



OD (INCHES)				
WALL THICKNESS (IN.)	.375 TO .875	OVER .875 TO 1.875	OVER 1.875 TO 3.750	OVER 3.750 TO 15.000
.028 & .035	+ .002 - .002	+ .002 - .002	+ .002 - .002	
.049	+ .002 - .002	+ .002 - .003	+ .002 - .003	
.065	+ .002 - .002	+ .002 - .003	+ .002 - .003	+ .004 - .004
.083	+ .002 - .002	+ .002 - .003	+ .003 - .003	+ .004 - .005
.095	+ .002 - .002	+ .002 - .003	+ .003 - .003	+ .004 - .005
.109	+ .002 - .003	+ .002 - .004	+ .003 - .003	+ .005 - .005
.120	+ .003 - .003	+ .002 - .004	+ .003 - .003	+ .005 - .005
.134 & .148	+ .002 - .004	+ .002 - .004	+ .003 - .003	+ .005 - .005
.165	+ .003 - .004	+ .003 - .004	+ .003 - .004	+ .005 - .006
.180	+ .004 - .004	+ .004 - .004	+ .003 - .005	+ .006 - .006
.203	+ .004 - .005	+ .004 - .005	+ .004 - .005	+ .006 - .007
.220	+ .004 - .006	+ .004 - .006	+ .004 - .006	+ .007 - .007
.238	+ .005 - .006	+ .005 - .006	+ .005 - .006	+ .007 - .007
.259		+ .005 - .006	+ .005 - .006	+ .007 - .007
.284		+ .005 - .006	+ .005 - .006	+ .007 - .007
.300		+ .006 - .006	+ .006 - .006	+ .008 - .008
.320		+ .007 - .007	+ .007 - .007	+ .008 - .008
.344		+ .008 - .008	+ .008 - .008	+ .009 - .009
.375			+ .009 - .009	+ .009 - .009
.400			+ .010 - .010	+ .010 - .010
.438			+ .011 - .011	+ .011 - .011
.480			+ .012 - .012	+ .012 - .012
.531 & .563			+ .013 - .013	+ .013 - .013
.580			+ .014 - .014	+ .014 - .014
.600			+ .015 - .015	+ .015 - .015
.625			+ .016 - .016	+ .016 - .016
.650			+ .017 - .017	+ .017 - .017



OD SIZE RANGE	OD OVER (IN.)	OD UNDER (IN.)	ID OVER (IN.)	ID UNDER (IN.)
Up to 0.499	.004	.000		
0.500 - 1.699	.005	.000	.000	.005
1.700 - 2.099	.006	.000	.000	.006
2.100 - 2.499	.007	.000	.000	.007
2.500 - 2.899	.008	.000	.000	.008
2.900 - 3.299	.009	.000	.000	.009
3.300 - 3.699	.010	.000	.000	.010
3.700 - 4.099	.011	.000	.000	.011
4.100 - 4.499	.012	.000	.000	.012
4.500 - 4.899	.013	.000	.000	.013
4.900 - 5.299	.014	.000	.000	.014
5.300 - 5.549	.015	.000	.000	.015
5.550 - 5.999	.010	.010	.010	.010
6.000 - 6.499	.013	.013	.013	.013
6.500 - 6.999	.015	.015	.015	.015
7.000 - 7.499	.018	.018	.018	.018
7.500 - 7.999	.020	.020	.020	.020
8.000 - 8.499	.023	.023	.023	.023
8.500 - 8.999	.025	.025	.025	.025
9.000 - 9.499	.028	.028	.028	.028
9.500 - 9.999	.030	.030	.030	.030
10.000 - 10.999	.034	.034	.034	.034
11.000 - 11.999	.035	.035	.035	.035
12.000 - 12.999	.036	.036	.036	.036
13.000 - 13.999	.037	.037	.037	.037
14.000 - 15.000	.038	.038	.038	.038

Ovality shall be within the above tolerance except when wall thickness is less than 3% of the OD. In such cases the additional ovality shall be as follows, but the mean diameter shall be within the specified tolerance:

OD (INCHES)	ADDITIONAL OVALITY TOLERANCE (IN.)
Up to 2.000	.010
Over 2.000 - 3.000 incl.	.015
Over 3.000 - 4.000 incl.	.020
Over 4.000 - 5.000 incl.	.025
Over 5.000 - 6.000 incl.	.030
Over 6.000 - 7.000 incl.	.035
Over 7.000 - 8.000 incl.	.040
Over 8.000 - 9.000 incl.	.045
Over 9.000 - 10.000 incl.	.050
Over 10.000 - 11.000 incl.	.055
Over 11.000 - 12.000 incl.	.060
Over 12.000 - 12.500 incl.	.065
Over 13.000 - 13.999 incl.	.070
Over 14.000 - 15.000 incl.	.075