

# 1.6587 CASE HARDENING STEEL

1.6587 is a 1.8% Chromium – Nickel – Molybdenum high hardenability, case hardening steel, generally supplied in the annealed condition with hardness around 225 Bhn. As with EN36A, 1.6587 has high core strength and toughness with case hardening capability up to 62 HRC.

Typical uses include: Large gears, heavy duty bushing, bearings, cam followers, extractors, shafts, wear pins, pump shafts, sprockets etc.

**Stocked Sizes** - Rounds 33 mm – 610 mm Ø

**Finishes** - Peeled/Rough Machined

## Related Specifications

Australia	AS1444-1996-X4317
Germany	W. Nr 1.6587 DIN 17CrNiMo6/18CrNiMo7-6
United Kingdom	BS970 Part 3 1991 – 820M17/822M17 BS 970 1955 – EN354/EN355
USA	SAE 4317

## Chemical Composition

	Min. %	Max %
Carbon	0.15	0.21
Silicon		0.40
Manganese	0.50	0.90
Nickel	1.40	1.70
Chromium	1.50	1.80
Molybdenum	0.25	0.35
Phosphorous		0.035
Sulphur		0.035

## Typical Mechanical Properties in the Annealed Condition

Mechanical Property Designation		
Tensile Strength Mpa	Approx.	700
0.20% Proof Stress (Yield) Mpa	Approx.	520
Elongation on %	Approx.	23
Hardness Brinell HB	Approx.	200 (Max. 230 BHN)

## Annealing

Heat to 830-850 Deg C. Hold until temperature is uniform throughout the section and allow to cool in furnace.