5327.8	6393.4	6926.2	5486.4	6645.5	7418.2	11745.6
155-1367	O	42	1	53.81	287.6	81.61	92.53	103.44	20	0.472	11.8	6039.2	1198.3	1437.9	1557.7	1233.9	1494.6	1668.4	2641.6
		1066.8	25.4	1366.8	15461.3	398.48	451.76	505.04	3413	12	300	824706.9	5330.1	6396.1	6929.1	5488.8	6648.4	7421.4	11750.6
155-1367	O	42	1	53.81	287.6	81.61	92.53	103.44	20	0.472	11.8	6039.2	1198.3	1437.9	1557.7	1233.9	1494.6	1668.4	2641.6
		1066.8	25.4	1366.8	15461.3	398.48	451.76	505.04	3413	12	300	824707.3	5330.1	6396.1	6929.1	5488.8	6648.4	7421.4	11750.6
155-1605	O	54	0.688	63.17	287.9	61.9	70.13	78.36	20	0.472	9.2	7772.1	1199.4	1439.3	1559.2	1235.1	1496	1670	2644.2
		1371.6	17.462	1604.6	15476.2	302.24	342.41	382.59	3413	12	233	1061354.9	5335.2	6402.3	6935.8	5494	6654.7	7428.6	11761.9
155-1370	O	50	0.688	53.94	288.2	66	74.56	83.12	20	0.472	3.9	7204.1	1200.7	1440.8	1560.9	1236.4	1497.6	1671.8	2647
		1270	17.462	1370	15492.7	322.23	364.03	405.82	3413	12	100	983788.3	5340.9	6409.1	6943.2	5499.9	6661.9	7436.5	11774.5
155-1722	O	56	0.688	67.81	288.8	60.27	68.36	76.46	20	0.472	11.8	8086.3	1203.3	1444	1564.3	1239.1	1500.9	1675.5	2652.8
		1422.4	17.462	1722.4	15526.7	294.24	333.78	373.31	3413	12	300	1104255.7	5352.6	6423.1	6958.4	5512	6676.5	7452.8	11800.3
155-1474	O	48	0.812	58.02	289	70.56	79.95	89.34	20	0.472	10	6935.8	1204.1	1445	1565.4	1240	1501.9	1676.6	2654.6
		1219.2	20.638	1473.7	15537.2	344.49	390.33	436.18	3413	12	254.5	947146.6	5356.3	6427.5	6963.1	5515.7	6681	7457.8	11808.3
156-1321	O	44	0.875	51.99	289.2	77.09	87.27	97.45	20	0.472	8	6363.2	1205.2	1446.2	1566.7	1241	1503.2	1678	2656.9
		1117.6	22.225	1320.6	15550.3	376.4	426.1	475.79	3413	12	203	868953.5	5360.8	6432.9	6969	5520.4	6686.7	7464.2	11818.3
156-1624	O	60	0.562	63.94	290.2	54.92	62.05	69.18	20	0.472	3.9	8706.3	1209.2	1451	1572	1245.2	1508.3	1683.6	2665.8
		1524	14.288	1624	15602.6	268.16	302.96	337.75	3413	12	100	1188916.3	5378.8	6454.6	6992.4	5538.9	6709.1	7489.2	11858
156-1080	O	40	0.875	42.52	290.5	84.27	95.15	106.02	20	0.472	2.5	5810.8	1210.6	1452.7	1573.8	1246.6	1510	1685.6	2668.8
		1016	22.225	1080	15620.5	411.46	464.55	517.65	3413	12	64	793522.2	5385	6462	7000.5	5545.3	6716.8	7497.8	11871.6
157-1473	O	50	0.75	57.99	291.3	67.71	76.66	85.6	20	0.472	8	7282	1213.7	1456.4	1577.8	1249.8	1513.8	1689.9	2675.6
		1270	19.05	1473	15660.3	330.57	374.26	417.96	3413	12	203	994426.3	5398.7	6478.4	7018.3	5559.4	6733.9	7516.9	11901.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
157-1219	O	40	1	47.99	291.4	86.22	97.59	108.96	20	0.472	8	5828.4	1214.3	1457.1	1578.5	1250.4	1514.6	1690.7	2676.9
		1016	25.4	1219	15667.7	420.99	476.48	531.97	3413	12	203	795921.2	5401.3	6481.5	7021.6	5562	6737.1	7520.5	11907.5
157-1219	O	40	1	47.99	291.4	86.22	97.59	108.96	20	0.472	8	5828.4	1214.3	1457.1	1578.5	1250.4	1514.6	1690.7	2676.9
		1016	25.4	1219	15667.7	420.99	476.48	531.97	3413	12	203	795921.6	5401.3	6481.5	7021.6	5562.1	6737.1	7520.5	11907.5
157-1791	O	60	0.625	70.51	291.5	56.4	63.95	71.49	20	0.472	10.5	8744.2	1214.5	1457.4	1578.8	1250.6	1514.8	1691	2677.4
		1524	15.875	1791	15670.5	275.37	312.21	349.06	3413	12	267	1194092.7	5402.2	6482.7	7022.9	5563	6738.3	7521.8	11909.6
157-1270	O	42	0.938	49.99	291.5	81.74	92.52	103.3	20	0.472	8	6121.7	1214.6	1457.5	1579	1250.8	1515	1691.2	2677.7
		1066.8	23.812	1269.8	15672.6	399.09	451.73	504.37	3413	12	203	835974.2	5402.9	6483.5	7023.8	5563.8	6739.2	7522.8	11911.1
157-978	O	36	1	38.52	291.6	95.06	107.32	119.58	20	0.472	2.5	5249.5	1215.2	1458.2	1579.7	1251.3	1515.7	1691.9	2678.9
		914.4	25.4	978.4	15679.4	464.14	524	583.85	3413	12	64	716864.1	5405.3	6486.3	7026.9	5566.2	6742.2	7526.1	11916.4
157-978	O	36	1	38.52	291.6	95.06	107.32	119.58	20	0.472	2.5	5249.5	1215.2	1458.2	1579.7	1251.3	1515.7	1691.9	2678.9
		914.4	25.4	978.4	15679.4	464.14	524	583.85	3413	12	64	716864.3	5405.3	6486.4	7026.9	5566.2	6742.2	7526.1	11916.4
157-1380	O	42.5	1	54.31	292	81.81	92.74	103.67	20	0.472	11.8	6205.1	1216.7	1460	1581.7	1252.9	1517.6	1694.1	2682.3
		1079.5	25.4	1379.5	15699.2	399.42	452.79	506.16	3413	12	300	847362.9	5412.1	6494.5	7035.7	5573.2	6750.6	7535.6	11931.4
157-1029	O	38	0.938	40.52	292.3	89.73	101.3	112.88	20	0.472	2.5	5554.3	1218	1461.7	1583.5	1254.3	1519.3	1696	2685.3
		965.2	23.812	1029.2	15716.7	438.09	494.6	551.11	3413	12	64	758487.2	5418.1	6501.8	7043.6	5579.4	6758.2	7544	11944.7
157-1218	O	44	0.812	47.94	292.5	76.8	86.75	96.7	20	0.472	3.9	6436.1	1219	1462.7	1584.6	1255.2	1520.4	1697.2	2687.3
		1117.6	20.638	1217.6	15728.4	374.98	423.55	472.13	3413	12	100	878901.1	5422.2	6506.6	7048.8	5583.6	6763.2	7549.6	11953.6
157-1588	O	52	0.75	62.51	292.8	65.8	74.58	83.37	20	0.472	10.5	7612.3	1219.9	1463.9	1585.9	1256.2	1521.6	1698.6	2689.4
		1320.8	19.05	1587.8	15740.9	321.26	364.15	407.04	3413	12	267	1039526.4	5426.5	6511.8	7054.4	5588	6768.6	7555.6	11963.1
158-1452	O	48	0.812	57.17	293.3	71.43	80.9	90.37	20	0.472	9.2	7038.5	1222	1466.4	1588.5	1258.3	1524.2	1701.4	2693.9
		1219.2	20.638	1452.2	15767.2	348.75	394.99	441.23	3413	12	233	961169.3	5435.6	6522.7	7066.2	5597.4	6779.9	7568.3	11983.1
158-1575	O	54	0.688	61.99	293.3	62.87	71.18	79.49	20	0.472	8	7920.2	1222.3	1466.7	1588.9	1258.6	1524.6	1701.8	2694.6
		1371.6	17.462	1574.6	15771	306.94	347.52	388.11	3413	12	203	1081576.3	5436.9	6524.2	7067.9	5598.7	6781.5	7570.1	11986
158-1436	O	54	0.625	56.52	293.5	61.81	69.79	77.77	20	0.472	2.5	7924.9	1223	1467.6	1589.9	1259.4	1525.5	1702.8	2696.1
		1371.6	15.875	1435.6	15780.4	301.78	340.75	379.73	3413	12	64	1082216.5	5440.1	6528.1	7072.1	5602	6785.6	7574.6	11993.1
158-1779	O	60	0.625	70.02	293.5	56.66	64.22	71.77	20	0.472	10	8805.6	1223	1467.6	1589.9	1259.4	1525.5	1702.9	2696.2
		1524	15.875	1778.5	15780.6	276.65	313.53	350.42	3413	12	254.5	1202485.2	5440.2	6528.2	7072.2	5602.1	6785.7	7574.7	11993.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
158-1385	O	44	0.938	54.51	294.3	79.1	89.62	100.15	20	0.472	10.5	6474.8	1226.3	1471.5	1594.2	1262.8	1529.6	1707.4	2703.4
		1117.6	23.812	1384.6	15823	386.18	437.59	488.99	3413	12	267	884190.4	5454.8	6545.7	7091.2	5617.2	6803.9	7595	12025.5
158-1298	O	44	0.875	51.09	294.4	78	88.21	98.41	20	0.472	7.1	6476	1226.5	1471.8	1594.5	1263	1529.9	1707.8	2703.9
		1117.6	22.225	1297.6	15826	380.83	430.66	480.49	3413	12	180	884355.7	5455.8	6547	7092.6	5618.2	6805.2	7596.5	12027.7
158-1689	O	56	0.688	66.51	294.4	61.21	69.39	77.56	20	0.472	10.5	8244.3	1226.8	1472.2	1594.9	1263.3	1530.2	1708.2	2704.6
		1422.4	17.462	1689.4	15829.9	298.85	338.77	378.7	3413	12	267	1125825.7	5457.2	6548.6	7094.3	5619.6	6806.9	7598.4	12030.8
158-1334	O	42	1	52.51	294.7	83.34	94.42	105.51	20	0.472	10.5	6188.6	1227.9	1473.5	1596.3	1264.5	1531.6	1709.7	2707
		1066.8	25.4	1333.8	15843.9	406.89	461	515.12	3413	12	267	845111.3	5462	6554.4	7100.6	5624.6	6812.9	7605.1	12041.3
158-1334	O	42	1	52.51	294.7	83.34	94.42	105.51	20	0.472	10.5	6188.6	1227.9	1473.5	1596.3	1264.5	1531.6	1709.7	2707
		1066.8	25.4	1333.8	15843.9	406.89	461	515.12	3413	12	267	845111.7	5462	6554.4	7100.6	5624.6	6812.9	7605.1	12041.3
159-1570	O	50	0.812	61.81	294.9	69.33	78.62	87.9	20	0.472	11.8	7373.6	1228.9	1474.7	1597.6	1265.5	1532.9	1711.1	2709.3
		1270	20.638	1570	15857.3	338.51	383.85	429.18	3413	12	300	1006936.3	5466.6	6559.9	7106.6	5629.3	6818.6	7611.5	12051.5
159-1575	O	52	0.75	62.02	295.1	66.17	74.97	83.78	20	0.472	10	7672.7	1229.6	1475.5	1598.5	1266.2	1533.7	1712	2710.7
		1320.8	19.05	1575.3	15865.8	323.06	366.05	409.03	3413	12	254.5	1047775	5469.5	6563.4	7110.4	5632.3	6822.3	7615.6	12058
159-1450	O	50	0.75	57.09	295.9	68.37	77.32	86.28	20	0.472	7.1	7397.5	1232.9	1479.5	1602.8	1269.6	1537.9	1716.7	2718.1
		1270	19.05	1450	15908.7	333.81	377.53	421.25	3413	12	180	1010200	5484.3	6581.2	7129.6	5647.6	6840.7	7636.2	12090.6
159-1334	O	50	0.688	52.52	295.9	67.58	76.3	85.02	20	0.472	2.5	7398.5	1233.1	1479.7	1603	1269.8	1538.1	1716.9	2718.4
		1270	17.462	1334	15910.8	329.95	372.54	415.13	3413	12	64	1010337.3	5485.1	6582.1	7130.6	5648.3	6841.7	7637.2	12092.2
159-1677	O	56	0.688	66.02	296.6	61.52	69.71	77.9	20	0.472	10	8305.7	1236	1483.2	1606.8	1272.8	1541.7	1720.9	2724.8
		1422.4	17.462	1676.9	15947.9	300.38	340.37	380.36	3413	12	254.5	1134217.9	5497.9	6597.4	7147.2	5661.5	6857.6	7655	12120.4
160-1588	O	60	0.562	62.52	296.8	56	63.23	70.46	20	0.472	2.5	8903.6	1236.6	1483.9	1607.6	1273.4	1542.5	1721.8	2726.2
		1524	14.288	1588	15956.3	273.41	308.72	344.03	3413	12	64	1215869	5500.7	6600.9	7151	5664.5	6861.2	7659	12126.8
160-1247	O	42	0.938	49.09	296.9	82.77	93.59	104.41	20	0.472	7.1	6234.6	1237	1484.4	1608.1	1273.9	1543	1722.4	2727.1
		1066.8	23.812	1246.8	15961.7	404.13	456.96	509.79	3413	12	180	851395.6	5502.6	6603.1	7153.4	5666.4	6863.5	7661.6	12130.9
160-1372	O	44	0.938	54.02	297	79.64	90.21	100.78	20	0.472	10	6533.8	1237.5	1484.9	1608.7	1274.3	1543.5	1723	2728.1
		1117.6	23.812	1372.1	15967.2	388.84	440.44	492.03	3413	12	254.5	892245.5	5504.5	6605.4	7155.8	5668.3	6865.9	7664.2	12135
160-1196	O	40	1	47.09	297	87.39	98.8	110.22	20	0.472	7.1	5940.5	1237.6	1485.1	1608.9	1274.4	1543.7	1723.2	2728.4
		1016	25.4	1196	15969	426.65	482.4	538.15	3413	12	180	811227.4	5505.1	6606.2	7156.7	5669	6866.7	7665.1	12136.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
160-1196	O	40	1	47.09	297	87.39	98.8	110.22	20	0.472	7.1	5940.5	1237.6	1485.1	1608.9	1274.4	1543.7	1723.2	2728.4
		1016	25.4	1196	15969.1	426.65	482.4	538.15	3413	12	180	811227.8	5505.1	6606.2	7156.7	5669	6866.7	7665.1	12136.5
160-1757	O	60	0.625	69.17	297.1	57.21	64.81	72.41	20	0.472	9.2	8913.4	1238	1485.6	1609.4	1274.8	1544.1	1723.7	2729.2
		1524	15.875	1757	15973.8	279.33	316.44	353.54	3413	12	233	1217199.8	5506.8	6608.1	7158.8	5670.7	6868.7	7667.4	12140.1
160-1167	O	42	0.875	45.94	297.4	82.14	92.78	103.41	20	0.472	3.9	6246	1239.3	1487.1	1611.1	1276.2	1545.8	1725.5	2732.1
		1066.8	22.225	1166.8	15990.7	401.07	452.97	504.88	3413	12	100	852943.9	5512.6	6615.1	7166.4	5676.7	6876	7675.5	12152.9
160-1321	O	42	1	52.02	297.5	83.94	95.07	106.2	20	0.472	10	6247.2	1239.5	1487.4	1611.4	1276.4	1546.1	1725.9	2732.6
		1066.8	25.4	1321.3	15993.7	409.85	464.18	518.52	3413	12	254.5	853106.3	5513.7	6616.4	7167.7	5677.8	6877.3	7677	12155.2
160-1321	O	42	1	52.02	297.5	83.94	95.07	106.2	20	0.472	10	6247.2	1239.5	1487.4	1611.4	1276.4	1546.1	1725.9	2732.6
		1066.8	25.4	1321.3	15993.8	409.85	464.18	518.52	3413	12	254.5	853106.8	5513.7	6616.4	7167.7	5677.8	6877.3	7677	12155.3
160-1552	O	54	0.688	61.09	297.7	63.41	71.72	80.03	20	0.472	7.1	8037.6	1240.4	1488.4	1612.5	1277.3	1547.1	1727.1	2734.5
		1371.6	17.462	1551.6	16004.8	309.61	350.18	390.74	3413	12	180	1097608.9	5517.5	6620.9	7172.7	5681.7	6882.1	7682.3	12163.6
160-1522	O	56	0.625	59.94	298	60.6	68.46	76.31	20	0.472	3.9	8344.9	1241.8	1490.2	1614.3	1278.8	1548.9	1729	2737.7
		1422.4	15.875	1522.4	16023.3	295.89	334.23	372.58	3413	12	100	1139575.7	5523.8	6628.6	7181	5688.3	6890	7691.2	12177.7
161-1347	O	42.5	1	53.01	299.2	83.52	94.62	105.72	20	0.472	10.5	6357.2	1246.5	1495.8	1620.5	1283.6	1554.8	1735.6	2748
		1079.5	25.4	1346.5	16083.9	407.78	461.97	516.17	3413	12	267	868130	5544.7	6653.7	7208.2	5709.8	6916.1	7720.3	12223.8
161-1319	O	48	0.75	51.94	299.2	71.57	80.84	90.11	20	0.472	3.9	7180.2	1246.6	1495.9	1620.5	1283.7	1554.9	1735.7	2748.2
		1219.2	19.05	1319.2	16084.7	349.46	394.71	439.96	3413	12	100	980526.1	5545	6654	7208.5	5710.1	6916.4	7720.7	12224.4
161-1554	O	52	0.75	61.17	299.2	66.92	75.79	84.67	20	0.472	9.2	7778.9	1246.6	1495.9	1620.6	1283.7	1554.9	1735.7	2748.3
		1320.8	19.05	1553.8	16085.3	326.74	370.06	413.38	3413	12	233	1062273.1	5545.2	6654.2	7208.8	5710.3	6916.7	7720.9	12224.8
161-1422	O	48	0.812	55.99	299.5	72.7	82.29	91.88	20	0.472	8	7187	1247.7	1497.3	1622.1	1284.9	1556.3	1737.3	2750.7
		1219.2	20.638	1422.2	16099.8	354.93	401.75	448.58	3413	12	203	981444.2	5550.2	6660.2	7215.3	5715.4	6922.9	7727.9	12235.9
161-1065	O	38	1	41.94	299.8	92.47	104.42	116.38	20	0.472	3.9	5695.9	1249.1	1498.9	1623.8	1286.3	1558	1739.2	2753.8
		965.2	25.4	1065.2	16117.5	451.46	509.83	568.21	3413	12	100	777832.3	5556.3	6667.6	7223.2	5721.7	6930.5	7736.4	12249.3
161-1116	O	40	0.938	43.94	299.8	87.37	98.67	109.97	20	0.472	3.9	5996.7	1249.3	1499.2	1624.1	1286.5	1558.3	1739.5	2754.2
		1016	23.812	1116	16120.1	426.58	481.76	536.94	3413	12	100	818902.3	5557.2	6668.7	7224.4	5722.6	6931.7	7737.7	12251.3
161-1672	O	54	0.75	65.81	300.4	65.08	73.79	82.51	20	0.472	11.8	8110.5	1251.6	1501.9	1627.1	1288.9	1561.2	1742.7	2759.3
		1371.6	19.05	1671.6	16149.9	317.73	360.28	402.84	3413	12	300	1107561.6	5567.5	6681	7237.7	5733.2	6944.5	7752	12273.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
162-1655	O	56	0.688	65.17	300.5	62.17	70.42	78.66	20	0.472	9.2	8413.6	1252	1502.4	1627.6	1289.3	1561.7	1743.3	2760.2
		1422.4	17.462	1655.4	16155.1	303.54	343.8	384.06	3413	12	233	1148948.9	5569.3	6683.1	7240	5735.1	6946.7	7754.4	12277.9
162-1519	O	48	0.875	59.81	300.7	73.83	83.7	93.57	20	0.472	11.8	7217.2	1253	1503.6	1628.9	1290.3	1562.9	1744.6	2762.3
		1219.2	22.225	1519.2	16167.6	360.47	408.65	456.83	3413	12	300	985577.9	5573.6	6688.3	7245.7	5739.5	6952.1	7760.5	12287.4
