

HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

Available Product Shapes

Long Products

Open Die Forgings

Properties

Ni-Cr-Mo steel for applications requiring high tensile and toughness values, particular in large cross sections in the hardened and tempered condition.

Applications

- > Bearings
- > Blades & Shafts for Turbines and Compressors
- > Comp. for Industrial Gas Compressors
- > Other Power Generation Components
- > Structural parts (Aerosp)

Material designation		Standards	
1.6944	SEL	A370	ASTM
G43400	UNS	E10	
≈40NiCrMo6	EN	6414	AMS
AISI: 4340	AISI	6484	
4340	Market grade		

Chemical composition

C	Si	Mn	Cr	Mo	Ni	V	Al
0.42	0.30	0.80	0.85	0.30	1.90	0.08	0.03

Physical Properties at 20°C / 68°F

Density	7.85 / 0.28	[kg/dm ³ / lb/in ³]
Thermal conductivity	42 / 24.27	[W/(m.K) / BTU (IT) ft/hr/ft ² /F]
Specific heat	460 / 109.87	[J/(kg.K) / BTU (IT) lb/F]
Spec. electrical resistance	0.19 / <0.001	[Ohm.mm ² /m / Ohm.inch ² /ft]

Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932	600 / 1112
Thermal expansion (10 ⁻⁶ m/(m.K) / 10 ⁻⁶ inch/(inch.F))	11.1 / 6.167	12.1 / 6.722	12.9 / 7.167	13.5 / 7.5	13.9 / 7.722	14.1 / 7.833

For more information see www.voestalpine.com/boehler-edelstahl

