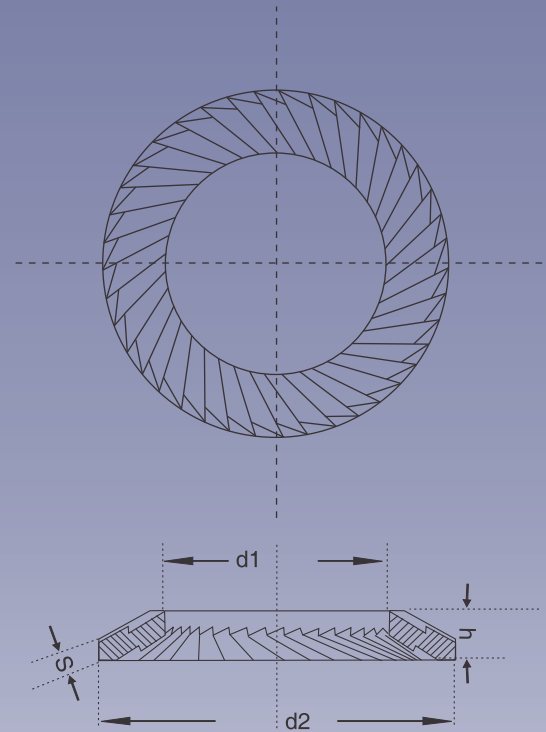
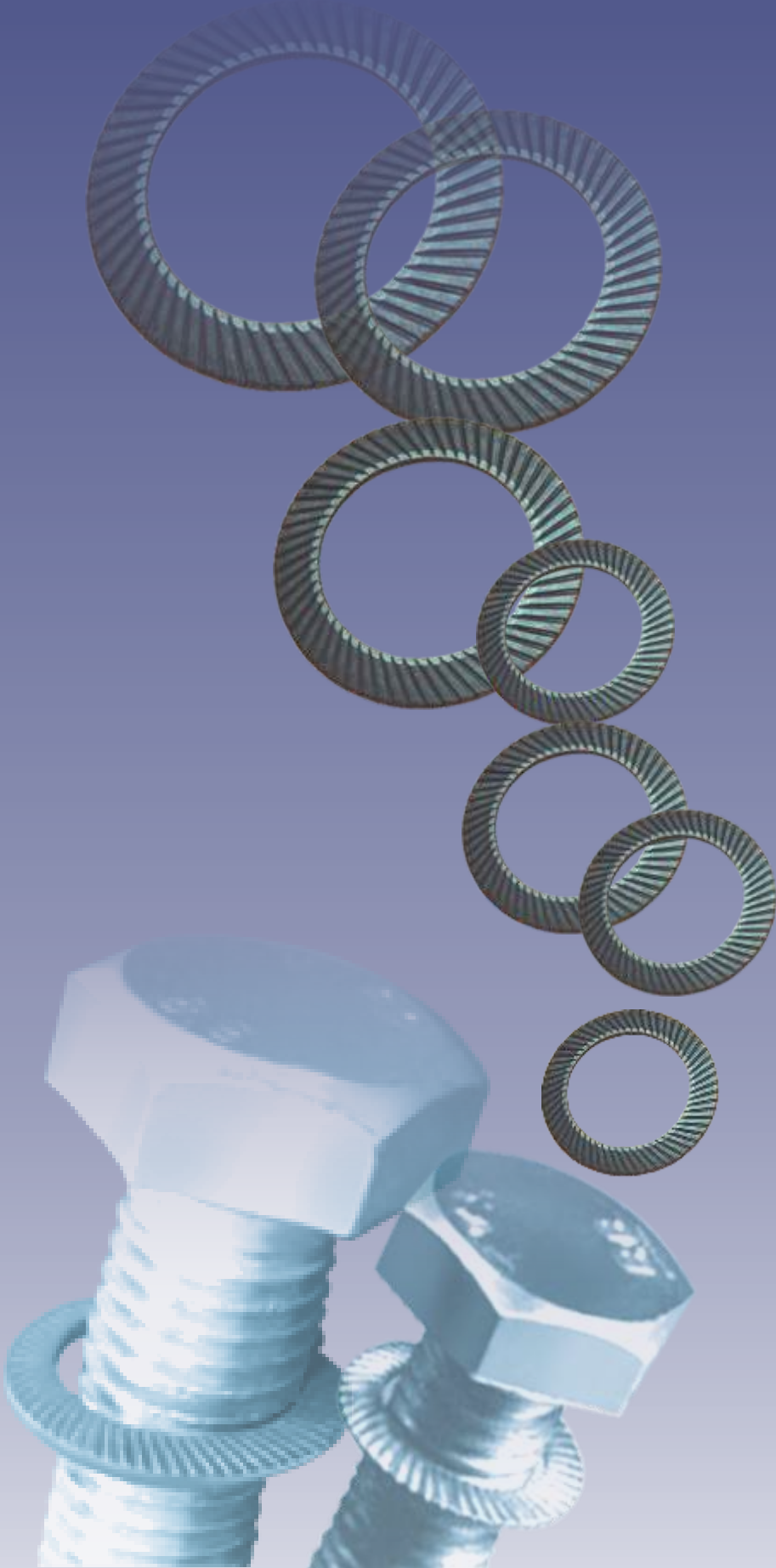


