



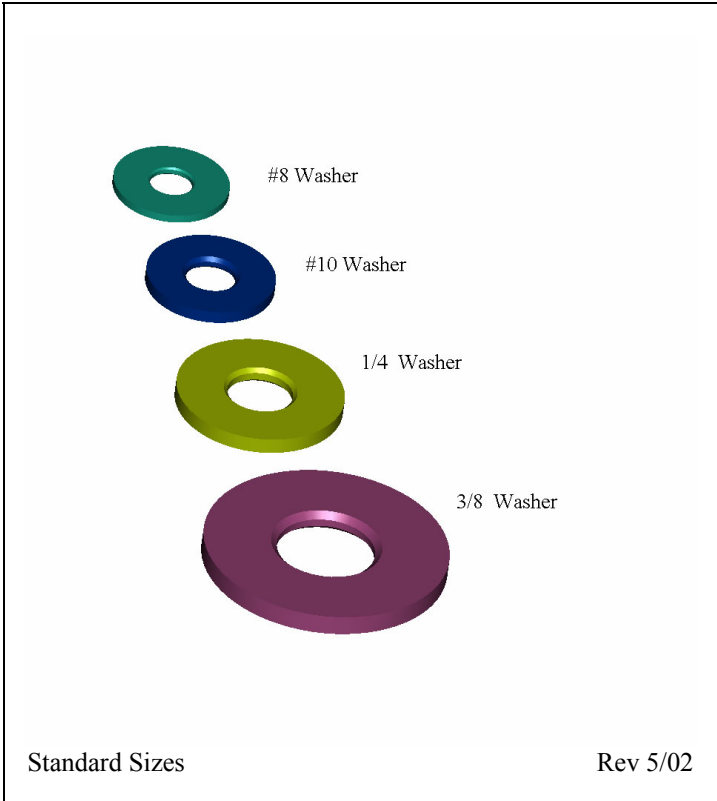
Innovative Mechanism Solutions

Frangibolt® Washers

The Washers used in the Frangibolt assembly are an important part of the mechanism. They serve the following critical functions:

- They distribute the relatively high recovery stress generated by the Nitinol cylinder during actuation, on a much larger contact area.
- They have minimum thickness so as to minimize the overall length of the joint.
- They have chamfers specially designed to match fillet radiuses of NAS bolts (at the location where the bolt head meets the bolt shank).
- They have tighter fitting inner diameters designed to clear NAS bolt shanks while at the same time maximizing coverage of the Nitinol cylinder.

TiNi Aerospace manufactures a line of such washers as specified below:



Specification

Size	OD (in)	ID (in)	Thickness (in)	Material	Min. Strength (Ksi)	P/N	Color ¹
3/8"	.950	.380	.080	6AL4V Ti	150	W6-80-Ti	Magenta
1/4"	.650	.254	.063	6AL4V Ti	150	W4-63-Ti	Green / Gold
# 10	.500	.194	.050	6AL4V Ti	150	W3-50-Ti	Dark Blue
# 8	.450	.166	.032	6AL4V Ti	150	W2-32-Ti	Teal Green

¹ An anodizing process produces the color.