162-1421	O	52	0.688	55.94	301	66.16	74.73	83.3	20	0.472	3.9	7826.4	1254.2	1505.1	1630.5	1291.6	1564.4	1746.3	2765
		1320.8	17.462	1420.8	16183.6	323.03	364.87	406.7	3413	12	100	1068764.1	5579.1	6694.9	7252.8	5745.2	6958.9	7768.1	12299.5
162-1537	O	50	0.812	60.51	301.3	70.56	79.96	89.36	20	0.472	10.5	7532	1255.3	1506.4	1631.9	1292.7	1565.8	1747.9	2767.5
		1270	20.638	1537	16197.7	344.52	390.41	436.3	3413	12	267	1028555.6	5584	6700.8	7259.2	5750.2	6965	7774.9	12310.3
162-1182	O	44	0.812	46.52	301.5	78.91	89.09	99.27	20	0.472	2.5	6632.1	1256.1	1507.3	1632.9	1293.5	1566.8	1748.9	2769.1
		1117.6	20.638	1181.6	16207.6	385.29	434.98	484.66	3413	12	64	905678.7	5587.4	6704.8	7263.6	5753.7	6969.3	7779.6	12317.7
162-1351	O	44	0.938	53.17	301.7	80.72	91.4	102.07	20	0.472	9.2	6637.8	1257.2	1508.6	1634.3	1294.6	1568.1	1750.4	2771.5
		1117.6	23.812	1350.6	16221.3	394.13	446.24	498.35	3413	12	233	906449	5592.1	6710.5	7269.7	5758.6	6975.2	7786.2	12328.2
162-1334	O	42.5	1	52.52	302	84.12	95.27	106.41	20	0.472	10	6416.8	1258.2	1509.8	1635.6	1295.6	1569.4	1751.9	2773.8
		1079.5	25.4	1334	16234.6	410.72	465.13	519.54	3413	12	254.5	876264.7	5596.7	6716	7275.7	5763.3	6980.9	7792.6	12338.3
163-1727	O	60	0.625	67.99	302.3	58.01	65.67	73.34	20	0.472	8	9068.2	1259.5	1511.4	1637.3	1297	1571	1753.6	2776.6
		1524	15.875	1727	16251.2	283.22	320.64	358.07	3413	12	203	1238343.9	5602.4	6722.9	7283.1	5769.2	6988	7800.6	12350.9
163-1300	O	42	1	51.17	302.4	85.14	96.39	107.64	20	0.472	9.2	6350.5	1260	1512	1638	1297.5	1571.7	1754.4	2777.8
		1066.8	25.4	1299.8	16258.3	415.69	470.61	525.52	3413	12	233	867217.6	5604.9	6725.8	7286.3	5771.7	6991.1	7804	12356.3
163-1300	O	42	1	51.17	302.4	85.14	96.39	107.64	20	0.472	9.2	6350.5	1260	1512	1638	1297.5	1571.7	1754.4	2777.8
		1066.8	25.4	1299.8	16258.3	415.69	470.61	525.52	3413	12	233	867218	5604.9	6725.8	7286.3	5771.7	6991.1	7804	12356.3
163-1525	O	50	0.812	60.02	303.7	70.99	80.41	89.83	20	0.472	10	7593.7	1265.6	1518.7	1645.3	1303.3	1578.6	1762.2	2790.2
		1270	20.638	1524.5	16330.5	346.58	392.59	438.6	3413	12	254.5	1036989.2	5629.8	6755.7	7318.7	5797.3	7022.1	7838.7	12411.2
164-1399	O	48	0.812	55.09	304.4	73.46	83.07	92.68	20	0.472	7.1	7305.1	1268.2	1521.9	1648.7	1306	1581.9	1765.9	2795.9
		1219.2	20.638	1399.2	16364.5	358.69	405.59	452.49	3413	12	180	997577.2	5641.4	6769.7	7333.9	5809.4	7036.7	7854.9	12437
164-1524	O	52	0.75	59.99	305.1	68.02	76.99	85.96	20	0.472	8	7932	1271.2	1525.4	1652.5	1309	1585.5	1769.9	2802.4
		1320.8	19.05	1523.8	16402	332.08	375.88	419.69	3413	12	203	1083186.8	5654.4	6785.3	7350.7	5822.7	7052.9	7873	12465.5
164-1486	O	56	0.625	58.52	305.3	61.89	69.87	77.86	20	0.472	2.5	8547.1	1271.9	1526.3	1653.4	1309.7	1586.5	1770.9	2804
		1422.4	15.875	1486.4	16411.4	302.17	341.15	380.13	3413	12	64	1167175.7	5657.6	6789.1	7354.9	5826	7056.9	7877.5	12472.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
164-1418	O	44	1	55.81	305.3	82.37	93.35	104.33	20	0.472	11.8	6716.8	1272.1	1526.5	1653.7	1310	1586.7	1771.2	2804.5
		1117.6	25.4	1417.6	16414.3	402.16	455.77	509.39	3413	12	300	917233.4	5658.6	6790.4	7356.2	5827.1	7058.2	7878.9	12474.9
165-1625	O	56	0.688	63.99	306	63.11	71.43	79.76	20	0.472	8	8568.9	1275.1	1530.2	1657.7	1313.1	1590.5	1775.4	2811.1
		1422.4	17.462	1625.4	16453.2	308.11	348.77	389.44	3413	12	203	1170155	5672.1	6806.5	7373.7	5840.9	7074.9	7897.6	12504.5
165-1704	O	60	0.625	67.09	306.4	58.44	66.09	73.75	20	0.472	7.1	9190.6	1276.5	1531.8	1659.4	1314.5	1592.2	1777.3	2814.1
		1524	15.875	1704	16470.6	285.34	322.7	360.06	3413	12	180	1255058.7	5678	6813.6	7381.4	5847.1	7082.4	7905.9	12517.6
165-1639	O	54	0.75	64.51	306.4	66.15	74.96	83.77	20	0.472	10.5	8273.8	1276.8	1532.2	1659.9	1314.8	1592.6	1777.8	2814.9
		1371.6	19.05	1638.6	16475.2	322.95	365.97	408.99	3413	12	267	1129867	5679.6	6815.5	7383.5	5848.7	7084.3	7908.1	12521.1
165-1131	O	42	0.875	44.52	306.9	84.52	95.41	106.3	20	0.472	2.5	6444.8	1278.7	1534.5	1662.4	1316.8	1595	1780.5	2819.1
		1066.8	22.225	1130.8	16499.8	412.67	465.84	519.02	3413	12	64	880098.2	5688.1	6825.7	7394.5	5857.4	7094.9	7919.9	12539.8
165-1313	O	42.5	1	51.67	306.9	85.31	96.57	107.84	20	0.472	9.2	6521.9	1278.8	1534.6	1662.4	1316.9	1595.1	1780.5	2819.2
		1079.5	25.4	1312.5	16500.6	416.52	471.51	526.5	3413	12	233	890618.7	5688.4	6826	7394.9	5857.7	7095.2	7920.3	12540.4
165-1486	O	48	0.875	58.51	307.4	75.2	85.2	95.2	20	0.472	10.5	7377.5	1280.8	1537	1665.1	1318.9	1597.6	1783.4	2823.7
		1219.2	22.225	1486.2	16526.6	367.17	415.99	464.81	3413	12	267	1007462	5697.3	6836.8	7406.5	5866.9	7106.4	7932.8	12560.2
165-1283	O	48	0.75	50.52	307.6	73.37	82.83	92.29	20	0.472	2.5	7381.7	1281.5	1537.8	1666	1319.7	1598.5	1784.4	2825.3
		1219.2	19.05	1283.2	16536	358.24	404.41	450.59	3413	12	64	1008034.6	5700.6	6840.7	7410.8	5870.3	7110.5	7937.3	12567.4
166-1503	O	50	0.812	59.17	308.1	71.83	81.34	90.84	20	0.472	9.2	7702.3	1283.7	1540.5	1668.8	1321.9	1601.2	1787.4	2830.1
		1270	20.638	1503	16564.1	350.72	397.12	443.52	3413	12	233	1051823	5710.3	6852.3	7423.4	5880.3	7122.6	7950.8	12588.7
166-1545	O	49	0.875	60.81	308.2	74.09	83.98	93.87	20	0.472	11.8	7552	1284.3	1541.2	1669.7	1322.6	1602	1788.3	2831.4
		1244.6	22.225	1544.6	16572.2	361.75	410.04	458.33	3413	12	300	1031288.2	5713.1	6855.7	7427	5883.1	7126	7954.7	12594.9
166-1321	O	44	0.938	51.99	308.6	82.3	93.13	103.96	20	0.472	8	6788.6	1285.7	1542.9	1671.4	1324	1603.7	1790.2	2834.5
		1117.6	23.812	1320.6	16589.8	401.81	454.69	507.56	3413	12	203	927040.7	5719.2	6863	7434.9	5889.4	7133.6	7963.1	12608.3
166-1626	O	54	0.75	64.02	308.8	66.51	75.34	84.16	20	0.472	10	8337.4	1286.6	1544	1672.6	1324.9	1604.9	1791.5	2836.5
		1371.6	19.05	1626.1	16601.8	324.71	367.82	410.93	3413	12	254.5	1138552.4	5723.3	6867.9	7440.3	5893.6	7138.8	7968.9	12617.4
166-1385	O	52	0.688	54.52	308.8	67.69	76.41	85.14	20	0.472	2.5	8029.9	1286.8	1544.2	1672.9	1325.1	1605.1	1791.7	2836.9
		1320.8	17.462	1384.8	16604.3	330.48	373.09	415.69	3413	12	64	1096548.2	5724.1	6869	7441.4	5894.5	7139.9	7970.1	12619.3
166-1270	O	42	1	49.99	309.5	86.88	98.31	109.73	20	0.472	8	6500.5	1289.8	1547.7	1676.7	1328.2	1608.8	1795.9	2843.4
		1066.8	25.4	1269.8	16642.4	424.19	479.97	535.75	3413	12	203	887706.3	5737.3	6884.7	7458.4	5908.1	7156.2	7988.4	12648.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
166-1270	O	42	1	49.99	309.5	86.88	98.31	109.73	20	0.472	8	6500.5	1289.8	1547.7	1676.7	1328.2	1608.8	1795.9	2843.4
		1066.8	25.4	1269.8	16642.4	424.19	479.97	535.75	3413	12	203	887706.7	5737.3	6884.7	7458.5	5908.1	7156.2	7988.4	12648.2
166-1621	O	52	0.812	63.81	309.6	69.77	79.09	88.42	20	0.472	11.8	8049.5	1290	1548	1677	1328.4	1609	1796.1	2843.9
		1320.8	20.638	1620.8	16645	340.66	386.17	431.68	3413	12	300	1099234.9	5738.2	6885.8	7459.6	5909	7157.3	7989.6	12650.2
167-1501	O	52	0.75	59.09	309.8	68.66	77.64	86.61	20	0.472	7.1	8053.6	1290.6	1548.8	1677.8	1329.1	1609.8	1797	2845.3
		1320.8	19.05	1500.8	16653.3	335.23	379.06	422.89	3413	12	180	1099786.8	5741	6889.2	7463.3	5911.9	7160.9	7993.6	12656.5
167-1080	O	40	0.938	42.52	309.8	90.03	101.63	113.22	20	0.472	2.5	6196.6	1291	1549.1	1678.2	1329.4	1610.2	1797.5	2846
		1016	23.812	1080	16657.5	439.59	496.2	552.81	3413	12	64	846199.1	5742.5	6890.9	7465.2	5913.4	7162.7	7995.6	12659.7
167-1474	O	48	0.875	58.02	310	75.68	85.71	95.74	20	0.472	10	7440.1	1291.7	1550	1679.2	1330.1	1611.1	1798.5	2847.6
		1219.2	22.225	1473.7	16666.8	369.49	418.46	467.43	3413	12	254.5	1016007.3	5745.7	6894.8	7469.4	5916.7	7166.7	8000.1	12666.8
167-1029	O	38	1	40.52	310.3	95.44	107.73	120.01	20	0.472	2.5	5895.2	1292.8	1551.4	1680.6	1331.3	1612.5	1800.1	2850.1
		965.2	25.4	1029.2	16681.3	465.97	525.96	585.95	3413	12	64	805039.8	5750.7	6900.8	7475.9	5921.9	7173	8007	12677.8
167-1602	O	56	0.688	63.09	310.4	63.64	71.96	80.29	20	0.472	7.1	8691.9	1293.4	1552.1	1681.5	1331.9	1613.3	1800.9	2851.5
		1422.4	17.462	1602.4	16689.4	310.72	351.36	392	3413	12	180	1186950.8	5753.5	6904.2	7479.5	5924.7	7176.4	8010.9	12684
168-1385	O	44	1	54.51	312.6	84.05	95.19	106.34	20	0.472	10.5	6876.8	1302.4	1562.9	1693.2	1341.2	1624.6	1813.5	2871.3
		1117.6	25.4	1384.6	16805.6	410.35	464.77	519.2	3413	12	267	939094.3	5793.5	6952.2	7531.6	5966	7226.4	8066.7	12772.2
168-1605	O	54	0.75	63.17	312.9	67.24	76.14	85.03	20	0.472	9.2	8449.2	1303.9	1564.7	1695	1342.7	1626.4	1815.5	2874.5
		1371.6	19.05	1604.6	16824.3	328.3	371.73	415.16	3413	12	233	1153807.8	5800	6959.9	7539.9	5972.6	7234.4	8075.6	12786.4
168-1370	O	50	0.75	53.94	313.2	71.77	81.06	90.34	20	0.472	3.9	7829.5	1304.9	1565.9	1696.4	1343.8	1627.7	1816.9	2876.8
		1270	19.05	1370	16837.6	350.43	395.75	441.06	3413	12	100	1069189.8	5804.6	6965.5	7545.9	5977.4	7240.2	8082.1	12796.6
169-1218	O	44	0.875	47.94	313.7	82.46	93.12	103.78	20	0.472	3.9	6901.5	1307.1	1568.5	1699.2	1346	1630.4	1820	2881.6
		1117.6	22.225	1217.6	16865.8	402.63	454.65	506.68	3413	12	100	942460.6	5814.3	6977.1	7558.6	5987.4	7252.3	8095.6	12818
169-1824	O	60	0.688	71.81	313.8	60.84	68.98	77.11	20	0.472	11.8	9415	1307.6	1569.2	1699.9	1346.6	1631.1	1820.7	2882.8
		1524	17.462	1824	16872.7	297.04	336.77	376.51	3413	12	300	1285701.8	5816.7	6980	7561.7	5989.8	7255.3	8098.9	12823.3
169-1472	O	54	0.688	57.94	313.9	66.31	74.89	83.47	20	0.472	3.9	8474.6	1307.8	1569.4	1700.1	1346.7	1631.3	1820.9	2883.2
		1371.6	17.462	1471.6	16874.9	323.77	365.65	407.53	3413	12	100	1157277.8	5817.4	6980.9	7562.6	5990.6	7256.2	8099.9	12824.9
169-1722	O	56	0.75	67.81	314	65.43	74.17	82.91	20	0.472	11.8	8791.8	1308.3	1570	1700.8	1347.3	1631.9	1821.6	2884.3
		1422.4	19.05	1722.4	16881.4	319.44	362.13	404.81	3413	12	300	1200603.8	5819.7	6983.6	7565.5	5992.9	7259	8103.1	12829.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
169-1298	O	44	0.938	51.09	314	83.3	94.17	105.03	20	0.472	7.1	6908.9	1308.5	1570.2	1701.1	1347.5	1632.1	1821.9	2884.7
		1117.6	23.812	1297.6	16883.9	406.7	459.76	512.82	3413	12	180	943472.6	5820.5	6984.6	7566.7	5993.8	7260.1	8104.3	12831.8
169-1283	O	42.5	1	50.49	314.1	87.04	98.48	109.91	20	0.472	8	6674.4	1308.7	1570.5	1701.3	1347.7	1632.4	1822.2	2885.1
		1079.5	25.4	1282.5	16886.6	424.95	480.8	536.64	3413	12	203	911451.9	5821.4	6985.7	7567.9	5994.7	7261.2	8105.5	12833.8
169-1473	O	50	0.812	57.99	314.4	73.06	82.68	92.3	20	0.472	8	7859.2	1309.9	1571.8	1702.8	1348.9	1633.8	1823.8	2887.7
		1270	20.638	1473	16901.5	356.73	403.69	450.66	3413	12	203	1073245.1	5826.6	6991.9	7574.6	6000	7267.6	8112.7	12845.1
169-1452	O	48	0.875	57.17	314.6	76.63	86.75	96.87	20	0.472	9.2	7550.2	1310.8	1573	1704	1349.8	1635	1825.1	2889.8
		1219.2	22.225	1452.2	16913.5	374.12	423.53	472.94	3413	12	233	1031049.4	5830.7	6996.9	7580	6004.3	7272.8	8118.5	12854.3
169-1512	O	49	0.875	59.51	315	75.45	85.47	95.49	20	0.472	10.5	7716.8	1312.4	1574.9	1706.1	1351.5	1637	1827.3	2893.3
		1244.6	22.225	1511.6	16934	368.37	417.29	466.21	3413	12	267	1053802.5	5837.8	7005.3	7589.1	6011.6	7281.6	8128.3	12869.8
169-1247	O	42	1	49.09	315.3	88.01	99.48	110.96	20	0.472	7.1	6620.5	1313.6	1576.3	1707.7	1352.7	1638.5	1829	2895.9
		1066.8	25.4	1246.8	16949.4	429.69	485.72	541.74	3413	12	180	904082	5843.1	7011.7	7596	6017	7288.2	8135.7	12881.6
169-1247	O	42	1	49.09	315.3	88.01	99.48	110.96	20	0.472	7.1	6620.5	1313.6	1576.3	1707.7	1352.7	1638.5	1829	2895.9
		1066.8	25.4	1246.8	16949.4	429.69	485.72	541.74	3413	12	180	904082.5	5843.1	7011.7	7596	6017	7288.3	8135.7	12881.6
170-1372	O	44	1	54.02	315.4	84.64	95.83	107.02	20	0.472	10	6939.5	1314.3	1577.2	1708.6	1353.4	1639.4	1830	2897.5
		1117.6	25.4	1372.1	16958.7	413.23	467.87	522.51	3413	12	254.5	947649.6	5846.3	7015.5	7600.2	6020.3	7292.2	8140.2	12888.6
170-1588	O	52	0.812	62.51	316	70.97	80.41	89.84	20	0.472	10.5	8216.8	1316.8	1580.2	1711.8	1356	1642.5	1833.5	2903
		1320.8	20.638	1587.8	16990.9	346.53	392.58	438.63	3413	12	267	1122080.9	5857.4	7028.9	7614.6	6031.8	7306.1	8155.6	12913.1
170-1570	O	50	0.875	61.81	316.4	74.35	84.26	94.17	20	0.472	11.8	7911	1318.5	1582.2	1714	1357.7	1644.6	1835.8	2906.7
		1270	22.225	1570	17012.8	362.99	411.39	459.79	3413	12	300	1080312.1	5865	7037.9	7624.4	6039.5	7315.5	8166.1	12929.7
171-1167	O	42	0.938	45.94	317.2	87.76	99.09	110.42	20	0.472	3.9	6662.1	1321.8	1586.2	1718.4	1361.2	1648.8	1840.5	2914.1
		1066.8	23.812	1166.8	17056.1	428.47	483.8	539.13	3413	12	100	909770.3	5879.9	7055.8	7643.8	6054.9	7334.1	8186.9	12962.6
171-1499	O	49	0.875	59.02	317.6	75.92	85.97	96.02	20	0.472	10	7781.2	1323.3	1588	1720.3	1362.7	1650.6	1842.6	2917.4
		1244.6	22.225	1499.1	17075.2	370.66	419.73	468.79	3413	12	254.5	1062589.4	5886.5	7063.8	7652.4	6061.7	7342.3	8196.1	12977.1
171-1116	O	40	1	43.94	318.3	92.93	104.92	116.92	20	0.472	3.9	6366.3	1326.3	1591.6	1724.2	1365.8	1654.4	1846.7	2924
		1016	25.4	1116	17113.8	453.72	512.29	570.85	3413	12	100	869379.9	5899.8	7079.7	7669.7	6075.4	7358.9	8214.6	13006.5
171-1116	O	40	1	43.94	318.3	92.93	104.92	116.92	20	0.472	3.9	6366.3	1326.3	1591.6	1724.2	1365.8	1654.4	1846.7	2924
