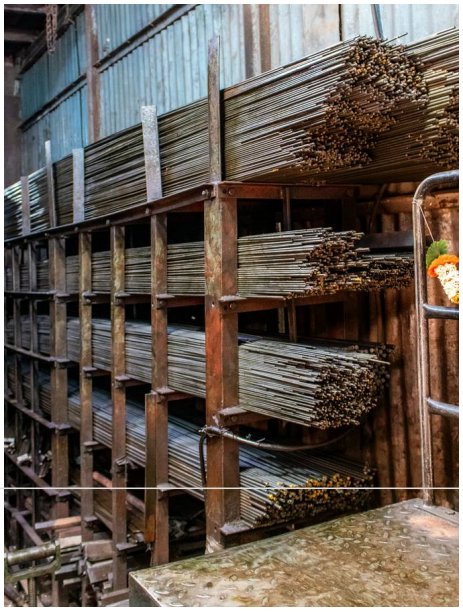
ALLOY STEEL Advanced Materials. Engineered for Performance.

AISI 4340 / 34CrNiMo6

Alloy Steel | AISI: 4340 | EN: 34CrNiMo6 / 1.6582

Nickel-chromium-molybdenum steel with very high hardenability and toughness in heavy sections, chosen for the most highly stressed machined components.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Exceptional toughness in heavy sections
- Very high hardenability

Available forms & sizes

Form	Size range
Round Bars	20 - 1000 mm dia, forged
Blocks & Profiles	Forged blocks and discs

Chemical composition (%)

Element	Min	Max
C	0.38	0.43
Ni	1.65	2.00
Cr	0.70	0.90
Mo	0.20	0.30

Mechanical properties

Property	Value	Unit
Yield Strength (Q+T)	860 min	MPa
Tensile Strength (Q+T)	1000 - 1200	MPa
Elongation	10 min	%

Physical properties

Property	Value	Unit

Property	Value	Unit
Density	7.85	g/cm3

Standards

ASTM A29, EN 10083-3

Equivalent grades

1.6582, 34CrNiMo6, SNCM439, 817M40

Industries served

Aerospace, Mining, General Engineering

Typical applications

- Heavy duty gears and pinions
- Aircraft landing gear components
- Crankshafts
- High stress fasteners

Live datasheet