

STAINLESS STEEL PIPE SIZES

THEORETICAL INTERNAL BURSTING PRESSURES*

Nominal I.P.S. (In.)	Nominal O.D. (In.)	SCHEDULE 5S		SCHEDULE 10S		SCHEDULE 40S		SCHEDULE 80S	
		Wall (in.)	Pressure (p.s.i.)	Wall (in.)	Pressure (p.s.i.)	Wall (in.)	Pressure (p.s.i.)	Wall (in.)	Pressure (p.s.i.)
1/8	.405			.049	18150	.068	25175	.095	35175
1/4	.540			.065	18050	.088	24450	.119	33050
3/8	.675			.065	14450	.091	20225	.126	28000
1/2	.840	.065	11600	.083	14825	.109	19475	.147	26250
3/4	1.050	.065	9275	.083	11850	.113	16150	.154	22000
1	1.315	.065	7425	.109	12450	.133	15175	.179	20425
1-1/4	1.660	.065	5875	.109	9850	.140	12650	.191	17250
1-1/2	1.900	.065	5125	.109	8600	.145	11450	.200	15800
2	2.375	.065	4100	.109	6875	.154	9750	.218	13775
2-1/2	2.875	.830	4325	.120	6250	.203	10600	.276	14400
3	3.500	.830	3550	.120	5150	.216	9250		
3-1/2	4.000	.830	3100	.120	4500	.226	8475		
4	4.500	.830	2750	.120	4000	.237	7900		
5	5.563	.109	2950	.134	3625	.258	6950		
6	6.625	.109	2475	.134	3050	.280	6350		
8	8.625	.109	1900	.148	2575	.322	5600		
10	10.750	.134	1875	.165	2300	.365	5100		
12	12.750	.156	1825	.180	2125	.375	4400		
14	14.000	.156	1675	.188	2025				
16	16.000	.165	1550	.188	1775				
18	18.000	.165	1375	.188	1575				
20	20.000	.188	1400	.218	1625				
24	24.000	.218	1375	.250	1550				
30	30.000	.250	1250	.312	1550				

*Bursting pressure calculated using Barlow's formula: $P = \frac{2ST}{D}$

S = 75,000 psi fiber stress. T = nom. wall. D = nom. O.D.