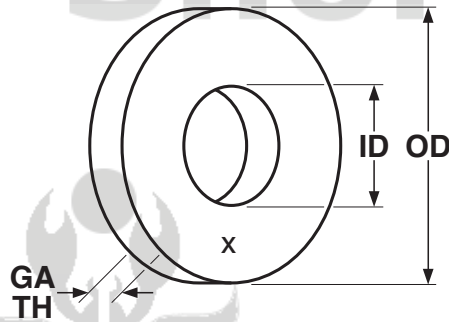


**USS THROUGH-HARDENED** **Heavy Duty**



<b>USS THROUGH-HARDENED FLAT WASHERS-HEAVY DUTY</b>								ASME B18.21.1-2009, Prestige Stamping	
Bolt Size	Outside Diameter			Inside Diameter			Thickness		
	Nominal	Max	Min	Nominal	Max	Min	Max	Min	
1/4	3/4	0.749	0.727	5/16	0.327	0.307	.080	.051	
5/16	7/8	0.905	0.868	3/8	0.390	0.370	.093	.079	
3/8	1	1.030	0.993	7/16	0.453	0.433	.098	.079	
7/16	1-1/4	1.280	1.243	1/2	0.515	0.495	.106	.090	
1/2	1-3/8	1.405	1.368	9/16	0.577	0.557	.146	.122	
9/16	1-1/2	1.499	1.462	5/8	0.640	0.620	.146	.122	
5/8	1-3/4	1.780	1.743	21/32	0.718	0.681	.160	.136	
3/4	2	2.030	1.993	13/16	0.842	0.805	.160	.136	
7/8	2-1/4	2.280	2.243	15/16	0.968	0.931	.160	.136	
1	2-1/2	2.530	2.493	1-1/16	1.092	1.055	.160	.136	

<b>Description</b>	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.
<b>Applications/Advantages</b>	Designed for heavy duty use in machinery construction, assembly, in-plant maintenance and building construction
<b>Material</b>	SAE 1035 - 1050 steel
<b>Hardness</b>	Rockwell C38 - 45
<b>Plating</b>	Parts are mechanically zinc yellow plated.