In-Service Pipe Wall Thickness Thresholds

for Ammonia Refrigeration Piping Systems

Piping Sizes, Schedules, and Thicknesses (Carbon Steel Only)

Pipe Size (in.) (OD)	Pipe Schedule	Nominal Thickness (in.)	*Mill Tolerance Thickness (in.)	Alert Thickness (in.)	Remaining Percentage from Nominal	Replacement Thickness (in.)	Remaining Percentage from Nominal	**Pressure Tmin (in.)
0.5 (0.840)	80	0.147	0.129	0.111	75%	0.074	50%	0.011
0.75 (1.050)	80	0.154	0.135	0.116	75%	0.077	50%	0.013
1 (1.315)	80	0.179	0.157	0.135	75%	0.090	50%	0.017
1.25 (1.660)	80	0.191	0.167	0.144	75%	0.096	50%	0.021
1.5 (1.900)	80	0.2	0.175	0.150	75%	0.100	50%	0.024
2 (2.375)	80	0.218	0.191	0.164	75%	0.109	50%	0.030
2 (2.375)	40	0.154	0.135	0.116	75%	0.077	50%	0.030
2.5 (2.875)	40	0.203	0.178	0.153	75%	0.102	50%	0.036
3 (3.500)	40	0.216	0.189	0.162	75%	0.108	50%	0.044
3.5 (4.000)	40	0.226	0.198	0.170	75%	0.113	50%	0.051
4 (4.500)	40	0.237	0.207	0.178	75%	0.119	50%	0.057
5 (5.563)	40	0.258	0.226	0.194	75%	0.129	50%	0.071
6 (6.625)	40	0.28	0.245	0.210	75%	0.140	50%	0.084
8 (8.625)	40	0.322	0.282	0.242	75%	0.161	50%	0.109
10 (10.750)	40	0.365	0.319	0.274	75%	0.183	50%	0.136
12 (12.750)	ST	0.375	0.328	0.282	75%	0.188	50%	0.162
14 (14.000)	ST	0.375	0.328	0.282	75%	0.188	50%	0.178
16 (16.000)	ST	0.375	0.328	0.282	75%	0.214	57%	0.203
18 (18.000)	ST	0.375	0.328	0.282	75%	0.240	64%	0.228
20 (20.000)	ST	0.375	0.328	0.319	85%	0.267	71%	0.254
24 (24.000)	ST	0.375	0.328	0.327	87%	0.315	84%	0.305

*Note: These values only apply to the pressure envelope of the pipe. They do not take into account other types of loading which may increase the remaining minimum alert and replacement thickness values.

© Gamma Graphics Services, LLC (GGS). All Rights Reserved.