		1016	25.4	1116	17113.8	453.72	512.29	570.85	3413	12	100	869380.3	5899.8	7079.7	7669.7	6075.4	7358.9	8214.6	13006.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
171-1575	O	52	0.812	62.02	318.5	71.39	80.84	90.3	20	0.472	10	8282	1327.2	1592.7	1725.4	1366.8	1655.5	1848	2926
		1320.8	20.638	1575.3	17125.8	348.53	394.7	440.87	3413	12	254.5	1130984.6	5903.9	7084.7	7675.1	6079.6	7364.1	8220.4	13015.6
171-1575	O	54	0.75	61.99	318.9	68.3	77.3	86.29	20	0.472	8	8610.1	1328.7	1594.5	1727.3	1368.3	1657.4	1850.1	2929.3
		1371.6	19.05	1574.6	17144.8	333.49	377.4	421.3	3413	12	203	1175790.7	5910.5	7092.5	7683.6	6086.4	7372.3	8229.5	13030.1
172-1450	O	50	0.812	57.09	319.4	73.81	83.45	93.08	20	0.472	7.1	7983.9	1330.6	1596.8	1729.8	1370.3	1659.7	1852.7	2933.5
		1270	20.638	1450	17169.6	360.38	407.43	454.47	3413	12	180	1090269	5919	7102.8	7694.7	6095.2	7382.9	8241.4	13048.9
172-1791	O	60	0.688	70.51	319.6	61.74	69.95	78.17	20	0.472	10.5	9588.5	1331.7	1598.1	1731.3	1371.4	1661.1	1854.3	2935.9
		1524	17.462	1791	17183.6	301.44	341.54	381.64	3413	12	267	1309391.4	5923.8	7108.6	7701	6100.2	7389	8248.1	13059.5
172-1260	O	42.5	1	49.59	319.8	88.15	99.64	111.13	20	0.472	7.1	6796.3	1332.6	1599.1	1732.4	1372.3	1662.2	1855.5	2937.8
		1079.5	25.4	1259.5	17194.9	430.41	486.5	542.6	3413	12	180	928096.1	5927.7	7113.3	7706.1	6104.2	7393.8	8253.6	13068.1
172-1689	O	56	0.75	66.51	320.1	66.47	75.31	84.14	20	0.472	10.5	8963.6	1333.9	1600.6	1734	1373.6	1663.8	1857.2	2940.6
		1422.4	19.05	1689.4	17211.1	324.54	367.68	410.81	3413	12	267	1224055.9	5933.3	7120	7713.3	6110	7400.8	8261.3	13080.5
172-1351	O	44	1	53.17	320.5	85.8	97.11	108.41	20	0.472	9.2	7050	1335.2	1602.3	1735.8	1375	1665.5	1859.1	2943.6
		1117.6	25.4	1350.6	17228.6	418.9	474.11	529.32	3413	12	233	962735.1	5939.4	7127.2	7721.2	6116.2	7408.3	8269.7	13093.7
173-1519	O	48	0.938	59.81	320.9	78.78	89.27	99.76	20	0.472	11.8	7702.4	1337.2	1604.7	1738.4	1377	1668	1861.9	2948
		1219.2	23.812	1519.2	17254.5	384.65	435.86	487.06	3413	12	300	1051836.5	5948.3	7137.9	7732.8	6125.4	7419.5	8282.2	13113.4
173-1422	O	48	0.875	55.99	321.2	78	88.25	98.51	20	0.472	8	7709.5	1338.5	1606.1	1740	1378.3	1669.5	1863.6	2950.7
		1219.2	22.225	1422.2	17270.3	380.84	430.9	480.96	3413	12	203	1052798.5	5953.7	7144.5	7739.8	6131	7426.2	8289.8	13125.4
173-1624	O	60	0.625	63.94	321.4	60.82	68.69	76.55	20	0.472	3.9	9643.3	1339.4	1607.2	1741.2	1379.2	1670.6	1864.9	2952.7
		1524	15.875	1624	17281.9	296.97	335.37	373.76	3413	12	100	1316884.2	5957.7	7149.3	7745.1	6135.1	7431.2	8295.3	13134.3
173-1334	O	50	0.75	52.52	321.6	73.51	82.97	92.44	20	0.472	2.5	8040.8	1340.1	1608.2	1742.2	1380	1671.6	1866	2954.4
		1270	19.05	1334	17292	358.91	405.12	451.33	3413	12	64	1098043.5	5961.2	7153.5	7749.6	6138.7	7435.6	8300.2	13141.9
173-1436	O	54	0.688	56.52	321.7	67.79	76.52	85.25	20	0.472	2.5	8687.1	1340.6	1608.7	1742.8	1380.5	1672.2	1866.6	2955.5
		1371.6	17.462	1435.6	17298	330.98	373.6	416.22	3413	12	64	1186298.4	5963.3	7155.9	7752.3	6140.8	7438.1	8303.1	13146.5
173-1779	O	60	0.688	70.02	321.9	62.04	70.26	78.49	20	0.472	10	9655.9	1341.1	1609.3	1743.4	1381	1672.8	1867.3	2956.5
		1524	17.462	1778.5	17304.4	302.9	343.06	383.23	3413	12	254.5	1318594.3	5965.5	7158.6	7755.1	6143.1	7440.9	8306.1	13151.3
173-1478	O	49	0.875	58.17	322.2	76.85	86.99	97.13	20	0.472	9.2	7894.4	1342.6	1611.1	1745.4	1382.6	1674.6	1869.4	2959.8
		1244.6	22.225	1477.6	17323.7	375.23	424.73	474.23	3413	12	233	1078050.8	5972.1	7166.5	7763.7	6149.9	7449.2	8315.4	13166

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
173-1677	O	56	0.75	66.02	322.5	66.82	75.68	84.53	20	0.472	10	9030.4	1343.8	1612.6	1747	1383.8	1676.2	1871.1	2962.5
		1422.4	19.05	1676.9	17339.4	326.26	369.49	412.71	3413	12	254.5	1233180.3	5977.6	7173.1	7770.8	6155.5	7456	8322.9	13178
174-1319	O	48	0.812	51.94	322.8	77.31	87.29	97.28	20	0.472	3.9	7748.1	1345.2	1614.2	1748.7	1385.2	1677.8	1872.9	2965.5
		1219.2	20.638	1319.2	17356.8	377.46	426.21	474.96	3413	12	100	1058073.1	5983.6	7180.3	7778.6	6161.7	7463.4	8331.3	13191.2
174-1554	O	52	0.812	61.17	322.9	72.21	81.74	91.28	20	0.472	9.2	8396.6	1345.6	1614.7	1749.3	1385.7	1678.4	1873.6	2966.5
		1320.8	20.638	1553.8	17362.7	352.57	399.11	445.66	3413	12	233	1146634.1	5985.6	7182.7	7781.3	6163.8	7466	8334.1	13195.7
174-1537	O	50	0.875	60.51	323.2	75.69	85.72	95.76	20	0.472	10.5	8080.8	1346.8	1616.2	1750.8	1386.9	1679.9	1875.2	2969.1
		1270	22.225	1537	17378.1	369.53	418.54	467.56	3413	12	267	1103506.8	5990.9	7189	7788.1	6169.2	7472.6	8341.5	13207.3
174-1182	O	44	0.875	46.52	323.3	84.75	95.65	106.56	20	0.472	2.5	7111.8	1346.9	1616.3	1751	1387	1680.1	1875.4	2969.4
		1117.6	22.225	1181.6	17379.6	413.78	467.02	520.27	3413	12	64	971174.7	5991.4	7189.7	7788.8	6169.8	7473.2	8342.2	13208.5
174-1552	O	54	0.75	61.09	323.6	68.93	77.93	86.93	20	0.472	7.1	8737.8	1348.4	1618.1	1752.9	1388.6	1681.9	1877.5	2972.7
		1371.6	19.05	1551.6	17398.9	336.56	380.49	424.43	3413	12	180	1193219.9	5998.1	7197.7	7797.5	6176.6	7481.5	8351.5	13223.2
174-1595	O	51	0.875	62.81	324	74.59	84.53	94.46	20	0.472	11.8	8261.2	1349.9	1619.8	1754.8	1390.1	1683.7	1879.5	2975.9
		1295.4	22.225	1595.4	17417.7	364.19	412.69	461.19	3413	12	300	1128145.7	6004.5	7205.4	7805.9	6183.3	7489.6	8360.5	13237.5
174-1672	O	54	0.812	65.81	324.3	70.19	79.54	88.9	20	0.472	11.8	8755.8	1351.2	1621.4	1756.6	1391.4	1685.4	1881.4	2978.8
		1371.6	20.638	1671.6	17434.8	342.69	388.36	434.03	3413	12	300	1195680.8	6010.4	7212.5	7813.6	6189.4	7497	8368.7	13250.5
175-1757	O	60	0.688	69.17	325.8	62.65	70.93	79.21	20	0.472	9.2	9774	1357.5	1629	1764.8	1397.9	1693.2	1890.1	2992.7
		1524	17.462	1757	17516.1	305.91	346.33	386.76	3413	12	233	1334729.7	6038.5	7246.2	7850	6218.2	7531.9	8407.7	13312.3
175-1525	O	50	0.875	60.02	325.9	76.15	86.22	96.29	20	0.472	10	8147.1	1357.8	1629.4	1765.2	1398.3	1693.7	1890.6	2993.5
		1270	22.225	1524.5	17520.6	371.79	420.95	470.11	3413	12	254.5	1112554.9	6040	7248	7852	6219.8	7533.8	8409.9	13315.6
176-1399	O	48	0.875	55.09	326.5	78.86	89.14	99.42	20	0.472	7.1	7836.2	1360.5	1632.5	1768.6	1401	1696.9	1894.2	2999.2
		1219.2	22.225	1399.2	17554.2	385.02	435.21	485.4	3413	12	180	1070104.3	6051.6	7261.9	7867.1	6231.7	7548.3	8426	13341.2
176-1655	O	56	0.75	65.17	326.7	67.54	76.46	85.38	20	0.472	9.2	9147.7	1361.3	1633.5	1769.6	1401.8	1697.9	1895.4	3001
		1422.4	19.05	1655.4	17564.6	329.76	373.3	416.84	3413	12	233	1249196.6	6055.2	7266.2	7871.7	6235.4	7552.8	8431	13349.1
176-1522	O	56	0.688	59.94	326.7	66.46	75.04	83.63	20	0.472	3.9	9148.6	1361.4	1633.7	1769.8	1401.9	1698.1	1895.6	3001.3
		1422.4	17.462	1522.4	17566.4	324.47	366.38	408.3	3413	12	100	1249323.4	6055.8	7267	7872.5	6236.1	7553.6	8431.9	13350.5
176-1421	O	52	0.75	55.94	327.2	71.96	81.25	90.55	20	0.472	3.9	8507	1363.3	1636	1772.3	1403.9	1700.5	1898.2	3005.5
		1320.8	19.05	1420.8	17591	351.34	396.72	442.09	3413	12	100	1161711.7	6064.3	7277.1	7883.6	6244.8	7564.1	8443.7	13369.2

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
176-1131	O	42	0.938	44.52	327.3	90.31	101.93	113.54	20	0.472	2.5	6874.2	1363.9	1636.7	1773.1	1404.5	1701.3	1899.1	3006.9
		1066.8	23.812	1130.8	17599.1	440.94	497.65	554.36	3413	12	64	938733.6	6067.1	7280.5	7887.2	6247.7	7567.6	8447.5	13375.3
176-1321	O	44	1	51.99	327.7	87.49	98.97	110.44	20	0.472	8	7210.1	1365.6	1638.7	1775.2	1406.2	1703.3	1901.3	3010.5
		1117.6	25.4	1320.6	17620	427.15	483.19	539.23	3413	12	203	984605.5	6074.3	7289.1	7896.6	6255.1	7576.6	8457.6	13391.2
176-1486	O	48	0.938	58.51	328.1	80.27	90.9	101.53	20	0.472	10.5	7873.5	1366.9	1640.3	1777	1407.6	1705	1903.2	3013.5
		1219.2	23.812	1486.2	17637.7	391.9	443.8	495.71	3413	12	267	1075191.8	6080.4	7296.4	7904.5	6261.4	7584.2	8466.1	13404.6
177-1588	O	60	0.625	62.52	328.7	62.03	70.02	78.01	20	0.472	2.5	9862	1369.7	1643.7	1780.6	1410.5	1708.5	1907.1	3019.6
		1524	15.875	1588	17673.7	302.88	341.87	380.86	3413	12	64	1346738	6092.8	7311.4	7920.6	6274.2	7599.7	8483.4	13432
177-1448	O	49	0.875	56.99	328.9	78.21	88.48	98.75	20	0.472	8	8058	1370.4	1644.5	1781.5	1411.2	1709.3	1908.1	3021.2
		1244.6	22.225	1447.6	17682.7	381.85	431.99	482.14	3413	12	203	1100392.3	6095.9	7315.1	7924.6	6277.3	7603.5	8487.7	13438.8
177-1080	O	40	1	42.52	328.9	95.78	108.09	120.4	20	0.472	2.5	6578.5	1370.5	1644.6	1781.7	1411.3	1709.5	1908.3	3021.4
		1016	25.4	1080	17684.2	467.62	527.74	587.86	3413	12	64	898359.3	6096.4	7315.7	7925.4	6277.9	7604.2	8488.4	13440
177-1080	O	40	1	42.52	328.9	95.78	108.09	120.4	20	0.472	2.5	6578.6	1370.5	1644.6	1781.7	1411.3	1709.5	1908.3	3021.4
		1016	25.4	1080	17684.2	467.62	527.74	587.86	3413	12	64	898359.7	6096.4	7315.7	7925.4	6277.9	7604.2	8488.4	13440
177-1524	O	52	0.812	59.99	329.3	73.41	83.05	92.7	20	0.472	8	8561.9	1372.1	1646.5	1783.7	1413	1711.5	1910.5	3024.9
		1320.8	20.638	1523.8	17704.6	358.41	405.51	452.6	3413	12	203	1169208.6	6103.4	7324.1	7934.5	6285.1	7613	8498.2	13455.5
178-1503	O	50	0.875	59.17	330.5	77.07	87.23	97.39	20	0.472	9.2	8263.6	1377.3	1652.7	1790.4	1418.3	1717.9	1917.7	3036.3
		1270	22.225	1503	17771.2	376.29	425.89	475.48	3413	12	233	1128469.7	6126.4	7351.7	7964.3	6308.8	7641.6	8530.2	13506.1
178-1562	O	51	0.875	61.51	330.8	75.92	85.97	96.03	20	0.472	10.5	8435.7	1378.4	1654.1	1791.9	1419.4	1719.3	1919.2	3038.8
		1295.4	22.225	1562.4	17785.6	370.65	419.76	468.87	3413	12	267	1151973.6	6131.4	7357.6	7970.8	6313.9	7647.8	8537.1	13517.1
178-1639	O	54	0.812	64.51	330.8	71.36	80.82	90.28	20	0.472	10.5	8932.1	1378.4	1654.1	1791.9	1419.4	1719.3	1919.3	3038.8
		1371.6	20.638	1638.6	17786	348.41	394.61	440.81	3413	12	267	1219760.8	6131.5	7357.8	7970.9	6314	7648	8537.3	13517.3
178-1474	O	48	0.938	58.02	330.8	80.78	91.45	102.12	20	0.472	10	7940.3	1378.5	1654.2	1792.1	1419.6	1719.5	1919.4	3039
		1219.2	23.812	1473.7	17787.3	394.42	446.51	498.59	3413	12	254.5	1084311.6	6131.9	7358.3	7971.5	6314.5	7648.5	8537.9	13518.3
178-1727	O	60	0.688	67.99	331.5	63.54	71.9	80.26	20	0.472	8	9943.8	1381.1	1657.3	1795.4	1422.2	1722.7	1923	3044.7
		1524	17.462	1727	17820.4	310.25	351.06	391.86	3413	12	203	1357915.5	6143.4	7372	7986.4	6326.2	7662.8	8553.8	13543.5
178-1283	O	48	0.812	50.52	331.9	79.27	89.46	99.66	20	0.472	2.5	7965.5	1382.9	1659.5	1797.8	1424.1	1724.9	1925.5	3048.7
		1219.2	20.638	1283.2	17843.8	387.02	436.8	486.58	3413	12	64	1087757.2	6151.4	7381.7	7996.9	6334.5	7672.8	8565	13561.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
179-1621	O	52	0.875	63.81	332.2	74.83	84.78	94.74	20	0.472	11.8	8637.3	1384.2	1661	1799.4	1425.4	1726.5	1927.3	3051.5
		1320.8	22.225	1620.8	17860.4	365.36	413.96	462.55	3413	12	300	1179503.9	6157.2	7388.6	8004.3	6340.5	7680	8573	13573.9
179-1625	O	56	0.75	63.99	332.7	68.58	77.59	86.6	20	0.472	8	9316.5	1386.4	1663.7	1802.3	1427.7	1729.3	1930.4	3056.4
		1422.4	19.05	1625.4	17888.8	334.82	378.82	422.82	3413	12	203	1272253	6167	7400.3	8017	6350.5	7692.2	8586.6	13595.5
179-1626	O	54	0.812	64.02	333.4	71.76	81.25	90.73	20	0.472	10	9000.8	1389	1666.8	1805.7	1430.4	1732.5	1934	3062.2
		1371.6	20.638	1626.1	17922.7	350.37	396.68	443	3413	12	254.5	1229137.2	6178.6	7414.3	8032.2	6362.6	7706.8	8602.9	13621.2
179-1550	O	51	0.875	61.02	333.5	76.37	86.46	96.55	20	0.472	10	8503.8	1389.5	1667.4	1806.4	1430.9	1733.2	1934.7	3063.3
		1295.4	22.225	1549.9	17929	372.88	422.14	471.39	3413	12	254.5	1161264.3	6180.8	7417	8035.1	6364.8	7709.5	8605.9	13626.1
179-1298	O	44	1	51.09	333.5	88.58	100.11	111.64	20	0.472	7.1	7337.9	1389.8	1667.7	1806.7	1431.1	1733.5	1935	3063.8
		1117.6	25.4	1297.6	17932.3	432.48	488.77	545.06	3413	12	180	1002057.6	6181.9	7418.3	8036.5	6366	7710.9	8607.5	13628.6
180-1425	O	49	0.875	56.09	334.2	79.05	89.35	99.65	20	0.472	7.1	8188.1	1392.5	1671	1810.3	1434	1736.9	1938.9	3069.9
		1244.6	22.225	1424.6	17968.1	385.97	436.25	486.52	3413	12	180	1118158	6194.3	7433.2	8052.6	6378.7	7726.3	8624.7	13655.8
180-1501	O	52	0.812	59.09	334.4	74.14	83.8	93.46	20	0.472	7.1	8693.2	1393.1	1671.8	1811.1	1434.6	1737.7	1939.7	3071.3
		1320.8	20.638	1500.8	17975.9	361.97	409.14	456.31	3413	12	180	1187126.9	6197	7436.4	8056.1	6381.4	7729.6	8628.4	13661.7
180-1486	O	56	0.688	58.52	334.6	67.88	76.62	85.35	20	0.472	2.5	9370.2	1394.4	1673.2	1812.7	1435.9	1739.2	1941.5	3074
		1422.4	17.462	1486.4	17991.9	331.44	374.08	416.72	3413	12	64	1279581.5	6202.5	7443	8063.2	6387.1	7736.5	8636.1	13673.8
180-1218	O	44	0.938	47.94	334.7	88.11	99.47	110.83	20	0.472	3.9	7362.8	1394.5	1673.4	1812.8	1436	1739.4	1941.6	3074.2
		1117.6	23.812	1217.6	17993.2	430.19	485.66	541.14	3413	12	100	1005461.6	6202.9	7443.5	8063.8	6387.6	7737.1	8636.7	13674.9
180-1385	O	52	0.75	54.52	335.7	73.64	83.11	92.58	20	0.472	2.5	8728.2	1398.7	1678.5	1818.4	1440.4	1744.7	1947.6	3083.6
		1320.8	19.05	1384.8	18048.3	359.53	405.77	452	3413	12	64	1191912.2	6221.9	7466.3	8088.5	6407.2	7760.8	8663.2	13716.7
181-1452	O	48	0.938	57.17	335.7	81.81	92.58	103.34	20	0.472	9.2	8057.8	1398.9	1678.7	1818.6	1440.6	1744.9	1947.8	3084
		1219.2	23.812	1452.2	18050.6	399.42	451.99	504.57	3413	12	233	1100365	6222.7	7467.3	8089.5	6408	7761.8	8664.3	13718.5
181-1704	O	60	0.688	67.09	335.9	64.05	72.41	80.76	20	0.472	7.1	10078	1399.7	1679.7	1819.6	1441.4	1745.9	1948.9	3085.8
