CREEP RESISTANT STEELS

Available Product Shapes

Plates

Product Description

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

Properties

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

Material designation	
1.4922	SEL
1.4923	
X20CrMoV11-1	EN
X20CrMoV12-1	
X22CrMoV12-1	
ST12TE	Market grade
X22	
ST12T	

Standards	
10088-1	EN ISO
10216-2	
10222-2	
10302	
A370	ASTM

Chemical composition

C	Si	Mn	Cr	Mo	Ni	V
0.22	0.25	0.70	11.40	0.95	0.70	0.30

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/bohler-edelstahl

voestalpine BÖHLER Edelstahl GmbH & Co KG
Mariazeller Straße 25
8605 Kapfenberg, AT
T. +43/50304/20-0
E. info@bohler-edelstahl.at
www.voestalpine.com/bohler-edelstahl

voestalpine
ONE STEP AHEAD.