



# SS THEORETICAL BURSTING PRESSURE



## STAINLESS STEEL PIPE SIZES

Theoretical Internal Bursting Pressures\*

		SCHEDULE 5S		SCHEDULE 10S		SCHEDULE 40S		SCHEDULE 80S	
Nominal I.P.S.	Nominal O.D.	Wall	Pressure (psi)	Wall	Pressure (psi)	Wall	Pressure (psi)	Wall	Pressure (psi)
1/8"	0.405"			0.049"	18150	0.068"	25175	0.095"	35175
1/4"	0.540"			0.065"	18050	0.088"	24450	0.119"	33050
3/8"	0.675"			0.065"	14450	0.091"	20225	0.126"	28000
1/2"	0.840"	0.065"	11600	0.083"	14825	0.109"	19475	0.147"	26250
3/4"	1.050"	0.065"	9275	0.083"	11850	0.113"	16150	0.154"	22000
1"	1.315"	0.065"	7425	0.109"	12450	0.133"	15175	0.179"	20425
1-1/4"	1.660"	0.065"	5875	0.109"	9850	0.140"	12650	0.191"	17250
1-1/2"	1.900"	0.065"	5125	0.109"	8600	0.145"	11450	0.200"	15800
2"	2.375"	0.065"	4100	0.109"	6875	0.154"	9750	0.218"	13775
2-1/2"	2.875"	0.830"	4325	0.120"	6250	0.203"	10600	0.276"	14400
3"	3.500"	0.830"	3550	0.120"	5150	0.216"	9250		
3-1/2"	4.000"	0.830"	3100	0.120"	4500	0.226"	8475		
4"	4.500"	0.830"	2750	0.120"	4000	0.237"	7900		
5"	5.563"	0.109"	2950	0.134"	3625	0.258"	6950		
6"	6.625"	0.109"	2475	0.134"	3050	0.280"	6350		
8"	8.625"	0.109"	1900	0.148"	2575	0.322"	5600		
10"	10.750"	0.134"	1875	0.165"	2300	0.365"	5100		
12"	12.750"	0.156"	1825	0.180"	2125	0.375"	4400		
14"	14.000"	0.156"	1675	0.188"	2025				
16"	16.000"	0.165"	1550	0.188"	1775				
18"	18.000"	0.165"	1375	0.188"	1575				
20"	20.000"	0.188"	1400	0.218"	1625				
24"	24.000"	0.218"	1375	0.250"	1550				
30"	30.000"	0.250"	1250	0.312"	1550				

\* Bursting pressure calculated using Barlow's formula:  $(P=2ST) / D$   
 S = 75,000 psi fiber stress T=nom. wall. D=nom. O.D.