		1524	17.462	1704	18060.9	312.73	353.52	394.31	3413	12	180	1376244.1	6226.3	7471.5	8094.2	6411.6	7766.2	8669.3	13726.3
181-1167	O	42	1	45.94	336.9	93.35	105.38	117.42	20	0.472	3.9	7074.4	1403.6	1684.4	1824.7	1445.4	1750.8	1954.4	3094.4
		1066.8	25.4	1166.8	18111.5	455.78	514.53	573.27	3413	12	100	966069.1	6243.7	7492.5	8116.8	6429.6	7788	8693.5	13764.8
181-1167	O	42	1	45.94	336.9	93.35	105.38	117.42	20	0.472	3.9	7074.4	1403.6	1684.4	1824.7	1445.4	1750.8	1954.4	3094.4
		1066.8	25.4	1166.8	18111.5	455.78	514.53	573.27	3413	12	100	966069.6	6243.7	7492.5	8116.9	6429.6	7788	8693.5	13764.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
181-1473	O	50	0.875	57.99	337.3	78.41	88.7	98.98	20	0.472	8	8431.9	1405.3	1686.4	1826.9	1447.2	1752.9	1956.7	3098.1
		1270	22.225	1473	18133.1	382.82	433.05	483.27	3413	12	203	1151452.8	6251.2	7501.4	8126.5	6437.3	7797.2	8703.9	13781.2
181-1602	O	56	0.75	63.09	337.5	69.19	78.21	87.22	20	0.472	7.1	9450.2	1406.3	1687.5	1828.2	1448.1	1754.1	1958.1	3100.3
		1422.4	19.05	1602.4	18145.6	337.81	381.84	425.87	3413	12	180	1290514.2	6255.5	7506.6	8132.1	6441.7	7802.6	8709.9	13790.6
182-1570	O	50	0.938	61.81	337.8	79.35	89.89	100.42	20	0.472	11.8	8444.1	1407.4	1688.8	1829.6	1449.2	1755.4	1959.5	3102.6
		1270	23.812	1570	18159.4	387.41	438.86	490.31	3413	12	300	1153121	6260.2	7512.3	8138.3	6446.6	7808.5	8716.5	13801.1
182-1605	O	54	0.812	63.17	337.8	72.57	82.13	91.69	20	0.472	9.2	9121.4	1407.6	1689.1	1829.9	1449.5	1755.8	1959.9	3103.2
		1371.6	20.638	1604.6	18162.8	354.3	400.98	447.66	3413	12	233	1245606.4	6261.4	7513.7	8139.8	6447.8	7810	8718.2	13803.7
182-1370	O	50	0.812	53.94	338	77.54	87.54	97.54	20	0.472	3.9	8450.1	1408.3	1690	1830.9	1450.3	1756.7	1960.9	3104.8
		1270	20.638	1370	18172.2	378.56	427.39	476.22	3413	12	100	1153934.3	6264.6	7517.6	8144	6451.1	7814	8722.7	13810.9
182-1528	O	51	0.875	60.17	338.2	77.28	87.46	97.63	20	0.472	9.2	8623.4	1409.1	1690.9	1831.8	1451	1757.5	1961.9	3106.4
		1295.4	22.225	1528.4	18181.3	377.33	427.01	476.69	3413	12	233	1177599.8	6267.8	7521.3	8148.1	6454.3	7817.9	8727	13817.8
182-1722	O	56	0.812	67.81	339	70.58	79.96	89.35	20	0.472	11.8	9492.5	1412.6	1695.1	1836.3	1454.6	1761.9	1966.8	3114.1
		1422.4	20.638	1722.4	18226.7	344.59	390.41	436.24	3413	12	300	1296284.3	6283.4	7540.1	8168.5	6470.5	7837.5	8748.8	13852.3
182-1588	O	52	0.875	62.51	339.1	76.14	86.21	96.29	20	0.472	10.5	8816.8	1413	1695.5	1836.8	1455	1762.4	1967.3	3115
		1320.8	22.225	1587.8	18231.6	371.74	420.94	470.14	3413	12	267	1204018.1	6285.1	7542.2	8170.7	6472.2	7839.6	8751.2	13856.1
183-1646	O	53	0.875	64.81	339.7	75.06	85.04	95.01	20	0.472	11.8	9003.2	1415.6	1698.7	1840.3	1457.7	1765.7	1971	3120.8
		1346.2	22.225	1646.2	18265.7	366.49	415.18	463.87	3413	12	300	1229465.4	6296.9	7556.3	8185.9	6484.3	7854.3	8767.5	13881.9
183-1519	O	48	1	59.81	341	83.72	94.83	105.93	20	0.472	11.8	8183.7	1420.8	1704.9	1847	1463.1	1772.2	1978.2	3132.2
		1219.2	25.4	1519.2	18332.6	408.78	463	517.22	3413	12	300	1117555.3	6319.9	7583.9	8215.9	6508.1	7883	8799.6	13932.8
183-1519	O	48	1	59.81	341	83.72	94.83	105.93	20	0.472	11.8	8183.7	1420.8	1704.9	1847	1463.1	1772.2	1978.2	3132.2
		1219.2	25.4	1519.2	18332.6	408.78	463	517.22	3413	12	300	1117557.6	6320	7583.9	8215.9	6508.1	7883	8799.7	13932.8
183-1472	O	54	0.75	57.94	341.2	72.13	81.44	90.74	20	0.472	3.9	9212.8	1421.7	1706.1	1848.2	1464	1773.4	1979.6	3134.3
		1371.6	19.05	1471.6	18344.8	352.19	397.62	443.05	3413	12	100	1258086.4	6324.1	7589	8221.4	6512.4	7888.3	8805.5	13942
183-1824	O	60	0.75	71.81	341.3	66.07	74.86	83.65	20	0.472	11.8	10238.7	1422	1706.5	1848.7	1464.4	1773.8	1980	3135
		1524	19.05	1824	18349	322.59	365.51	408.43	3413	12	300	1398190.8	6325.6	7590.7	8223.3	6513.9	7890.1	8807.5	13945.2
184-1180	O	42.5	1	46.44	341.5	93.45	105.49	117.53	20	0.472	3.9	7257.3	1423	1707.6	1849.9	1465.4	1774.9	1981.3	3137.1
		1079.5	25.4	1179.5	18361.2	456.27	515.06	573.85	3413	12	100	991044.6	6329.8	7595.7	8228.7	6518.2	7895.3	8813.4	13954.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
184-1575	O	52	0.875	62.02	341.8	76.59	86.7	96.8	20	0.472	10	8886.8	1424.2	1709	1851.4	1466.6	1776.4	1983	3139.7
		1320.8	22.225	1575.3	18376.3	373.94	423.29	472.63	3413	12	254.5	1213572	6335	7602	8235.5	6523.6	7901.8	8820.6	13966
184-1450	O	50	0.875	57.09	342.6	79.24	89.55	99.87	20	0.472	7.1	8565.7	1427.6	1713.1	1855.9	1470.1	1780.7	1987.8	3147.3
		1270	22.225	1450	18420.7	386.89	437.24	487.6	3413	12	180	1169717.2	6350.3	7620.4	8255.4	6539.4	7920.9	8842	13999.8
184-1422	O	48	0.938	55.99	342.8	83.29	94.21	105.12	20	0.472	8	8227.8	1428.4	1714.1	1857	1471	1781.7	1988.9	3149.1
		1219.2	23.812	1422.2	18431.4	406.67	459.96	513.25	3413	12	203	1123576.1	6354	7624.8	8260.2	6543.1	7925.5	8847.1	14007.8
185-1575	O	54	0.812	61.99	344.3	73.73	83.4	93.07	20	0.472	8	9295.2	1434.4	1721.3	1864.8	1477.1	1789.2	1997.3	3162.3
		1371.6	20.638	1574.6	18508.9	359.98	407.2	454.42	3413	12	203	1269338.2	6380.7	7656.8	8294.9	6570.6	7958.8	8884.3	14066.7
185-1182	O	44	0.938	46.52	344.9	90.57	102.2	113.83	20	0.472	2.5	7587.2	1437	1724.4	1868.1	1479.7	1792.4	2000.8	3167.9
		1117.6	23.812	1181.6	18541.4	442.18	498.98	555.77	3413	12	64	1036095.1	6391.9	7670.3	8309.5	6582.2	7972.8	8899.9	14091.5
185-1498	O	51	0.875	58.99	344.9	78.6	88.9	99.21	20	0.472	8	8796	1437.3	1724.7	1868.4	1480	1792.7	2001.2	3168.5
		1295.4	22.225	1498.4	18545.3	383.77	434.07	484.37	3413	12	203	1201177	6393.3	7671.9	8311.2	6583.6	7974.5	8901.7	14094.4
185-1537	O	50	0.938	60.51	345	80.79	91.47	102.15	20	0.472	10.5	8625.4	1437.6	1725.1	1868.8	1480.4	1793.1	2001.6	3169.2
		1270	23.812	1537	18549.3	394.47	446.6	498.74	3413	12	267	1177879	6394.6	7673.6	8313	6585	7976.2	8903.7	14097.4
186-1689	O	56	0.812	66.51	345.6	71.72	81.21	90.7	20	0.472	10.5	9677.9	1440.2	1728.2	1872.2	1483	1796.4	2005.2	3175
		1422.4	20.638	1689.4	18582.8	350.17	396.52	442.86	3413	12	267	1321605.3	6406.2	7687.4	8328	6596.9	7990.6	8919.7	14122.9
186-1319	O	48	0.875	51.94	346.3	83.03	93.73	104.43	20	0.472	3.9	8311.4	1443	1731.5	1875.8	1485.9	1799.8	2009.1	3181.1
		1219.2	22.225	1319.2	18618.7	405.39	457.63	509.87	3413	12	100	1134998.5	6418.6	7702.3	8344.2	6609.7	8006.1	8937	14150.2
186-1554	O	52	0.875	61.17	346.5	77.49	87.68	97.87	20	0.472	9.2	9009.8	1443.9	1732.6	1877	1486.9	1801	2010.4	3183.1
		1320.8	22.225	1553.8	18630.6	378.33	428.09	477.86	3413	12	233	1230364.3	6422.7	7707.2	8349.5	6613.9	8011.2	8942.7	14159.2
186-1613	O	53	0.875	63.51	346.7	76.35	86.45	96.54	20	0.472	10.5	9187.4	1444.6	1733.5	1877.9	1487.6	1801.8	2011.3	3184.6
		1346.2	22.225	1613.2	18639.4	372.79	422.08	471.37	3413	12	267	1254615.6	6425.7	7710.8	8353.4	6617	8014.9	8946.9	14165.9
187-1334	O	50	0.812	52.52	347.1	79.43	89.63	99.83	20	0.472	2.5	8678.1	1446.4	1735.6	1880.3	1489.4	1804.1	2013.8	3188.6
		1270	20.638	1334	18662.6	387.79	437.61	487.43	3413	12	64	1185075	6433.7	7720.4	8363.8	6625.2	8024.9	8958	14183.6
187-1791	O	60	0.75	70.51	347.6	67.07	75.95	84.83	20	0.472	10.5	10427.4	1448.2	1737.9	1882.7	1491.4	1806.4	2016.5	3192.8
		1524	19.05	1791	18687	327.45	370.8	414.16	3413	12	267	1423953.1	6442.1	7730.6	8374.8	6633.9	8035.4	8969.8	14202.2
187-1131	O	42	1	44.52	347.6	96.09	108.42	120.76	20	0.472	2.5	7299.6	1448.3	1738	1882.8	1491.4	1806.5	2016.6	3193
		1066.8	25.4	1130.8	18688.1	469.13	529.36	589.59	3413	12	64	996824.7	6442.5	7731	8375.3	6634.3	8035.9	8970.3	14203

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
187-1131	O	42	1	44.52	347.6	96.09	108.42	120.76	20	0.472	2.5	7299.6	1448.3	1738	1882.8	1491.4	1806.5	2016.6	3193
		1066.8	25.4	1130.8	18688.1	469.13	529.36	589.59	3413	12	64	996825.3	6442.5	7731	8375.3	6634.3	8035.9	8970.3	14203
187-1525	O	50	0.938	60.02	347.8	81.3	92.01	102.72	20	0.472	10	8696.2	1449.4	1739.2	1884.2	1492.5	1807.8	2018	3195.2
		1270	23.812	1524.5	18701.4	396.94	449.24	501.55	3413	12	254.5	1187536.9	6447.1	7736.5	8381.2	6639	8041.6	8976.7	14213
187-1672	O	54	0.875	65.81	348	75.29	85.28	95.27	20	0.472	11.8	9396.5	1450.1	1740.1	1885.1	1493.2	1808.7	2019	3196.8
		1371.6	22.225	1671.6	18710.6	367.58	416.37	465.15	3413	12	300	1283171.8	6450.2	7740.3	8385.3	6642.3	8045.6	8981.1	14220
187-1677	O	56	0.812	66.02	348.2	72.11	81.63	91.14	20	0.472	10	9750.1	1450.9	1741.1	1886.2	1494.1	1809.7	2020.2	3198.6
		1422.4	20.638	1676.9	18721.3	352.09	398.54	444.99	3413	12	254.5	1331456.9	6453.9	7744.7	8390.1	6646.1	8050.1	8986.2	14228.2
187-1399	O	48	0.938	55.09	348.5	84.24	95.19	106.14	20	0.472	7.1	8363	1451.9	1742.3	1887.5	1495.1	1811	2021.6	3200.9
		1219.2	23.812	1399.2	18734.3	411.28	464.75	518.23	3413	12	180	1142045.5	6458.4	7750.1	8396	6650.7	8055.8	8992.5	14238.1
187-1486	O	48	1	58.51	348.6	85.32	96.58	107.84	20	0.472	10.5	8365.4	1452.3	1742.8	1888	1495.6	1811.5	2022.2	3201.8
		1219.2	25.4	1486.2	18739.7	416.55	471.54	526.53	3413	12	267	1142369.8	6460.3	7752.3	8398.3	6652.6	8058.1	8995	14242.1
187-1486	O	48	1	58.51	348.6	85.32	96.58	107.84	20	0.472	10.5	8365.4	1452.3	1742.8	1888	1495.6	1811.5	2022.2	3201.8
		1219.2	25.4	1486.2	18739.7	416.55	471.54	526.53	3413	12	267	1142372.2	6460.3	7752.3	8398.4	6652.6	8058.1	8995.1	14242.2
188-1552	O	54	0.812	61.09	349.4	74.44	84.13	93.81	20	0.472	7.1	9433	1455.7	1746.8	1892.4	1499	1815.7	2026.9	3209.2
		1371.6	20.638	1551.6	18783.2	363.45	410.74	458.03	3413	12	180	1288154.2	6475.3	7770.3	8417.9	6668	8076.8	9016	14275.3
188-1601	O	53	0.875	63.02	349.4	76.8	86.92	97.05	20	0.472	10	9259.1	1455.8	1747	1892.6	1499.2	1815.9	2027	3209.5
		1346.2	22.225	1600.7	18784.9	374.97	424.4	473.83	3413	12	254.5	1264413	6475.9	7771	8418.6	6668.6	8077.5	9016.8	14276.5
188-1436	O	54	0.75	56.52	349.8	73.76	83.23	92.71	20	0.472	2.5	9443.8	1457.4	1748.9	1894.6	1500.8	1817.8	2029.2	3212.9
		1371.6	19.05	1435.6	18804.8	360.1	406.37	452.63	3413	12	64	1289635	6482.7	7779.3	8427.6	6675.7	8086.1	9026.3	14291.7
188-1545	O	49	1	60.81	349.9	84.03	95.17	106.3	20	0.472	11.8	8573.8	1458.1	1749.7	1895.6	1501.5	1818.8	2030.2	3214.5
		1244.6	25.4	1544.6	18814.4	410.29	464.65	519.01	3413	12	300	1170822	6486	7783.2	8431.9	6679.1	8090.2	9030.9	14299
188-1779	O	60	0.75	70.02	350	67.4	76.3	85.2	20	0.472	10	10500.7	1458.4	1750.1	1896	1501.8	1819.1	2030.7	3215.2
		1524	19.05	1778.5	18818.4	329.09	372.53	415.97	3413	12	254.5	1433961.2	6487.4	7784.9	8433.6	6680.5	8091.9	9032.8	14302
188-1475	O	51	0.875	58.09	350.3	79.42	89.75	100.08	20	0.472	7.1	8933.2	1459.7	1751.6	1897.6	1503.1	1820.7	2032.4	3217.9
		1295.4	22.225	1475.4	18834.4	387.78	438.21	488.64	3413	12	180	1219902.1	6492.9	7791.5	8440.8	6686.2	8098.8	9040.5	14314.1
189-1474	O	48	1	58.02	351.5	85.88	97.18	108.49	20	0.472	10	8436.4	1464.6	1757.6	1904	1508.2	1826.9	2039.3	3228.9
		1219.2	25.4	1473.7	18898.6	419.29	474.48	529.67	3413	12	254.5	1152059.4	6515.1	7818.1	8469.6	6709	8126.4	9071.3	14362.9

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
189-1474	O	48	1	58.02	351.5	85.88	97.18	108.49	20	0.472	10	8436.4	1464.6	1757.6	1904	1508.2	1826.9	2039.3	3228.9
		1219.2	25.4	1473.7	18898.7	419.29	474.48	529.67	3413	12	254.5	1152061.9	6515.1	7818.1	8469.6	6709	8126.4	9071.4	14363
189-1144	O	42.5	1	45.02	352.3	96.16	108.5	120.84	20	0.472	2.5	7485.7	1467.8	1761.4	1908.1	1511.5	1830.8	2043.7	3235.9
		1079.5	25.4	1143.5	18939.2	469.48	529.74	590	3413	12	64	1022244.9	6529.1	7834.9	8487.8	6723.4	8143.9	9090.8	14393.8
190-1624	O	60	0.688	63.94	352.5	66.71	75.31	83.91	20	0.472	3.9	10574.5	1468.7	1762.4	1909.3	1512.4	1831.9	2044.9	3237.8
		1524	17.462	1624	18950.6	325.72	367.71	409.7	3413	12	100	1444039.4	6533	7839.6	8492.9	6727.5	8148.8	9096.3	14402.5
190-1655	O	56	0.812	65.17	352.7	72.9	82.49	92.07	20	0.472	9.2	9876.7	1469.7	1763.7	1910.7	1513.5	1833.2	2046.4	3240.2
		1422.4	20.638	1655.4	18964.4	355.92	402.73	449.54	3413	12	233	1348749.5	6537.8	7845.3	8499.1	6732.4	8154.7	9102.9	14413
190-1503	O	50	0.938	59.17	352.8	82.3	93.11	103.92	20	0.472	9.2	8820.5	1470.1	1764.1	1911.1	1513.9	1833.7	2046.9	3240.9
		1270	23.812	1503	18968.9	401.8	454.58	507.36	3413	12	233	1204524.3	6539.3	7847.1	8501.1	6734	8156.6	9105.1	14416.4
190-1421	O	52	0.812	55.94	353.2	77.74	87.76	97.78	20	0.472	3.9	9182.6	1471.6	1765.9	1913	1515.4	1835.5	2049	3244.2
		1320.8	20.638	1420.8	18988	379.58	428.49	477.39	3413	12	100	1253969.6	6545.9	7855.1	8509.7	6740.8	8164.9	9114.3	14430.9
190-1524	O	52	0.875	59.99	353.4	78.79	89.11	99.42	20	0.472	8	9187.2	1472.3	1766.8	1914	1516.1	1836.4	2050	3245.8
		1320.8	22.225	1523.8	18997.4	384.68	435.06	485.43	3413	12	203	1254587.2	6549.1	7858.9	8513.8	6744.1	8168.9	9118.7	14438
190-1345	O	49	0.875	52.94	354.1	83.16	93.87	104.58	20	0.472	3.9	8675.3	1475.4	1770.5	1918	1519.3	1840.3	2054.3	3252.6
		1244.6	22.225	1344.6	19037.2	406.01	458.3	510.6	3413	12	100	1184685.3	6562.8	7875.4	8531.7	6758.2	8186	9137.9	14468.3
190-1579	O	53	0.875	62.17	354.2	77.69	87.89	98.1	20	0.472	9.2	9385.2	1475.7	1770.8	1918.4	1519.6	1840.6	2054.6	3253.2
		1346.2	22.225	1579.2	19040.7	379.3	429.14	478.99	3413	12	233	1281627.3	6564	7876.8	8533.2	6759.4	8187.5	9139.5	14470.9
