

CREEP RESISTANT STEELS

Available Product Shapes

Long Products

Product Description

Components featuring elevated high-temperature strength for use in thermal engines and power plants, such as turbine blades.

Properties

Creep resisting steel, hardened and tempered. Usual upper temperature limit for continuous operating at 580°C.

Applications

- > Blades & Shafts for Turbines and Compressors
- > Fasteners, Bolts, Nuts
- > Other Power Generation Components

Material designation		Standards
~1.4935	SEL	A370 A1028 ASTM
AISI: 422 / 616	AISI	
422	Market grade	

Chemical composition

C	Si	Mn	Cr	Mo	Ni	V	W
0.23	0.35	0.70	11.60	1.00	0.75	0.25	1.00

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))	10.5 / 5.833	11 / 6.111	11.5 / 6.389	12 / 6.667	12.3 / 6.833	12.5 / 6.944

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