SERRATED SAFETY WASHERS (Rib washers)



ISO 9001: 2008

BUREAU VERITAS
Certification



International Industrial Springs

Plot No. A-26, Road No. 10, Wagle Industrial Estate, Thane - 400604, Maharashtra, INDIA

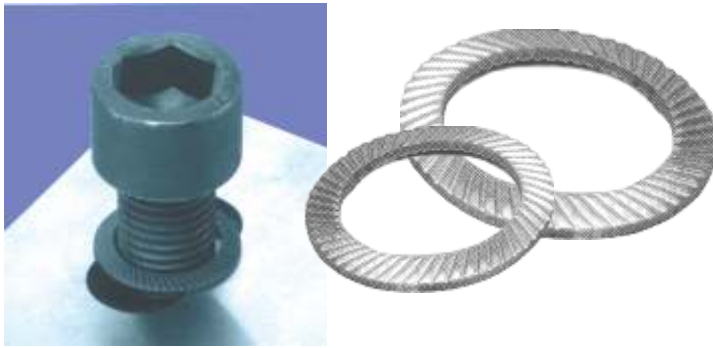
Tel. : 91-22-2582 1941 / 2508 / 6593 / 2581 3416 * Fax : 91-22-2582 4478

Email : sales@internationalsprings.com * Web : www.internationalsprings.com



Serrated Safety Washers (Rib washers)

Serrated Washers are Disc Springs with Trapezoidal Cross Section on both sides for gripping. IIS serrated safety washers are ready to fit washers to sustain preload and avoid loosening. As the bolt is tightened the serrations crunch into the mating faces and prevents the screw from loosening up due to vibration. Also, the disc shape hold the necessary tension. They are available in various sizes to fit bolts or screws. The diameter for Serrated Washers are matched to screw dimensions. The outer diameter of washer is matched to the head diameter of screw head. This allows using screw and bolt including recessed heads, except countersunk screw.



The advantages of Serrated Safety Washers are :

1. Used for high vibration resistance due to positive rib contact
2. Excellent pretensioning
3. Through proper radius selection, no splitting/cracking occurs during tightening
4. The concentric force of the washer eliminates the chances of bending the fastener
5. Extensive application and flexibility, minimizes stocks

IIS has ready stock of all the sizes of serrated safety washers, which can be supplied in variety of materials.

International Industrial Springs, Thane established in the year 1967 has specialized in manufacture of Disc springs, serrated washers, curved washers, wave spring washer, Bearing washers & Precision Sheet Metal Components. IIS continued its steady growth by implementing modern manufacturing methods. Our engineers have utilized their engineering background, experience and skills in designing and improving the manufacturing process through value engineering for best quality. Extensive product development and testing laboratories are available and used for our in house production and also for customer's proprietary development.

Our main goals are individual attention, custom engineering, continuous improvement and management commitment to product quality and customer's satisfaction.

At IIS, we believe in quality through performance. All our springs are manufactured as per DIN, ASTM or IS standards. We can also custom make your requirement as per your tolerances. We at IIS are committed to customer satisfaction through quality and believe customer satisfaction is the key to our growth. Our QC team is well experienced and responsible for identifying quality problems and providing solutions for the same.

Dimension Table for Serrated Washer Series

Size (Nominal) (mm)	d ₁ H14 (mm)	d ₂ h14 (mm)	s (mm)	h max. (mm)	h min. (mm)	for bolts	
						metric (mm)	imperial (inch)
1.6	1.7	3.2	0.35	0.6	0.38	1.6	
2	2.2	4	0.35	0.6	0.39	2	
2.5	2.7	4.8	0.45	0.9	0.49	2.5	
3	3.2	5.5	0.45	0.9	0.51	3	1/8"
3.5	3.7	6	0.45	0.9	0.52	3.5	
4	4.3	7	0.5	1.0	0.59	4	5/32"
5	5.3	9	0.6	1.1	0.73	5	3/16"
6	6.4	10	0.7	1.2	0.82	6	
6.35	6.7	9.5	0.7	1.2	0.79		1/4"
7	7.4	12	0.7	1.3	0.89	7	
8	8.4	13	0.8	1.4	0.98	8	5/16"
10	10.5	16	1	1.6	1.21	10	3/8"
11.1	11.6	15.9	1	1.6	1.18		7/16"
12	13	18	1.1	1.7	1.31	12	
12.7	13.7	19	1.1	1.8	1.33		1/2"
14	15	22	1.2	2.0	1.52	14	9/16"
16	17	24	1.3	2.1	1.63	16	5/8"
18	19	27	1.5	2.3	1.85	18	
19	20	30	1.5	2.5	1.98		3/4"
20	21	30	1.5	2.5	1.94	20	
22	23	33	1.5	2.7	2.08	22	7/8"
24	25.6	36	1.8	2.9	2.32	24	
25.4	27	38	2	3.1	2.52		1"
27	28.6	39	2	3.1	2.52	27	
30	31.6	45	2	3.6	2.78	30	1 1/8"
36	38	54	2.5	4.2	3.38	36	1 3/8"