190-1757	O	60	0.75	69.17	354.3	68.09	77.04	86	20	0.472	9.2	10629.2	1476.3	1771.5	1919.2	1520.2	1841.4	2055.5	3254.6
		1524	19.05	1757	19048.7	332.42	376.16	419.9	3413	12	233	1451508.3	6566.8	7880.1	8536.8	6762.3	8190.9	9143.4	14477
191-1621	O	52	0.938	63.81	354.6	79.88	90.46	101.04	20	0.472	11.8	9220.8	1477.7	1773.2	1921	1521.7	1843.2	2057.5	3257.7
		1320.8	23.812	1620.8	19067	389.99	441.67	493.34	3413	12	300	1259186.8	6573.1	7887.7	8545.1	6768.8	8198.8	9152.2	14490.9
191-1639	O	54	0.875	64.51	355	76.56	86.67	96.79	20	0.472	10.5	9585.7	1479.3	1775.1	1923.1	1523.3	1845.1	2059.7	3261.2
		1371.6	22.225	1638.6	19087.4	373.8	423.18	472.55	3413	12	267	1309013.8	6580.2	7896.2	8554.2	6776	8207.6	9162	14506.4
191-1522	O	56	0.75	59.94	355.2	72.3	81.61	90.93	20	0.472	3.9	9946.8	1480.2	1776.2	1924.2	1524.2	1846.3	2061	3263.2
		1422.4	19.05	1522.4	19099.1	352.98	398.46	443.94	3413	12	100	1358329	6584.2	7901	8559.4	6780.2	8212.6	9167.6	14515.3
191-1218	O	44	1	47.94	355.5	93.74	105.8	117.87	20	0.472	3.9	7820	1481.1	1777.3	1925.4	1525.2	1847.4	2062.2	3265.1
		1117.6	25.4	1217.6	19110.5	457.67	516.58	575.49	3413	12	100	1067895.9	6588.1	7905.7	8564.6	6784.2	8217.5	9173	14524

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
191-1697	O	55	0.875	66.81	355.6	75.5	85.51	95.53	20	0.472	11.8	9777.8	1481.5	1777.8	1925.9	1525.6	1847.9	2062.8	3266.1
		1397	22.225	1697	19116	368.64	417.52	466.39	3413	12	300	1335250.7	6590	7908	8567	6786.2	8219.9	9175.7	14528.1
191-1283	O	48	0.875	50.52	356	85.15	96.08	107.01	20	0.472	2.5	8544.6	1483.4	1780.1	1928.5	1527.6	1850.3	2065.5	3270.3
		1219.2	22.225	1283.2	19141.1	415.74	469.1	522.47	3413	12	64	1166840.7	6598.7	7918.4	8578.3	6795.1	8230.7	9187.7	14547.2
192-1452	O	48	1	57.17	356.7	86.98	98.39	109.8	20	0.472	9.2	8561.3	1486.3	1783.6	1932.2	1530.6	1853.9	2069.5	3276.7
		1219.2	25.4	1452.2	19178.4	424.65	480.38	536.11	3413	12	233	1169115.8	6611.5	7933.8	8595	6808.3	8246.7	9205.6	14575.6
192-1452	O	48	1	57.17	356.7	86.98	98.39	109.8	20	0.472	9.2	8561.3	1486.3	1783.6	1932.2	1530.6	1853.9	2069.5	3276.7
		1219.2	25.4	1452.2	19178.4	424.65	480.38	536.11	3413	12	233	1169118.3	6611.5	7933.8	8595	6808.3	8246.7	9205.7	14575.6
192-1512	O	49	1	59.51	357.6	85.61	96.9	108.19	20	0.472	10.5	8760.9	1490	1787.9	1936.9	1534.3	1858.5	2074.6	3284.7
		1244.6	25.4	1511.6	19225.2	417.97	473.09	528.21	3413	12	267	1196382.5	6627.6	7953.2	8615.9	6824.9	8266.8	9228.1	14611.1
192-1626	O	54	0.875	64.02	357.8	77	87.14	97.29	20	0.472	10	9659.4	1490.6	1788.8	1937.8	1535	1859.3	2075.5	3286.2
		1371.6	22.225	1626.1	19234.1	375.96	425.47	474.99	3413	12	254.5	1319076.3	6630.7	7956.9	8619.9	6828.1	8270.7	9232.4	14617.9
193-1501	O	52	0.875	59.09	358.8	79.6	89.94	100.29	20	0.472	7.1	9327.9	1494.9	1793.8	1943.3	1539.4	1864.6	2081.4	3295.5
		1320.8	22.225	1500.8	19288.5	388.64	439.14	489.65	3413	12	180	1273814	6649.5	7979.4	8644.3	6847.4	8294.1	9258.5	14659.3
193-1570	O	50	1	61.81	358.9	84.34	95.5	106.66	20	0.472	11.8	8973.1	1495.5	1794.6	1944.2	1540	1865.4	2082.3	3297
		1270	25.4	1570	19297	411.76	466.26	520.75	3413	12	300	1225361.4	6652.4	7982.9	8648.1	6850.4	8297.7	9262.6	14665.7
193-1570	O	50	1	61.81	358.9	84.34	95.5	106.66	20	0.472	11.8	8973.1	1495.5	1794.6	1944.2	1540	1865.4	2082.3	3297
		1270	25.4	1570	19297.1	411.76	466.26	520.75	3413	12	300	1225363.1	6652.4	7982.9	8648.1	6850.5	8297.7	9262.6	14665.8
193-1625	O	56	0.812	63.99	359.2	74.03	83.73	93.42	20	0.472	8	10059	1496.9	1796.2	1945.9	1541.4	1867.1	2084.2	3300
		1422.4	20.638	1625.4	19314.4	361.46	408.79	456.12	3413	12	203	1373643.4	6658.4	7990.1	8655.9	6856.6	8305.2	9270.9	14679
194-1473	O	50	0.938	57.99	360	83.74	94.69	105.65	20	0.472	8	9000.2	1500	1800	1950	1544.7	1871	2088.6	3306.9
		1270	23.812	1473	19355.2	408.85	462.33	515.8	3413	12	203	1229056.3	6672.5	8007	8674.2	6871.1	8322.7	9290.5	14710
194-1727	O	60	0.75	67.99	360.5	69.07	78.12	87.17	20	0.472	8	10813.8	1501.9	1802.3	1952.5	1546.6	1873.4	2091.2	3311.1
		1524	19.05	1727	19379.6	337.23	381.41	425.58	3413	12	203	1476722.6	6680.9	8017	8685.1	6879.7	8333.2	9302.2	14728.5
194-1588	O	60	0.688	62.52	360.5	68.06	76.79	85.53	20	0.472	2.5	10814.2	1502	1802.4	1952.6	1546.7	1873.4	2091.3	3311.2
		1524	17.462	1588	19380.3	332.28	374.94	417.61	3413	12	64	1476775.8	6681.1	8017.3	8685.4	6880	8333.5	9302.5	14729
194-1499	O	49	1	59.02	360.6	86.16	97.49	108.82	20	0.472	10	8834	1502.4	1802.9	1953.1	1547.1	1874	2091.9	3312.1
		1244.6	25.4	1499.1	19385.5	420.68	475.99	531.31	3413	12	254.5	1206358.3	6682.9	8019.5	8687.8	6881.8	8335.8	9305	14733

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
194-1549	O	53	0.875	60.99	361	78.97	89.3	99.64	20	0.472	8	9566.9	1504.2	1805.1	1955.5	1549	1876.3	2094.4	3316.2
		1346.2	22.225	1549.2	19409.4	385.56	436.01	486.46	3413	12	203	1306445.8	6691.2	8029.4	8698.5	6890.3	8346	9316.5	14751.1
195-1588	O	52	0.938	62.51	362	81.29	92.01	102.73	20	0.472	10.5	9412.5	1508.4	1810.1	1960.9	1553.3	1881.5	2100.3	3325.4
		1320.8	23.812	1587.8	19463.3	396.88	449.22	501.57	3413	12	267	1285357.1	6709.7	8051.7	8722.7	6909.5	8369.2	9342.4	14792.1
195-1385	O	52	0.812	54.52	362.4	79.57	89.78	100	20	0.472	2.5	9421.3	1509.8	1811.8	1962.8	1554.8	1883.2	2102.2	3328.5
		1320.8	20.638	1384.8	19481.7	388.5	438.36	488.22	3413	12	64	1286568.5	6716.1	8059.3	8730.9	6916	8377.1	9351.2	14806.1
195-1605	O	54	0.875	63.17	362.5	77.88	88.1	98.33	20	0.472	9.2	9788.8	1510.6	1812.7	1963.8	1555.6	1884.2	2103.3	3330.3
		1371.6	22.225	1604.6	19491.8	380.23	430.16	480.08	3413	12	233	1336750.6	6719.6	8063.5	8735.4	6919.6	8381.5	9356.1	14813.8
195-1664	O	55	0.875	65.51	362.6	76.76	86.89	97.02	20	0.472	10.5	9971.8	1510.9	1813	1964.1	1555.8	1884.5	2103.7	3330.8
		1397	22.225	1664	19495.1	374.79	424.25	473.71	3413	12	267	1361731	6720.7	8064.8	8736.9	6920.8	8382.9	9357.6	14816.3
195-1370	O	50	0.875	53.94	362.6	83.28	94	104.72	20	0.472	3.9	9065.8	1511	1813.2	1964.3	1556	1884.7	2103.8	3331.1
		1270	22.225	1370	19496.4	406.61	458.95	511.29	3413	12	100	1238021.9	6721.2	8065.4	8737.5	6921.2	8383.5	9358.3	14817.3
196-1309	O	49	0.875	51.52	363.8	85.24	96.18	107.11	20	0.472	2.5	8913.9	1516	1819.2	1970.8	1561.1	1890.9	2110.8	3342.1
		1244.6	22.225	1308.6	19560.9	416.18	469.57	522.97	3413	12	64	1217276.3	6743.4	8092.1	8766.4	6944.1	8411.2	9389.2	14866.3
196-1486	O	56	0.75	58.52	363.8	73.87	83.35	92.83	20	0.472	2.5	10187.7	1516	1819.2	1970.8	1561.2	1891	2110.9	3342.2
		1422.4	19.05	1486.4	19561.7	360.64	406.93	453.22	3413	12	64	1391227.1	6743.7	8092.4	8766.7	6944.4	8411.5	9389.6	14866.9
196-1722	O	56	0.875	67.81	363.9	75.71	85.74	95.77	20	0.472	11.8	10188.3	1516.1	1819.3	1971	1561.3	1891.1	2111	3342.4
		1422.4	22.225	1722.4	19562.8	369.67	418.64	467.6	3413	12	300	1391308.6	6744.1	8092.9	8767.3	6944.8	8412	9390.2	14867.8
196-1422	O	48	1	55.99	364.2	88.57	100.14	111.72	20	0.472	8	8741.9	1517.7	1821.2	1973	1562.9	1893	2113.2	3345.8
		1219.2	25.4	1422.2	19583	432.44	488.95	545.46	3413	12	203	1193777.2	6751	8101.2	8776.3	6952	8420.7	9399.8	14883
196-1422	O	48	1	55.99	364.2	88.57	100.14	111.72	20	0.472	8	8741.9	1517.7	1821.2	1973	1562.9	1893	2113.2	3345.8
		1219.2	25.4	1422.2	19583	432.44	488.95	545.46	3413	12	203	1193779.8	6751	8101.2	8776.3	6952	8420.7	9399.8	14883.1
196-1602	O	56	0.812	63.09	364.4	74.72	84.43	94.14	20	0.472	7.1	10203.4	1518.4	1822	1973.9	1563.6	1893.9	2114.1	3347.3
		1422.4	20.638	1602.4	19591.7	364.83	412.24	459.65	3413	12	180	1393360	6754	8104.8	8780.2	6955	8424.4	9404	14889.7
196-1575	O	52	0.938	62.02	364.9	81.78	92.54	103.29	20	0.472	10	9487.2	1520.4	1824.5	1976.5	1565.6	1896.4	2116.9	3351.8
		1320.8	23.812	1575.3	19617.8	399.29	451.8	504.31	3413	12	254.5	1295556.4	6763	8115.6	8791.9	6964.3	8435.6	9416.5	14909.5
196-1704	O	60	0.75	67.09	365.3	69.65	78.71	87.76	20	0.472	7.1	10959.8	1522.2	1826.6	1978.8	1567.5	1898.7	2119.4	3355.8
		1524	19.05	1704	19641.1	340.08	384.28	428.48	3413	12	180	1496654.9	6771	8125.2	8802.4	6972.6	8445.7	9427.7	14927.3

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
196-1652	O	55	0.875	65.02	365.4	77.2	87.36	97.52	20	0.472	10	10047.2	1522.3	1826.8	1979	1567.6	1898.8	2119.6	3356
		1397	22.225	1651.5	19642.6	376.92	426.52	476.11	3413	12	254.5	1372037.8	6771.6	8125.9	8803	6973.1	8446.3	9428.5	14928.4
197-1450	O	50	0.938	57.09	365.7	84.66	95.65	106.64	20	0.472	7.1	9143	1523.8	1828.6	1981	1569.2	1900.7	2121.7	3359.4
		1270	23.812	1450	19662.2	413.33	466.99	520.65	3413	12	180	1248551.7	6778.3	8134	8811.8	6980.1	8454.8	9437.9	14943.3
197-1478	O	49	1	58.17	365.8	87.25	98.68	110.12	20	0.472	9.2	8962.5	1524.2	1829.1	1981.5	1569.6	1901.2	2122.3	3360.3
		1244.6	25.4	1477.6	19667.5	425.97	481.82	537.66	3413	12	233	1223911.6	6780.2	8136.2	8814.2	6982	8457	9440.4	14947.3
197-1182	O	44	1	46.52	366.3	96.37	108.72	121.08	20	0.472	2.5	8058.3	1526.2	1831.4	1984	1571.6	1903.7	2125	3364.6
		1117.6	25.4	1181.6	19692.8	470.5	530.84	591.17	3413	12	64	1100431.6	6788.8	8146.6	8825.5	6990.9	8467.9	9452.5	14966.5
197-1526	O	53	0.875	60.09	366.5	79.77	90.13	100.49	20	0.472	7.1	9711.1	1526.9	1832.3	1985	1572.4	1904.5	2126	3366.2
		1346.2	22.225	1526.2	19701.9	389.47	440.04	490.62	3413	12	180	1326134.1	6792	8150.4	8829.6	6994.2	8471.8	9456.9	14973.4
197-1537	O	50	1	60.51	366.6	85.89	97.2	108.52	20	0.472	10.5	9165.8	1527.6	1833.2	1985.9	1573.1	1905.5	2127	3367.8
		1270	25.4	1537	19711.3	419.35	474.59	529.83	3413	12	267	1251670.4	6795.2	8154.3	8833.8	6997.5	8475.9	9461.4	14980.6
197-1537	O	50	1	60.51	366.6	85.89	97.2	108.52	20	0.472	10.5	9165.8	1527.6	1833.2	1985.9	1573.1	1905.5	2127	3367.8
		1270	25.4	1537	19711.4	419.35	474.59	529.83	3413	12	267	1251672.1	6795.3	8154.3	8833.8	6997.5	8475.9	9461.5	14980.6
198-1595	O	51	1	62.81	367.9	84.63	95.81	107	20	0.472	11.8	9381.9	1533	1839.6	1992.9	1578.6	1912.1	2134.5	3379.6
		1295.4	25.4	1595.4	19780.4	413.19	467.81	522.43	3413	12	300	1281176.2	6819.1	8182.9	8864.8	7022	8505.6	9494.6	15033.1
198-1472	O	54	0.812	57.94	368.4	77.94	87.97	98	20	0.472	3.9	9945.8	1534.8	1841.8	1995.3	1580.5	1914.4	2137.1	3383.7
		1371.6	20.638	1471.6	19804.3	380.54	429.51	478.48	3413	12	100	1358181.6	6827.3	8192.8	8875.5	7030.5	8515.9	9506.1	15051.3
198-1824	O	60	0.812	71.81	368.6	71.29	80.73	90.18	20	0.472	11.8	11057.2	1535.7	1842.9	1996.4	1581.4	1915.5	2138.3	3385.6
		1524	20.638	1824	19815.7	348.07	394.18	440.29	3413	12	300	1509956.1	6831.2	8197.5	8880.6	7034.6	8520.7	9511.5	15059.9
199-1575	O	54	0.875	61.99	369.5	79.14	89.49	99.84	20	0.472	8	9975.3	1539.4	1847.3	2001.2	1585.2	1920.1	2143.4	3393.7
		1371.6	22.225	1574.6	19863.2	386.41	436.94	487.46	3413	12	203	1362219	6847.6	8217.1	8901.9	7051.4	8541.2	9534.3	15096
199-1319	O	48	0.938	51.94	369.6	88.73	100.15	111.56	20	0.472	3.9	8870.2	1540	1848	2002	1585.8	1920.8	2144.2	3395
		1219.2	23.812	1319.2	19870.4	433.24	488.96	544.69	3413	12	100	1211302.3	6850.1	8220.1	8905.1	7054	8544.3	9537.8	15101.5
199-1525	O	50	1	60.02	369.6	86.44	97.79	109.15	20	0.472	10	9240.9	1540.2	1848.2	2002.2	1586	1921.1	2144.5	3395.4
		1270	25.4	1524.5	19873	422.02	477.46	532.9	3413	12	254.5	1261933.3	6851	8221.1	8906.2	7054.9	8545.4	9539	15103.5
199-1525	O	50	1	60.02	369.6	86.44	97.79	109.15	20	0.472	10	9241	1540.2	1848.2	2002.2	1586	1921.1	2144.5	3395.4
		1270	25.4	1524.5	19873	422.02	477.46	532.9	3413	12	254.5	1261935.1	6851	8221.2	8906.3	7054.9	8545.4	9539	15103.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
199-1554	O	52	0.938	61.17	369.9	82.75	93.6	104.45	20	0.472	9.2	9618.4	1541.4	1849.7	2003.8	1587.3	1922.6	2146.2	3398.2
		1320.8	23.812	1553.8	19889.2	404.02	457	509.97	3413	12	233	1313483.1	6856.6	8227.9	8913.5	7060.7	8552.4	9546.8	15115.8
199-1630	O	55	0.875	64.17	370.2	78.06	88.3	98.55	20	0.472	9.2	10179.8	1542.4	1850.9	2005.1	1588.3	1923.9	2147.6	3400.3
		1397	22.225	1630	19901.7	381.14	431.14	481.14	3413	12	233	1390135.2	6860.9	8233	8919.1	7065.1	8557.7	9552.8	15125.3
199-1399	O	48	1	55.09	370.2	89.6	101.22	112.85	20	0.472	7.1	8885.5	1542.6	1851.2	2005.4	1588.6	1924.2	2147.9	3400.8
		1219.2	25.4	1399.2	19904.9	437.47	494.22	550.96	3413	12	180	1213400.5	6862	8234.3	8920.5	7066.2	8559.1	9554.3	15127.7
199-1399	O	48	1	55.09	370.2	89.6	101.22	112.85	20	0.472	7.1	8885.6	1542.6	1851.2	2005.4	1588.6	1924.2	2147.9	3400.8
		1219.2	25.4	1399.2	19904.9	437.47	494.22	550.96	3413	12	180	1213403.1	6862	8234.4	8920.6	7066.2	8559.1	9554.4	15127.7
199-1395	O	51	0.875	54.94	370.4	83.4	94.13	104.86	20	0.472	3.9	9445.3	1543.4	1852	2006.4	1589.3	1925.1	2148.9	3402.4
		1295.4	22.225	1395.4	19914.2	407.19	459.58	511.96	3413	12	100	1289840.6	6865.2	8238.2	8924.7	7069.5	8563.1	9558.8	15134.8
199-1689	O	56	0.875	66.51	371	76.96	87.11	97.25	20	0.472	10.5	10387.4	1545.7	1854.9	2009.5	1591.8	1928	2152.2	3407.7
		1422.4	22.225	1689.4	19945	375.75	425.29	474.83	3413	12	267	1418485.9	6875.8	8250.9	8938.5	7080.5	8576.3	9573.6	15158.2
200-1672	O	54	0.938	65.81	371.6	80.37	91	101.63	20	0.472	11.8	10032.6	1548.2	1857.9	2012.7	1594.3	1931.2	2155.7	3413.2
		1371.6	23.812	1671.6	19977.2	392.42	444.31	496.2	3413	12	300	1370034.7	6886.9	8264.3	8953	7091.9	8590.2	9589	15182.7
