



Chetak[®]
YOUR SUPPORT TO LUBE

CHETAK
FASTENERS

STANDARD FLAT WASHERS

METRIC ISO 7089 / DIN 125 FORM A BLUEPRINT



OPTIMIZED UNIFORM STRESS DISTRIBUTION

Engineered to maximize bearing surface interfaces and prevent joint surface clamping clearance distortion.

HARDNESS CLASSIFICATION

- **Class 140 HV:** Optimized for standard structural configurations (Min. HV 140).
- **Class 200 HV:** Engineered for intermediate commercial manufacturing loads.
- **Class 300 HV:** Hardened & Tempered for premium structural high-tensile fasteners.

MATERIAL METALLURGY

- **Carbon Steel:** Low or medium grade carbon steel configurations with uniform density.
- **Austenitic Stainless:** Premium Stainless Steel (A2 / A4 grades) delivering absolute corrosion defense in active moisture environments.

METRIC FLAT WASHERS DIMENSIONAL MATRIX (ISO 7089)

NOMINAL SIZE (M)	INTERNAL DIAMETER (ID)		OUTSIDE DIAMETER (OD)		THICKNESS (T)	
	MAX (MM)	MIN (MM)	MAX (MM)	MIN (MM)	MAX (MM)	MIN (MM)
M3	3.38	3.20	7.00	6.64	0.55	0.45
M4	4.48	4.30	9.00	8.64	0.90	0.70
M5	5.48	5.30	10.00	9.64	1.10	0.90
M6	6.62	6.40	12.00	11.57	1.80	1.40
M8	8.62	8.40	16.00	15.57	1.80	1.40
M10	10.77	10.50	20.00	19.48	2.20	1.80
M12	13.27	13.00	24.00	23.48	2.70	2.30
M16	17.27	17.00	30.00	29.48	3.30	2.70
M20	21.33	21.00	37.00	36.38	3.30	2.70
M24	25.33	25.00	44.00	43.38	4.30	3.70
M30	31.39	31.00	56.00	55.26	4.30	3.70
M36	37.62	37.00	66.00	64.80	5.60	4.40

CHETAK FASTENERS: YOUR TRUSTED FASTENING PARTNER

Official Website: www.chetaktoolsindia.com