

Cross-Sectional Properties of the Available Sections

Section ID	Section Name	Area , (cm ²)	Section ID	Section Name	Area , (cm ²)
1	PIPE1/2STD	1.6129	20	PIPE3-1/2XS	23.7419
2	PIPE1/2XS	2.0645	21	PIPE2-1/2XXS	25.9999
3	PIPE3/4STD	2.1484	22	PIPE5STD	27.7419
4	PIPE3/4XS	2.7935	23	PIPE4XS	28.4516
5	PIPE1STD	3.1871	24	PIPE3XXS	35.2903
6	PIPE1XS	4.1226	25	PIPE6STD	35.9999
7	PIPE1-1/4STD	4.3161	26	PIPE5XS	39.4193
8	PIPE1-1/2STD	5.1548	27	PIPE4XXS	52.258
9	PIPE1-1/4XS	5.6839	28	PIPE6XS	54.1934
10	PIPE1-1/2XS	6.9032	29	PIPE8STD	54.1934
11	PIPE2STD	6.9032	30	PIPE5XXS	72.9031
12	PIPE2XS	9.5484	31	PIPE10STD	76.774
13	PIPE2-1/2STD	10.9677	32	PIPE8XS	82.5805
14	PIPE3STD	14.3871	33	PIPE12STD	94.1934
15	PIPE2-1/2XS	14.5161	34	PIPE6XXS	100.645
16	PIPE2XXS	17.1613	35	PIPE10XS	103.8708
17	PIPE3-1/2STD	17.2903	36	PIPE12XS	123.8707
18	PIPE3XS	19.4838	37	PIPE8XXS	137.4191
19	PIPE4STD	20.4516			