200-1334	O	50	0.875	52.52	372.4	85.33	96.27	107.21	20	0.472	2.5	9310.5	1551.8	1862.1	2017.3	1597.9	1935.5	2160.6	3420.9
		1270	22.225	1334	20022.5	416.6	470.02	523.45	3413	12	64	1271431.8	6902.5	8283	8973.3	7108	8609.7	9610.8	15217.1
201-1448	O	49	1	56.99	373.4	88.82	100.41	112.01	20	0.472	8	9148.3	1555.8	1867	2022.6	1602.1	1940.6	2166.3	3429.9
		1244.6	25.4	1447.6	20075.1	433.64	490.26	546.88	3413	12	203	1249275.9	6920.7	8304.8	8996.9	7126.7	8632.3	9636.1	15257.1
201-1677	O	56	0.875	66.02	373.7	77.39	87.56	97.74	20	0.472	10	10464.8	1557.3	1868.7	2024.4	1603.6	1942.4	2168.3	3433.1
		1422.4	22.225	1676.9	20093.6	377.85	427.53	477.2	3413	12	254.5	1429059.6	6927	8312.4	9005.1	7133.2	8640.3	9644.9	15271.2
202-1503	O	50	1	59.17	374.9	87.51	98.97	110.43	20	0.472	9.2	9373.1	1562.2	1874.6	2030.8	1608.7	1948.6	2175.1	3444
		1270	25.4	1503	20157.2	427.24	483.2	539.16	3413	12	233	1279984.9	6949	8338.7	9033.6	7155.8	8667.6	9675.5	15319.5
202-1503	O	50	1	59.17	374.9	87.51	98.97	110.43	20	0.472	9.2	9373.1	1562.2	1874.6	2030.8	1608.7	1948.6	2175.1	3444
		1270	25.4	1503	20157.3	427.24	483.2	539.16	3413	12	233	1279986.7	6949	8338.8	9033.7	7155.8	8667.6	9675.5	15319.5
202-1552	O	54	0.875	61.09	374.9	79.93	90.31	100.68	20	0.472	7.1	10123.2	1562.2	1874.7	2030.9	1608.7	1948.6	2175.2	3444
		1371.6	22.225	1551.6	20157.7	390.27	440.91	491.56	3413	12	180	1382411.7	6949.1	8338.9	9033.8	7156	8667.8	9675.7	15319.8
202-1791	O	60	0.812	70.51	375.4	72.38	81.93	91.47	20	0.472	10.5	11260.9	1564	1876.8	2033.2	1610.6	1950.8	2177.7	3448
		1524	20.638	1791	20180.8	353.41	400.01	446.61	3413	12	267	1537777.8	6957.1	8348.5	9044.2	7164.2	8677.7	9686.8	15337.4

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
202-1562	O	51	1	61.51	375.7	86.16	97.5	108.84	20	0.472	10.5	9580	1565.4	1878.4	2035	1612	1952.5	2179.6	3451
		1295.4	25.4	1562.4	20198.2	420.68	476.04	531.4	3413	12	267	1308236.4	6963.1	8355.7	9052	7170.4	8685.2	9695.1	15350.6
203-1621	O	52	1	63.81	376.9	84.91	96.12	107.34	20	0.472	11.8	9799.9	1570.5	1884.6	2041.6	1617.2	1958.9	2186.7	3462.3
		1320.8	25.4	1620.8	20264.5	414.56	469.31	524.06	3413	12	300	1338265.1	6985.9	8383.1	9081.7	7193.9	8713.7	9726.9	15401
203-1621	O	52	1	63.81	376.9	84.91	96.12	107.34	20	0.472	11.8	9799.9	1570.5	1884.6	2041.7	1617.3	1958.9	2186.7	3462.3
		1320.8	25.4	1620.8	20264.5	414.56	469.31	524.06	3413	12	300	1338267.1	6985.9	8383.1	9081.7	7193.9	8713.7	9727	15401
203-1600	O	55	0.875	62.99	377.1	79.31	89.67	100.04	20	0.472	8	10370.6	1571.3	1885.6	2042.7	1618.1	1959.9	2187.8	3464.1
		1397	22.225	1600	20274.9	387.24	437.83	488.42	3413	12	203	1416200.3	6989.5	8387.4	9086.4	7197.6	8718.2	9731.9	15408.9
203-1524	O	52	0.938	59.99	377.2	84.15	95.14	106.13	20	0.472	8	9807.8	1571.8	1886.1	2043.3	1618.6	1960.5	2188.5	3465.1
		1320.8	23.812	1523.8	20280.8	410.88	464.53	518.19	3413	12	203	1339342.4	6991.6	8389.9	9089	7199.7	8720.7	9734.8	15413.4
203-1436	O	54	0.812	56.52	377.6	79.71	89.93	100.15	20	0.472	2.5	10195.2	1573.3	1888	2045.3	1620.2	1962.5	2190.6	3468.5
		1371.6	20.638	1435.6	20301	389.16	439.06	488.96	3413	12	64	1392240.2	6998.5	8398.2	9098.1	7206.8	8729.4	9744.5	15428.7
203-1779	O	60	0.812	70.02	378	72.76	82.32	91.89	20	0.472	10	11340.1	1575	1890	2047.5	1621.9	1964.5	2193	3472.2
		1524	20.638	1778.5	20322.6	355.23	401.94	448.65	3413	12	254.5	1548585.9	7006	8407.2	9107.8	7214.5	8738.7	9754.9	15445.2
204-1655	O	56	0.875	65.17	378.6	78.24	88.5	98.76	20	0.472	9.2	10600.7	1577.5	1893	2050.7	1624.4	1967.6	2196.4	3477.7
		1422.4	22.225	1655.4	20354.6	382.02	432.09	482.17	3413	12	233	1447619.9	7017	8420.4	9122.1	7225.9	8752.5	9770.2	15469.5
204-1550	O	51	1	61.02	378.7	86.7	98.08	109.46	20	0.472	10	9657.3	1578	1893.6	2051.4	1625	1968.3	2197.1	3478.8
		1295.4	25.4	1549.9	20361.1	423.31	478.87	534.43	3413	12	254.5	1318787.3	7019.2	8423.1	9125	7228.2	8755.3	9773.3	15474.4
204-1421	O	52	0.875	55.94	379	83.51	94.25	104.99	20	0.472	3.9	9853.2	1579	1894.8	2052.7	1626	1969.6	2198.6	3481.1
		1320.8	22.225	1420.8	20374.6	407.75	460.18	512.61	3413	12	100	1345537.7	7023.9	8428.7	9131.1	7233	8761.1	9779.8	15484.7
204-1639	O	54	0.938	64.51	379.1	81.75	92.51	103.27	20	0.472	10.5	10234.6	1579.4	1895.3	2053.2	1626.4	1970	2199.1	3481.9
		1371.6	23.812	1638.6	20379.5	399.14	451.68	504.23	3413	12	267	1397626	7025.6	8430.7	9133.3	7234.7	8763.2	9782.2	15488.4
204-1425	O	49	1	56.09	379.4	89.83	101.48	113.12	20	0.472	7.1	9296	1580.9	1897.1	2055.2	1628	1972	2201.2	3485.3
		1244.6	25.4	1424.6	20399.2	438.6	495.46	552.31	3413	12	180	1269445.3	7032.4	8438.9	9142.1	7241.7	8771.7	9791.6	15503.4
204-1283	O	48	0.938	50.52	380	91.01	102.68	114.34	20	0.472	2.5	9119	1583.2	1899.8	2058.1	1630.3	1974.7	2204.3	3490.2
		1219.2	23.812	1283.2	20427.9	444.37	501.32	558.26	3413	12	64	1245285.2	7042.3	8450.7	9155	7251.9	8784	9805.4	15525.2
204-1359	O	51	0.875	53.52	380.2	85.41	96.36	107.3	20	0.472	2.5	9695.4	1584.2	1901.1	2059.5	1631.4	1976	2205.8	3492.5
		1295.4	22.225	1359.4	20441.5	417.01	470.46	523.91	3413	12	64	1323998.5	7047	8456.4	9161.1	7256.7	8789.9	9811.9	15535.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
205-1626	O	54	0.938	64.02	382	82.23	93.03	103.82	20	0.472	10	10313.3	1591.6	1909.9	2069	1638.9	1985.2	2216	3508.7
		1371.6	23.812	1626.1	20536.2	401.49	454.2	506.9	3413	12	254.5	1408369.7	7079.6	8495.5	9203.5	7290.3	8830.5	9857.4	15607.5
206-1473	O	50	1	57.99	382.6	89.06	100.67	112.29	20	0.472	8	9564	1594	1912.8	2072.2	1641.5	1988.2	2219.4	3514.1
		1270	25.4	1473	20567.8	434.81	491.53	548.25	3413	12	203	1306053.9	7090.5	8508.6	9217.6	7301.6	8844.1	9872.5	15631.5
206-1473	O	50	1	57.99	382.6	89.06	100.67	112.29	20	0.472	8	9564	1594	1912.8	2072.2	1641.5	1988.2	2219.4	3514.1
		1270	25.4	1473	20567.8	434.81	491.53	548.25	3413	12	203	1306055.7	7090.5	8508.6	9217.6	7301.6	8844.2	9872.5	15631.5
206-1577	O	55	0.875	62.09	382.6	80.09	90.48	100.87	20	0.472	7.1	10521.9	1594.2	1913.1	2072.5	1641.7	1988.5	2219.7	3514.6
		1397	22.225	1577	20570.6	391.05	441.76	492.47	3413	12	180	1436855.1	7091.5	8509.7	9218.9	7302.6	8845.3	9873.9	15633.6
206-1757	O	60	0.812	69.17	382.6	73.5	83.14	92.78	20	0.472	9.2	11478.8	1594.3	1913.1	2072.6	1641.7	1988.6	2219.8	3514.7
		1524	20.638	1757	20571.3	358.88	405.93	452.98	3413	12	233	1567535.6	7091.7	8510.1	9219.2	7302.8	8845.7	9874.2	15634.2
206-1501	O	52	0.938	59.09	383	85.05	96.07	107.1	20	0.472	7.1	9958.1	1595.9	1915	2074.6	1643.4	1990.5	2222	3518.2
		1320.8	23.812	1500.8	20591.6	415.24	469.07	522.9	3413	12	180	1359868.1	7098.7	8518.4	9228.3	7310	8854.4	9884	15649.6
206-1624	O	60	0.75	63.94	383.3	72.59	81.92	91.26	20	0.472	3.9	11499.7	1597.2	1916.6	2076.3	1644.7	1992.2	2223.8	3521.1
		1524	19.05	1624	20608.7	354.41	399.98	445.56	3413	12	100	1570381.8	7104.6	8525.5	9236	7316.1	8861.7	9892.2	15662.6
206-1522	O	56	0.812	59.94	383.6	78.12	88.17	98.21	20	0.472	3.9	10739.5	1598.1	1917.8	2077.6	1645.7	1993.4	2225.2	3523.2
		1422.4	20.638	1522.4	20621.2	381.42	430.46	479.5	3413	12	100	1466579.1	7108.9	8530.7	9241.6	7320.5	8867.1	9898.2	15672.1
206-1528	O	51	1	60.17	384	87.76	99.24	110.73	20	0.472	9.2	9793.1	1600.2	1920.2	2080.2	1647.8	1995.9	2228	3527.7
		1295.4	25.4	1528.4	20647.5	428.47	484.54	540.61	3413	12	233	1337338.7	7118	8541.6	9253.4	7329.9	8878.4	9910.8	15692.1
207-1588	O	52	1	62.51	384.8	86.42	97.79	109.15	20	0.472	10.5	10003.6	1603.1	1923.8	2084.1	1650.9	1999.6	2232.2	3534.2
		1320.8	25.4	1587.8	20685.6	421.96	477.44	532.92	3413	12	267	1366078.9	7131.1	8557.3	9270.5	7343.4	8894.8	9929.1	15721.1
207-1588	O	52	1	62.51	384.8	86.42	97.79	109.15	20	0.472	10.5	10003.6	1603.1	1923.8	2084.1	1650.9	1999.6	2232.2	3534.2
		1320.8	25.4	1587.8	20685.7	421.96	477.44	532.92	3413	12	267	1366080.9	7131.1	8557.3	9270.5	7343.4	8894.8	9929.1	15721.1
207-1625	O	56	0.875	63.99	385.6	79.48	89.85	100.23	20	0.472	8	10796.4	1606.6	1927.9	2088.6	1654.4	2004	2237	3541.9
		1422.4	22.225	1625.4	20730.3	388.04	438.7	489.35	3413	12	203	1474338.6	7146.5	8575.8	9290.5	7359.3	8914	9950.5	15755
207-1646	O	53	1	64.81	385.9	85.18	96.42	107.66	20	0.472	11.8	10227.3	1608.1	1929.7	2090.5	1655.9	2005.8	2239	3545.1
		1346.2	25.4	1646.2	20749.3	415.9	470.77	525.64	3413	12	300	1396634.5	7153.1	8583.7	9299	7366	8922.2	9959.7	15769.5
208-1446	O	53	0.875	56.94	386.7	83.63	94.37	105.12	20	0.472	3.9	10248.3	1611.4	1933.6	2094.8	1659.3	2009.9	2243.6	3552.4
		1346.2	22.225	1446.2	20791.7	408.29	460.76	513.23	3413	12	100	1399492.4	7167.7	8601.2	9318	7381.1	8940.5	9980	15801.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
208-1370	O	50	0.938	53.94	387.1	89.01	100.45	111.88	20	0.472	3.9	9676.9	1612.8	1935.4	2096.7	1660.8	2011.7	2245.6	3555.6
		1270	23.812	1370	20810.4	434.6	490.43	546.27	3413	12	100	1321459.9	7174.1	8608.9	9326.4	7387.7	8948.5	9989	15815.9
208-1605	O	54	0.938	63.17	387.1	83.18	94.06	104.95	20	0.472	9.2	10451.5	1612.9	1935.5	2096.7	1660.9	2011.8	2245.7	3555.7
		1371.6	23.812	1604.6	20811.3	406.11	459.26	512.42	3413	12	233	1427240.4	7174.5	8609.3	9326.8	7388	8948.9	9989.4	15816.6
208-1575	O	52	1	62.02	387.8	86.96	98.36	109.76	20	0.472	10	10083	1615.9	1939	2100.6	1664	2015.5	2249.9	3562.3
		1320.8	25.4	1575.3	20849.8	424.57	480.24	535.91	3413	12	254.5	1376918.7	7187.7	8625.2	9344	7401.7	8965.4	10007.9	15845.8
208-1575	O	52	1	62.02	387.8	86.96	98.36	109.76	20	0.472	10	10083	1615.9	1939	2100.6	1664	2015.5	2249.9	3562.3
		1320.8	25.4	1575.3	20849.8	424.57	480.24	535.91	3413	12	254.5	1376920.8	7187.7	8625.2	9344	7401.7	8965.4	10007.9	15845.8
209-1722	O	56	0.938	67.81	388.6	80.84	91.51	102.18	20	0.472	11.8	10879.4	1619	1942.8	2104.7	1667.2	2019.4	2254.2	3569.1
		1422.4	23.812	1722.4	20889.8	394.7	446.79	498.88	3413	12	300	1485682.8	7201.5	8641.8	9362	7415.9	8982.6	10027.1	15876.3
209-1450	O	50	1	57.09	388.6	90.06	101.72	113.39	20	0.472	7.1	9715.7	1619.3	1943.1	2105.1	1667.5	2019.8	2254.6	3569.8
		1270	25.4	1450	20894	439.7	496.65	553.61	3413	12	180	1326770.6	7203	8643.5	9363.8	7417.4	8984.4	10029.1	15879.5
209-1450	O	50	1	57.09	388.6	90.06	101.72	113.39	20	0.472	7.1	9715.8	1619.3	1943.1	2105.1	1667.5	2019.8	2254.6	3569.8
		1270	25.4	1450	20894.1	439.7	496.65	553.61	3413	12	180	1326772.4	7203	8643.6	9363.9	7417.4	8984.4	10029.1	15879.5
209-1385	O	52	0.875	54.52	388.8	85.49	96.44	107.4	20	0.472	2.5	10109.3	1620.1	1944.1	2106.1	1668.3	2020.8	2255.7	3571.6
		1320.8	22.225	1384.8	20904.3	417.41	470.88	524.35	3413	12	64	1380517	7206.5	8647.8	9368.4	7421	8988.8	10034	15887.2
209-1727	O	60	0.812	67.99	389.3	74.58	84.32	94.06	20	0.472	8	11678.2	1622	1946.4	2108.6	1670.3	2023.1	2258.4	3575.8
		1524	20.638	1727	20928.7	364.15	411.69	459.23	3413	12	203	1594765.5	7214.9	8657.9	9379.4	7429.7	8999.3	10045.8	15905.8
210-1602	O	56	0.875	63.09	391.1	80.25	90.65	101.05	20	0.472	7.1	10951.3	1629.7	1955.6	2118.6	1678.2	2032.7	2269.1	3592.7
		1422.4	22.225	1602.4	21027.8	391.8	442.58	493.35	3413	12	180	1495500.5	7249.1	8698.9	9423.8	7464.9	9042	10093.4	15981.2
211-1498	O	51	1	58.99	391.7	89.29	100.92	112.56	20	0.472	8	9989.2	1632.2	1958.7	2121.9	1680.8	2035.9	2272.6	3598.4
		1295.4	25.4	1498.4	21060.9	435.93	492.75	549.58	3413	12	203	1364114.1	7260.5	8712.6	9438.6	7476.6	9056.2	10109.2	16006.3
211-1588	O	60	0.75	62.52	392	74.06	83.55	93.04	20	0.472	2.5	11760.4	1633.4	1960.1	2123.4	1682	2037.4	2274.3	3600.9
		1524	19.05	1588	21075.9	361.61	407.95	454.28	3413	12	64	1605982.4	7265.7	8718.8	9445.3	7481.9	9062.6	10116.4	16017.7
211-1319	O	48	1	51.94	392.7	94.42	106.55	118.67	20	0.472	3.9	9424.4	1636.2	1963.4	2127	1684.9	2040.8	2278.2	3607.1
		1219.2	25.4	1319.2	21112	461.02	520.21	579.41	3413	12	100	1286984.5	7278.1	8733.7	9461.5	7494.7	9078.1	10133.7	16045.1
211-1319	O	48	1	51.94	392.7	94.42	106.55	118.67	20	0.472	3.9	9424.4	1636.2	1963.4	2127	1684.9	2040.9	2278.2	3607.1
		1219.2	25.4	1319.2	21112	461.02	520.21	579.41	3413	12	100	1286987.2	7278.1	8733.7	9461.5	7494.8	9078.2	10133.8	16045.1

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
211-1486	O	56	0.812	58.52	392.8	79.83	90.06	100.29	20	0.472	2.5	10999.6	1636.9	1964.2	2127.9	1685.6	2041.7	2279.1	3608.6
		1422.4	20.638	1486.4	21120.6	389.78	439.71	489.64	3413	12	64	1502099	7281.1	8737.3	9465.4	7497.8	9081.9	10137.9	16051.7
211-1554	O	52	1	61.17	393.2	88	99.51	111.01	20	0.472	9.2	10222.5	1638.2	1965.9	2129.7	1687	2043.4	2281	3611.6
		1320.8	25.4	1553.8	21138.3	429.65	485.83	542.01	3413	12	233	1395971.2	7287.2	8744.6	9473.3	7504.1	9089.5	10146.4	16065.1
211-1554	O	52	1	61.17	393.2	88	99.51	111.01	20	0.472	9.2	10222.5	1638.2	1965.9	2129.7	1687	2043.4	2281	3611.6
		1320.8	25.4	1553.8	21138.3	429.65	485.83	542.01	3413	12	233	1395973.3	7287.2	8744.6	9473.3	7504.1	9089.5	10146.4	16065.1
212-1613	O	53	1	63.51	393.8	86.68	98.07	109.45	20	0.472	10.5	10436.6	1641	1969.2	2133.3	1689.8	2046.8	2284.8	3617.6
		1346.2	25.4	1613.2	21173.7	423.21	478.8	534.39	3413	12	267	1425204.4	7299.4	8759.3	9489.2	7516.7	9104.7	10163.4	16092
212-1575	O	54	0.938	61.99	394.5	84.54	95.57	106.59	20	0.472	8	10650.6	1643.6	1972.3	2136.7	1692.5	2050.1	2288.5	3623.5
		1371.6	23.812	1574.6	21207.8	412.78	466.6	520.41	3413	12	203	1454432.9	7311.1	8773.4	9504.5	7528.8	9119.4	10179.8	16117.9
