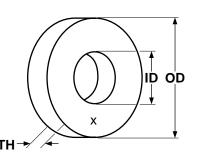
USS Through-Hardened

Extra Thick







USS THROUGH-HARDENED FLAT WASHERS-EXTRA THICK ANSI B18.22. Wrought Washe									
Bolt Size	Outside Diameter			Inside Diameter			Thickness		Approximate
	Nominal	Max	Min	Nominal	Max	Min	Max	Min	Number per 50 Pounds
1/4	3/4	0.749	0.727	5/16	0.327	0.307	.080	.064	6600
5/16	7/8	0.905	0.868	3/8	0.390	0.370	.093	.079	4200
3/8	1	1.030	0.993	7/16	0.453	0.433	.093	.079	3250
7/16	1-1/4	1.280	1.243	1/2	0.515	0.495	.106	.090	1750
1/2	1-3/8	1.405	1.368	9/16	0.577	0.557	.146	.122	1100
9/16	1-1/2	1.499	1.462	5/8	0.640	0.620	.146	.122	950
5/8	1-3/4	1.780	1.743	21/32	0.687	0.649	.160	.136	550
3/4	2	2.030	1.993	13/16	0.842	0.805	.160	.136	450
7/8	2-1/4	2.280	2.243	15/16	0.968	0.931	.160	.136	375
1	2-1/2	2.530	2.493	1-1/16	1.092	1.055	.160	.136	300

FASTENERS &								
Description	Has identical inside and outside diameters as USS thru-hardened washer, but can be as much as 50% thicker. They are manufactured from a medium grade of steel and heat-treated.							
Applications/ Advantages	Designed for heavy duty use in machinery construction, assembly, in-plant maintenance and building construction							
Material	SAE 1035 - 1050 steel							
Hardness	Rockwell C38 - 45							
Plating	Parts are mechanically zinc yellow plated.							