212-1704	O	60	0.812	67.09	394.5	75.24	84.99	94.75	20	0.472	7.1	11835.9	1643.9	1972.6	2137	1692.8	2050.4	2288.9	3624
		1524	20.638	1704	21211.2	367.36	414.97	462.59	3413	12	180	1616291.1	7312.3	8774.7	9506	7530	9120.8	10181.4	16120.5
212-1672	O	54	1	65.81	395	85.45	96.71	107.97	20	0.472	11.8	10664.1	1645.7	1974.8	2139.4	1694.7	2052.7	2291.4	3628.1
		1371.6	25.4	1671.6	21234.7	417.19	472.18	527.17	3413	12	300	1456279	7320.4	8784.5	9516.5	7538.3	9130.9	10192.7	16138.4
212-1672	O	54	1	65.81	395	85.45	96.71	107.97	20	0.472	11.8	10664.1	1645.7	1974.8	2139.4	1694.7	2052.7	2291.4	3628.1
		1371.6	25.4	1671.6	21234.8	417.19	472.18	527.17	3413	12	300	1456281.4	7320.4	8784.5	9516.6	7538.3	9131	10192.7	16138.4
213-1472	O	54	0.875	57.94	395.3	83.73	94.49	105.24	20	0.472	3.9	10673.5	1647.1	1976.6	2141.3	1696.2	2054.5	2293.4	3631.3
		1371.6	22.225	1471.6	21253.5	408.81	461.32	513.83	3413	12	100	1457563.2	7326.9	8792.2	9524.9	7545	9139	10201.7	16152.6
213-1824	O	60	0.875	71.81	395.7	76.5	86.6	96.69	20	0.472	11.8	11870.4	1648.7	1978.4	2143.3	1697.8	2056.4	2295.5	3634.6
		1524	22.225	1824	21273.2	373.51	422.79	472.08	3413	12	300	1621014.3	7333.7	8800.4	9533.8	7552	9147.5	10211.1	16167.6
213-1689	O	56	0.938	66.51	396.1	82.19	92.99	103.78	20	0.472	10.5	11091.9	1650.6	1980.7	2145.8	1699.7	2058.8	2298.2	3638.8
		1422.4	23.812	1689.4	21297.9	401.27	453.99	506.72	3413	12	267	1514703.4	7342.2	8810.6	9544.8	7560.7	9158.1	10223	16186.4
213-1410	O	53	0.875	55.52	396.6	85.57	96.53	107.48	20	0.472	2.5	10509.9	1652.5	1983	2148.2	1701.7	2061.2	2300.9	3643.1
		1346.2	22.225	1410.2	21322.5	417.79	471.28	524.78	3413	12	64	1435219	7350.7	8820.8	9555.9	7569.5	9168.7	10234.8	16205.1
213-1601	O	53	1	63.02	396.9	87.21	98.63	110.06	20	0.472	10	10518.1	1653.8	1984.5	2149.9	1703	2062.8	2302.7	3645.9
		1346.2	25.4	1600.7	21339.1	425.78	481.57	537.35	3413	12	254.5	1436333.9	7356.4	8827.7	9563.3	7575.4	9175.8	10242.8	16217.7
214-1334	O	50	0.938	52.52	397.5	91.21	102.89	114.57	20	0.472	2.5	9938	1656.3	1987.6	2153.2	1705.6	2066	2306.2	3651.5
		1270	23.812	1334	21372	445.34	502.35	559.37	3413	12	64	1357121.4	7367.7	8841.3	9578.1	7587.1	9190	10258.6	16242.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
214-1475	O	51	1	58.09	397.8	90.27	101.96	113.64	20	0.472	7.1	10144.9	1657.7	1989.2	2155	1707	2067.6	2308.1	3654.4
		1295.4	25.4	1475.4	21389.2	440.76	497.81	554.86	3413	12	180	1385379.2	7373.7	8848.4	9585.8	7593.2	9197.4	10266.8	16255.8
215-1677	O	56	0.938	66.02	399.1	82.66	93.49	104.32	20	0.472	10	11174.6	1662.9	1995.5	2161.8	1712.4	2074.2	2315.3	3666
		1422.4	23.812	1676.9	21456.6	403.56	456.45	509.34	3413	12	254.5	1525994.4	7396.9	8876.3	9616	7617.1	9226.3	10299.2	16307
215-1552	O	54	0.938	61.09	400.3	85.41	96.47	107.53	20	0.472	7.1	10808.5	1668	2001.6	2168.4	1717.6	2080.5	2322.4	3677.2
		1371.6	23.812	1551.6	21522.2	417.03	471.02	525.01	3413	12	180	1475992.5	7419.5	8903.4	9645.4	7640.4	9254.5	10330.7	16356.9
216-1524	O	52	1	59.99	400.9	89.51	101.17	112.82	20	0.472	8	10423.7	1670.5	2004.6	2171.6	1720.2	2083.6	2325.9	3682.7
		1320.8	25.4	1523.8	21554.4	437.02	493.94	550.86	3413	12	203	1423454.5	7430.6	8916.7	9659.8	7651.8	9268.4	10346.1	16381.4
216-1524	O	52	1	59.99	400.9	89.51	101.17	112.82	20	0.472	8	10423.8	1670.5	2004.6	2171.6	1720.2	2083.6	2325.9	3682.7
		1320.8	25.4	1523.8	21554.5	437.02	493.94	550.86	3413	12	203	1423456.7	7430.6	8916.8	9659.8	7651.8	9268.4	10346.1	16381.4
216-1345	O	49	1	52.94	402	94.58	106.72	118.85	20	0.472	3.9	9849	1675	2010	2177.5	1724.9	2089.3	2332.2	3692.7
		1244.6	25.4	1344.6	21612.9	461.78	521.04	580.3	3413	12	100	1344973.8	7450.8	8941	9686	7672.6	9293.6	10374.2	16425.8
216-1579	O	53	1	62.17	402.3	88.24	99.76	111.29	20	0.472	9.2	10661.3	1676.3	2011.6	2179.2	1726.2	2090.9	2334	3695.5
		1346.2	25.4	1579.2	21629.6	430.8	487.09	543.37	3413	12	233	1455888.9	7456.5	8947.8	9693.5	7678.5	9300.7	10382.2	16438.5
217-1639	O	54	1	64.51	402.9	86.93	98.34	109.74	20	0.472	10.5	10878.9	1678.8	2014.6	2182.5	1728.8	2094.1	2337.6	3701.1
		1371.6	25.4	1638.6	21662.4	424.42	480.12	535.82	3413	12	267	1485607.2	7467.9	8961.4	9708.2	7690.2	9314.8	10398	16463.4
217-1639	O	54	1	64.51	402.9	86.93	98.34	109.74	20	0.472	10.5	10878.9	1678.8	2014.6	2182.5	1728.8	2094.1	2337.6	3701.1
		1371.6	25.4	1638.6	21662.4	424.42	480.12	535.82	3413	12	267	1485609.7	7467.9	8961.4	9708.2	7690.2	9314.8	10398	16463.4
217-1791	O	60	0.875	70.51	403	77.69	87.9	98.1	20	0.472	10.5	12089.2	1679.1	2014.9	2182.8	1729	2094.3	2337.8	3701.6
		1524	22.225	1791	21665.1	379.31	429.15	478.98	3413	12	267	1650882.2	7468.8	8962.5	9709.4	7691.1	9316	10399.3	16465.5
217-1497	O	55	0.875	58.94	403.1	83.83	94.6	105.36	20	0.472	3.9	11084.2	1679.4	2015.3	2183.2	1729.4	2094.8	2338.4	3702.4
		1397	22.225	1497	21669.9	409.32	461.87	514.41	3413	12	100	1513640.9	7470.4	8964.5	9711.6	7692.8	9318	10401.5	16469.1
217-1283	O	48	1	50.52	403.7	96.86	109.26	121.65	20	0.472	2.5	9688.8	1682.1	2018.5	2186.7	1732.2	2098.1	2342.1	3708.3
		1219.2	25.4	1283.2	21704.2	472.93	533.44	593.96	3413	12	64	1323090.7	7482.3	8978.7	9727	7705	9332.8	10418	16495.2
217-1283	O	48	1	50.52	403.7	96.86	109.26	121.65	20	0.472	2.5	9688.8	1682.1	2018.5	2186.7	1732.2	2098.1	2342.1	3708.3
		1219.2	25.4	1283.2	21704.3	472.93	533.44	593.96	3413	12	64	1323093.5	7482.3	8978.7	9727	7705	9332.8	10418.1	16495.3
217-1697	O	55	1	66.81	404	85.71	96.99	108.28	20	0.472	11.8	11110.2	1683.4	2020	2188.4	1733.5	2099.7	2343.9	3711.1
		1397	25.4	1697	21720.8	418.45	473.55	528.66	3413	12	300	1517200.9	7488	8985.6	9734.4	7710.9	9340	10426	16507.8

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Streghth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade							
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110	
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	
217-1655	O	56	0.938	65.17	404.3	83.58	94.5	105.42	20	0.472	9.2	11319.8	1684.5	2021.4	2189.8	1734.6	2101.1	2345.4	3713.6	
		1422.4	23.812	1655.4	21735.3	408.06	461.39	514.72	3413	12	233	1545813.7	7493	8991.6	9740.9	7716	9346.2	10432.9	16518.8	
218-1421	O	52	0.938	55.94	404.6	89.27	100.73	112.18	20	0.472	3.9	10518.8	1685.7	2022.8	2191.4	1735.9	2102.6	2347.1	3716.3	
		1320.8	23.812	1420.8	21751	435.86	491.79	547.73	3413	12	100	1436437.2	7498.4	8998.1	9747.9	7721.6	9352.9	10440.5	16530.8	
218-1436	O	54	0.875	56.52	405.2	85.64	96.61	107.57	20	0.472	2.5	10941.2	1688.5	2026.1	2195	1738.7	2106	2350.9	3722.3	
		1371.6	22.225	1435.6	21786.4	418.15	471.67	525.19	3413	12	64	1494114	7510.6	9012.7	9763.8	7734.2	9368.2	10457.5	16557.7	
218-1779	O	60	0.875	70.02	405.8	78.1	88.33	98.57	20	0.472	10	12174.1	1690.9	2029	2198.1	1741.2	2109	2354.3	3727.6	
		1524	22.225	1778.5	21817.4	381.32	431.28	481.25	3413	12	254.5	1662485.2	7521.3	9025.5	9777.7	7745.2	9381.5	10472.3	16581.2	
218-1626	O	54	1	64.02	406	87.45	98.9	110.34	20	0.472	10	10962.5	1691.7	2030.1	2199.3	1742.1	2110.2	2355.5	3729.6	
		1371.6	25.4	1626.1	21828.9	426.96	482.85	538.74	3413	12	254.5	1497027.2	7525.3	9030.3	9782.8	7749.3	9386.4	10477.9	16590	
218-1626	O	54	1	64.02	406	87.45	98.9	110.34	20	0.472	10	10962.5	1691.7	2030.1	2199.3	1742.1	2110.2	2355.5	3729.6	
		1371.6	25.4	1626.1	21829	426.96	482.85	538.74	3413	12	254.5	1497029.7	7525.3	9030.3	9782.8	7749.3	9386.5	10477.9	16590	
219-1501	O	52	1	59.09	407.1	90.48	102.19	113.89	20	0.472	7.1	10583.5	1696.1	2035.3	2204.9	1746.6	2115.6	2361.5	3739.1	
		1320.8	25.4	1500.8	21884.8	441.78	498.92	556.07	3413	12	180	1445269.2	7544.5	9053.4	9807.8	7769.1	9410.4	10504.7	16632.4	
219-1501	O	52	1	59.09	407.1	90.48	102.19	113.89	20	0.472	7.1	10583.5	1696.1	2035.3	2204.9	1746.6	2115.6	2361.6	3739.1	
		1320.8	25.4	1500.8	21884.8	441.78	498.92	556.07	3413	12	180	1445271.4	7544.5	9053.4	9807.9	7769.1	9410.5	10504.7	16632.4	
220-1549	O	53	1	60.99	410.1	89.72	101.4	113.08	20	0.472	8	10867.7	1708.8	2050.5	2221.4	1759.6	2131.4	2379.2	3767.1	
		1346.2	25.4	1549.2	22048.5	438.07	495.08	552.1	3413	12	203	1484081.9	7600.9	9121.1	9881.2	7827.2	9480.8	10583.3	16756.8	
221-1757	O	60	0.875	69.17	410.8	78.91	89.22	99.54	20	0.472	9.2	12323.1	1711.5	2053.8	2225	1762.5	2134.8	2383.1	3773.2	
		1524	22.225	1757	22084.4	385.28	435.63	485.98	3413	12	233	1682828.7	7613.3	9136	9897.3	7839.9	9496.3	10600.5	16784.1	
221-1370	O	50	1	53.94	411.3	94.73	106.88	119.03	20	0.472	3.9	10283.1	1713.8	2056.6	2228	1764.9	2137.7	2386.3	3778.3	
		1270	25.4	1370	22114.1	462.51	521.83	581.15	3413	12	100	1404246.2	7623.6	9148.3	9910.6	7850.5	9509.1	10614.8	16806.7	
221-1370	O	50	1	53.94	411.3	94.73	106.88	119.03	20	0.472	3.9	10283.1	1713.9	2056.6	2228	1764.9	2137.7	2386.3	3778.3	
		1270	25.4	1370	22114.1	462.51	521.83	581.15	3413	12	100	1404248.2	7623.6	9148.3	9910.7	7850.5	9509.1	10614.8	16806.7	
221-1605	O	54	1	63.17	411.5	88.46	100.01	111.56	20	0.472	9.2	11109.4	1714.4	2057.3	2228.7	1765.4	2138.4	2387.1	3779.5	
		1371.6	25.4	1604.6	22121.4	431.92	488.3	544.69	3413	12	233	1517085.8	7626.1	9151.3	9913.9	7853.1	9512.2	10618.3	16812.3	
221-1605	O	54	1	63.17	411.5	88.46	100.01	111.56	20	0.472	9.2	11109.4	1714.4	2057.3	2228.7	1765.4	2138.4	2387.1	3779.6	
		1371.6	25.4	1604.6	22121.4	431.92	488.3	544.69	3413	12	233	1517088.4	7626.1	9151.3	9913.9	7853.1	9512.2	10618.3	16812.3	

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
221-1522	O	56	0.875	59.94	411.7	83.93	94.7	105.48	20	0.472	3.9	11526.8	1715.3	2058.4	2229.9	1766.4	2139.5	2388.3	3781.5
		1422.4	22.225	1522.4	22132.8	409.8	462.39	514.98	3413	12	100	1574087	7630	9156	9919	7857.2	9517.1	10623.8	16821
221-1625	O	56	0.938	63.99	411.7	84.91	95.96	107.02	20	0.472	8	11528.7	1715.6	2058.7	2230.3	1766.6	2139.9	2388.7	3782.1
		1422.4	23.812	1625.4	22136.5	414.56	468.53	522.5	3413	12	203	1574344.8	7631.3	9157.5	9920.7	7858.4	9518.7	10625.5	16823.7
222-1664	O	55	1	65.51	412	87.17	98.6	110.03	20	0.472	10.5	11330.6	1716.8	2060.1	2231.8	1767.9	2141.3	2390.3	3784.7
		1397	25.4	1664	22151.6	425.59	481.4	537.2	3413	12	267	1547289.6	7636.5	9163.8	9927.4	7863.8	9525.2	10632.8	16835.2
222-1461	O	55	0.875	57.52	413	85.72	96.68	107.65	20	0.472	2.5	11357.3	1720.8	2065	2237	1772	2146.4	2396	3793.6
		1397	22.225	1461	22203.8	418.5	472.05	525.59	3413	12	64	1550938	7654.5	9185.4	9950.8	7882.4	9547.6	10657.8	16874.9
222-1309	O	49	1	51.52	413.1	96.98	109.38	121.78	20	0.472	2.5	10120	1721.1	2065.3	2237.4	1772.3	2146.8	2396.4	3794.3
		1244.6	25.4	1308.6	22207.5	473.48	534.03	594.59	3413	12	64	1381974.4	7655.8	9186.9	9952.5	7883.7	9549.2	10659.6	16877.7
222-1722	O	56	1	67.81	413.1	85.96	97.26	108.57	20	0.472	11.8	11565.7	1721.1	2065.3	2237.4	1772.3	2146.8	2396.4	3794.3
		1422.4	25.4	1722.4	22207.5	419.67	474.88	530.1	3413	12	300	1579400.8	7655.8	9186.9	9952.5	7883.7	9549.2	10659.6	16877.7
223-1624	O	60	0.812	63.94	414	78.45	88.52	98.59	20	0.472	3.9	12418.9	1724.8	2069.8	2242.3	1776.2	2151.4	2401.6	3802.6
		1524	20.638	1624	22256.1	383.03	432.19	481.34	3413	12	100	1695911.3	7672.5	9207	9974.3	7900.9	9570.1	10682.9	16914.6
223-1385	O	52	0.938	54.52	415.1	91.4	103.09	114.78	20	0.472	2.5	10792.3	1729.5	2075.4	2248.4	1781	2157.3	2408.1	3812.9
		1320.8	23.812	1384.8	22316.5	446.24	503.31	560.39	3413	12	64	1473779.6	7693.3	9232	10001.3	7922.3	9596.1	10711.9	16960.5
223-1652	O	55	1	65.02	415.1	87.68	99.15	110.62	20	0.472	10	11416.3	1729.7	2075.7	2248.7	1781.2	2157.6	2408.4	3813.4
		1397	25.4	1651.5	22319.3	428.1	484.09	540.09	3413	12	254.5	1559000.9	7694.3	9233.1	10002.6	7923.3	9597.3	10713.2	16962.6
224-1526	O	53	1	60.09	416.3	90.69	102.41	114.13	20	0.472	7.1	11031.5	1734.5	2081.4	2254.9	1786.1	2163.5	2415.1	3823.9
		1346.2	25.4	1526.2	22380.7	442.76	500	557.24	3413	12	180	1506447.2	7715.5	9258.6	10030.1	7945.2	9623.7	10742.8	17009.4
225-1602	O	56	0.938	63.09	417.6	85.76	96.85	107.93	20	0.472	7.1	11694.2	1740.2	2088.2	2262.3	1792	2170.6	2423	3836.4
		1422.4	23.812	1602.4	22454.2	418.7	472.84	526.98	3413	12	180	1596942.1	7740.8	9289	10063	7971.2	9655.3	10778	17065.2
225-1727	O	60	0.875	67.99	417.9	80.08	90.51	100.94	20	0.472	8	12537.2	1741.3	2089.5	2263.7	1793.1	2171.9	2424.5	3838.8
		1524	22.225	1727	22468	391.01	441.91	492.81	3413	12	203	1712061.4	7745.6	9294.7	10069.2	7976.1	9661.2	10784.6	17075.7
225-1575	O	54	1	61.99	419.3	89.93	101.63	113.32	20	0.472	8	11321.1	1747.1	2096.5	2271.2	1799.1	2179.2	2432.6	3851.6
		1371.6	25.4	1574.6	22542.9	439.08	496.19	553.29	3413	12	203	1545990.1	7771.4	9325.6	10102.8	8002.7	9693.4	10820.6	17132.6
225-1575	O	54	1	61.99	419.3	89.93	101.63	113.32	20	0.472	8	11321.1	1747.1	2096.5	2271.2	1799.1	2179.2	2432.6	3851.6
		1371.6	25.4	1574.6	22542.9	439.08	496.19	553.29	3413	12	203	1545992.6	7771.4	9325.7	10102.8	8002.7	9693.5	10820.6	17132.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
226-1630	O	55	1	64.17	420.6	88.68	100.25	111.82	20	0.472	9.2	11566.9	1752.6	2103.1	2278.3	1804.7	2186	2440.2	3863.7
		1397	25.4	1630	22613.7	433	489.48	545.96	3413	12	233	1579564.4	7795.8	9354.9	10134.5	8027.9	9723.9	10854.6	17186.4
226-1395	O	51	1	54.94	420.6	94.87	107.04	119.2	20	0.472	3.9	10726.5	1752.7	2103.2	2278.5	1804.9	2186.2	2440.4	3864
		1295.4	25.4	1395.4	22615.5	463.21	522.59	581.98	3413	12	100	1464804.7	7796.4	9355.7	10135.3	8028.5	9724.7	10855.4	17187.8
226-1689	O	56	1	66.51	421.1	87.4	98.85	110.3	20	0.472	10.5	11791.6	1754.7	2105.6	2281.1	1806.9	2188.7	2443.2	3868.4
		1422.4	25.4	1689.4	22641.3	426.72	482.63	538.54	3413	12	267	1610252.2	7805.3	9366.4	10146.9	8037.7	9735.8	10867.8	17207.4
227-1486	O	56	0.875	58.52	421.6	85.79	96.76	107.73	20	0.472	2.5	11806	1756.8	2108.2	2283.9	1809.1	2191.4	2446.2	3873.1
		1422.4	22.225	1486.4	22668.9	418.85	472.41	525.97	3413	12	64	1612210.7	7814.8	9377.8	10159.3	8047.5	9747.6	10881.1	17228.3
227-1472	O	54	0.938	57.94	422.1	89.51	100.99	112.46	20	0.472	3.9	11396	1758.6	2110.4	2286.2	1811	2193.6	2448.7	3877.1
		1371.6	23.812	1471.6	22692.2	437.03	493.06	549.1	3413	12	100	1556231.3	7822.9	9387.4	10169.7	8055.7	9757.6	10892.3	17246.1
227-1334	O	50	1	52.52	422.4	97.08	109.49	121.91	20	0.472	2.5	10560.6	1760.1	2112.1	2288.1	1812.5	2195.4	2450.7	3880.3
		1270	25.4	1334	22710.9	474	534.6	595.19	3413	12	64	1442141.9	7829.3	9395.2	10178.1	8062.4	9765.7	10901.2	17260.3
227-1334	O	50	1	52.52	422.4	97.08	109.49	121.91	20	0.472	2.5	10560.6	1760.1	2112.1	2288.1	1812.5	2195.4	2450.7	3880.3
		1270	25.4	1334	22710.9	474	534.6	595.19	3413	12	64	1442143.9	7829.3	9395.2	10178.1	8062.4	9765.7	10901.2	17260.3
227-1824	O	60	0.938	71.81	422.6	81.7	92.44	103.19	20	0.472	11.8	12678.4	1760.9	2113.1	2289.2	1813.3	2196.4	2451.8	3882
		1524	23.812	1824	22721.2	398.88	451.34	503.81	3413	12	300	1731354.2	7832.9	9399.4	10182.7	8066	9770.1	10906.2	17268.1
228-1588	O	60	0.812	62.52	423.3	80.06	90.3	100.54	20	0.472	2.5	12700.4	1764	2116.7	2293.1	1816.5	2200.2	2456.1	3888.8
		1524	20.638	1588	22760.6	390.89	440.88	490.87	3413	12	64	1734357.7	7846.4	9415.7	10200.4	8080	9787.1	10925.1	17298.1
228-1704	O	60	0.875	67.09	423.5	80.82	91.27	101.72	20	0.472	7.1	12706.4	1764.8	2117.7	2294.2	1817.3	2201.2	2457.2	3890.6
		1524	22.225	1704	22771.3	394.58	445.6	496.62	3413	12	180	1735170.2	7850.1	9420.1	10205.1	8083.8	9791.6	10930.2	17306.2
228-1677	O	56	1	66.02	424.3	87.91	99.4	110.89	20	0.472	10	11879.5	1767.8	2121.3	2298.1	1820.4	2205	2461.4	3897.2
		1422.4	25.4	1676.9	22810.1	429.21	485.3	541.4	3413	12	254.5	1622255.4	7863.5	9436.2	10222.6	8097.6	9808.3	10948.9	17335.7
229-1552	O	54	1	61.09	425.5	90.88	102.62	114.36	20	0.472	7.1	11488.9	1773	2127.6	2304.9	1825.8	2211.5	2468.6	3908.7
		1371.6	25.4	1551.6	22877	443.72	501.05	558.37	3413	12	180	1568906.9	7886.6	9463.9	10252.5	8121.3	9837.1	10981	17386.5
229-1552	O	54	1	61.09	425.5	90.88	102.62	114.36	20	0.472	7.1	11488.9	1773	2127.6	2304.9	1825.8	2211.5	2468.6	3908.7
		1371.6	25.4	1551.6	22877.1	443.72	501.05	558.37	3413	12	180	1568909.5	7886.6	9463.9	10252.6	8121.4	9837.1	10981	17386.6
230-1600	O	55	1	62.99	428.5	90.13	101.85	113.56	20	0.472	8	11783.8	1785.4	2142.5	2321	1838.6	2227	2486	3936.1
		1397	25.4	1600	23037.7	440.07	497.26	554.45	3413	12	203	1609181.2	7942	9530.3	10324.5	8178.4	9906.2	11058.1	17508.6

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Strength	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
231-1655	O	56	1	65.17	429.8	88.9	100.49	112.07	20	0.472	9.2	12033.8	1790.7	2148.9	2328	1844.1	2233.6	2493.4	3947.8
		1422.4	25.4	1655.4	23106.4	434.04	490.62	547.19	3413	12	233	1643324.9	7965.6	9558.8	10355.3	8202.8	9935.7	11091.1	17560.8
231-1421	O	52	1	55.94	430	95.01	107.19	119.36	20	0.472	3.9	11179.4	1791.6	2149.9	2329	1844.9	2234.7	2494.5	3949.7
		1320.8	25.4	1420.8	23117	463.89	523.33	582.77	3413	12	100	1526647	7969.3	9563.2	10360.1	8206.5	9940.3	11096.2	17568.9
231-1421	O	52	1	55.94	430	95.01	107.19	119.36	20	0.472	3.9	11179.4	1791.6	2149.9	2329	1844.9	2234.7	2494.5	3949.7
		1320.8	25.4	1420.8	23117	463.89	523.33	582.77	3413	12	100	1526649.3	7969.3	9563.2	10360.1	8206.5	9940.3	11096.2	17568.9
231-1791	O	60	0.938	70.51	430.4	82.98	93.85	104.72	20	0.472	10.5	12912.1	1793.3	2152	2331.3	1846.7	2236.9	2497	3953.6
		1524	23.812	1791	23139.8	405.15	458.22	511.29	3413	12	267	1763255.2	7977.2	9572.6	10370.3	8214.6	9950.1	11107.1	17586.3
232-1359	O	51	1	53.52	431.8	97.19	109.61	122.02	20	0.472	2.5	11010.6	1799.1	2158.9	2338.9	1852.7	2244.1	2505	3966.3
		1295.4	25.4	1359.4	23214.4	474.51	535.14	595.78	3413	12	64	1503596.1	8002.9	9603.4	10403.7	8241.1	9982.2	11142.9	17642.9
233-1436	O	54	0.938	56.52	432.7	91.57	103.27	114.97	20	0.472	2.5	11681.8	1802.8	2163.3	2343.6	1856.4	2248.6	2510.1	3974.3
		1371.6	23.812	1435.6	23261.2	447.07	504.21	561.34	3413	12	64	1595256.3	8019	9622.8	10424.7	8257.7	10002.3	11165.4	17678.5
233-1779	O	60	0.938	70.02	433.4	83.43	94.33	105.23	20	0.472	10	13002.8	1805.9	2167.1	2347.7	1859.7	2252.6	2514.5	3981.3
		1524	23.812	1778.5	23302.5	407.34	460.56	513.79	3413	12	254.5	1775648	8033.2	9639.9	10443.2	8272.4	10020.1	11185.2	17709.9
234-1577	O	55	1	62.09	434.8	91.07	102.83	114.59	20	0.472	7.1	11955.7	1811.5	2173.8	2354.9	1865.4	2259.5	2522.2	3993.5
		1397	25.4	1577	23373.7	444.64	502.06	559.47	3413	12	180	1632650.6	8057.8	9669.3	10475.1	8297.7	10050.7	11219.4	17764
235-1625	O	56	1	63.99	437.7	90.33	102.06	113.79	20	0.472	8	12255.9	1823.8	2188.6	2370.9	1878.1	2274.9	2539.4	4020.7
		1422.4	25.4	1625.4	23532.8	441.02	498.3	555.58	3413	12	203	1673655.7	8112.7	9735.2	10546.5	8354.2	10119.1	11295.8	17885
236-1757	O	60	0.938	69.17	438.7	84.31	95.3	106.28	20	0.472	9.2	13161.9	1828	2193.7	2376.5	1882.5	2280.2	2545.3	4030.1
		1524	23.812	1757	23587.6	411.63	465.27	518.91	3413	12	233	1797376.2	8131.5	9757.8	10571	8373.6	10142.7	11322.1	17926.6
236-1446	O	53	1	56.94	439.3	95.15	107.33	119.52	20	0.472	3.9	11641.7	1830.5	2196.5	2379.6	1884.9	2283.2	2548.7	4035.4
		1346.2	25.4	1446.2	23618.8	464.54	524.04	583.54	3413	12	100	1589779.9	8142.3	9770.7	10585	8384.7	10156.1	11337	17950.3
236-1522	O	56	0.938	59.94	439.6	89.73	101.23	112.72	20	0.472	3.9	12308.7	1831.6	2198	2381.1	1886.2	2284.7	2550.3	4038
		1422.4	23.812	1522.4	23634.1	438.12	494.25	550.37	3413	12	100	1680859.2	8147.6	9777.1	10591.8	8390.1	10162.7	11344.4	17961.9
237-1385	O	52	1	54.52	441.2	97.29	109.71	122.14	20	0.472	2.5	11470	1838.1	2205.8	2389.6	1892.9	2292.8	2559.4	4052.3
		1320.8	25.4	1384.8	23718	475	535.67	596.34	3413	12	64	1566334.5	8176.5	9811.8	10629.4	8419.9	10198.7	11384.6	18025.7
237-1385	O	52	1	54.52	441.2	97.29	109.71	122.14	20	0.472	2.5	11470	1838.1	2205.8	2389.6	1892.9	2292.8	2559.4	4052.3
		1320.8	25.4	1384.8	23718	475	535.67	596.34	3413	12	64	1566336.9	8176.5	9811.8	10629.4	8419.9	10198.7	11384.6	18025.7

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
239-1602	O	56	1	63.09	444	91.25	103.03	114.81	20	0.472	7.1	12431.8	1850	2220	2405	1905	2307.5	2575.8	4078.4
		1422.4	25.4	1602.4	23870.6	445.54	503.04	560.53	3413	12	180	1697678.5	8229.1	9874.9	10697.8	8474.1	10264.4	11457.9	18141.7
239-1624	O	60	0.875	63.94	444.4	84.3	95.1	105.9	20	0.472	3.9	13332.3	1851.7	2222.1	2407.2	1906.8	2309.7	2578.3	4082.2
		1524	22.225	1624	23893	411.6	464.32	517.05	3413	12	100	1820646.6	8236.8	9884.2	10707.9	8482	10274	11468.6	18158.7
240-1727	O	60	0.938	67.99	446.4	85.57	96.69	107.8	20	0.472	8	13390.6	1859.8	2231.8	2417.7	1915.2	2319.8	2589.5	4100.1
		1524	23.812	1727	23997.4	417.81	472.06	526.31	3413	12	203	1828598.7	8272.8	9927.3	10754.6	8519.1	10318.9	11518.7	18238
241-1472	O	54	1	57.94	448.6	95.27	107.47	119.67	20	0.472	3.9	12113.4	1869.4	2243.2	2430.2	1925	2331.7	2602.8	4121.1
		1371.6	25.4	1471.6	24120.7	465.17	524.72	584.28	3413	12	100	1654196.7	8315.3	9978.4	10809.9	8562.8	10371.9	11577.9	18331.7
241-1472	O	54	1	57.94	448.6	95.27	107.47	119.67	20	0.472	3.9	12113.5	1869.4	2243.2	2430.2	1925	2331.7	2602.8	4121.1
		1371.6	25.4	1471.6	24120.7	465.17	524.72	584.28	3413	12	100	1654199.5	8315.3	9978.4	10809.9	8562.9	10371.9	11577.9	18331.8
242-1824	O	60	1	71.81	449.4	86.88	98.28	109.67	20	0.472	11.8	13481.3	1872.4	2246.9	2434.1	1928.1	2335.5	2607.1	4127.8
		1524	25.4	1824	24159.9	424.21	479.83	535.46	3413	12	300	1840986.8	8328.8	9994.6	10827.5	8576.8	10388.8	11596.8	18361.5
242-1486	O	56	0.938	58.52	450.2	91.73	103.44	115.15	20	0.472	2.5	12606.8	1876	2251.2	2438.8	1931.9	2340	2612.1	4135.8
		1422.4	23.812	1486.4	24206.5	447.85	505.04	562.23	3413	12	64	1721568.9	8344.9	10013.9	10848.4	8593.3	10408.8	11619.1	18397
242-1410	O	53	1	55.52	450.5	97.38	109.82	122.25	20	0.472	2.5	11938.9	1877.2	2252.6	2440.3	1933.1	2341.5	2613.7	4138.4
		1346.2	25.4	1410.2	24221.7	475.47	536.17	596.88	3413	12	64	1630364.3	8350.1	10020.2	10855.2	8598.7	10415.3	11626.4	18408.5
243-1704	O	60	0.938	67.09	452.4	86.38	97.53	108.67	20	0.472	7.1	13571.3	1884.9	2261.9	2450.4	1941	2351.1	2624.5	4155.4
		1524	23.812	1704	24321.3	421.75	476.16	530.57	3413	12	180	1853280.5	8384.5	10061.3	10899.8	8634	10458.1	11674.2	18484.2
244-1588	O	60	0.875	62.52	454.5	86.04	97.03	108.02	20	0.472	2.5	13634.6	1893.7	2272.4	2461.8	1950.1	2362	2636.7	4174.8
		1524	22.225	1588	24434.7	420.1	473.75	527.39	3413	12	64	1861920.7	8423.6	10108.2	10950.6	8674.3	10506.9	11728.6	18570.3
246-1791	O	60	1	70.51	457.7	88.26	99.79	111.32	20	0.472	10.5	13729.7	1906.9	2288.3	2479	1963.7	2378.5	2655.1	4203.9
		1524	25.4	1791	24605.1	430.94	487.24	543.53	3413	12	267	1874907.9	8482.3	10178.8	11027	8734.8	10580.2	11810.4	18699.9
246-1497	O	55	1	58.94	458	95.4	107.61	119.82	20	0.472	3.9	12594.6	1908.3	2289.9	2480.7	1965.1	2380.2	2657	4206.9
		1397	25.4	1497	24622.8	465.78	525.39	584.99	3413	12	100	1719899.8	8488.4	10186.1	11034.9	8741.1	10587.8	11818.9	18713.3
247-1436	O	54	1	56.52	459.9	97.48	109.92	122.36	20	0.472	2.5	12417.2	1916.2	2299.5	2491.1	1973.3	2390.2	2668.1	4224.5
		1371.6	25.4	1435.6	24725.6	475.92	536.66	597.4	3413	12	64	1695678.4	8523.8	10228.6	11081	8777.6	10632	11868.3	18791.4
247-1436	O	54	1	56.52	459.9	97.48	109.92	122.36	20	0.472	2.5	12417.2	1916.2	2299.5	2491.1	1973.3	2390.2	2668.1	4224.5
		1371.6	25.4	1435.6	24725.6	475.92	536.66	597.4	3413	12	64	1695681.2	8523.9	10228.6	11081	8777.6	10632	11868.3	18791.5

Section	Solution Type	Pipe		Width	Section Modulus	Panel Weight by Ratio			Interlock Stregth	Minimum Thickness	Connector Width	Moment of Inertia	Bending Moment by Grade						
		Diameter	Thickness			60%	80%	100%					50	60	65	S 355 GP	S 430 GP	x70	x110
		in (mm)	in (mm)	in (mm)	in³/ft (cm³/m)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	lb/ft² (kg/m²)	k/ft (kN/m)	in (mm)	in (mm)	in⁴/ft (cm⁴/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)	k·ft/ft (kN·m/m)
248-1779	O	60	1	70.02	460.9	88.75	100.32	111.88	20	0.472	10	13826.2	1920.3	2304.4	2496.4	1977.5	2395.2	2673.8	4233.4
		1524	25.4	1778.5	24778	433.31	489.78	546.25	3413	12	254.5	1888085.5	8541.9	10250.3	11104.5	8796.2	10654.6	11893.5	18831.3
251-1757	O	60	1	69.17	466.5	89.69	101.35	113.01	20	0.472	9.2	13995.4	1943.8	2332.6	2526.9	2001.7	2424.5	2706.5	4285.2
		1524	25.4	1757	25081.2	437.92	494.85	551.77	3413	12	233	1911189.5	8646.5	10375.7	11240.4	8903.8	10784.9	12039	19061.7
251-1522	O	56	1	59.94	467.3	95.52	107.74	119.96	20	0.472	3.9	13085.1	1947.2	2336.6	2531.3	2005.2	2428.8	2711.2	4292.7
		1422.4	25.4	1522.4	25125	466.37	526.03	585.68	3413	12	100	1786889.1	8661.5	10393.8	11260	8919.4	10803.7	12060	19095
252-1461	O	55	1	57.52	469.3	97.57	110.01	122.46	20	0.472	2.5	12904.9	1955.3	2346.3	2541.9	2013.5	2438.9	2722.5	4310.6
		1397	25.4	1461	25229.5	476.36	537.13	597.91	3413	12	64	1762279.2	8697.6	10437.1	11306.8	8956.5	10848.7	12110.2	19174.4
255-1727	O	60	1	67.99	474.6	91.05	102.85	114.64	20	0.472	8	14238.5	1977.6	2373.1	2570.8	2036.4	2466.7	2753.5	4359.7
		1524	25.4	1727	25516.9	444.56	502.15	559.75	3413	12	203	1944389.1	8796.7	10556	11435.6	9058.5	10972.3	12248.1	19392.9
255-1624	O	60	0.938	63.94	474.7	90.14	101.67	113.2	20	0.472	3.9	14239.8	1977.8	2373.3	2571.1	2036.6	2466.9	2753.8	4360.1
		1524	23.812	1624	25519.4	440.1	496.39	552.68	3413	12	100	1944575.1	8797.5	10557	11436.7	9059.4	10973.3	12249.3	19394.7
257-1486	O	56	1	58.52	478.6	97.65	110.11	122.56	20	0.472	2.5	13402	1994.4	2393.2	2592.7	2053.7	2487.6	2776.9	4396.7
		1422.4	25.4	1486.4	25733.5	476.78	537.59	598.39	3413	12	64	1830166.8	8871.3	10645.6	11532.7	9135.4	11065.4	12352.1	19557.5
259-1704	O	60	1	67.09	481	91.93	103.77	115.61	20	0.472	7.1	14430.7	2004.3	2405.1	2605.5	2063.9	2500	2790.7	4418.5
		1524	25.4	1704	25861.3	448.85	506.66	564.46	3413	12	180	1970633.8	8915.4	10698.4	11590	9180.8	11120.4	12413.4	19654.6
261-1588	O	60	0.938	62.52	485.4	92.01	103.75	115.48	20	0.472	2.5	14562.6	2022.6	2427.1	2629.4	2082.8	2522.8	2816.2	4458.9
		1524	23.812	1588	26097.9	449.25	506.54	563.83	3413	12	64	1988658.7	8996.9	10796.3	11696	9264.7	11222.1	12527	19834.4
271-1624	O	60	1	63.94	504.7	95.97	108.22	120.48	20	0.472	3.9	15141.5	2103	2523.6	2733.9	2165.6	2623.1	2928.1	4636.2
		1524	25.4	1624	27135.3	468.54	528.39	588.23	3413	12	100	2067709.4	9354.6	11225.5	12160.9	9633	11668.2	13024.9	20622.8
278-1588	O	60	1	62.52	516.2	97.97	110.45	122.93	20	0.472	2.5	15484.8	2150.7	2580.8	2795.9	2214.7	2682.6	2994.5	4741.3
		1524	25.4	1588	27750.5	478.34	539.26	600.19	3413	12	64	2114584.4	9566.6	11479.9	12436.6	9851.4	11932.7	13320.2	21090.3