

CREEP RESISTANT STEELS

Available Product Variants

Plates

Product Description

Components for steam and gas turbines, such as blades, discs, bolts and pins.

Process Melting

VID

Properties

Creep resisting austenitic steel. Scaling resistance in air up to appr. 750°C.

Applications

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

Technical data

Material designation		Standards	
1.4962	SEL	10088-1	EN ISO
X12CrNiWTiB16-13	EN	10302	
ST17/13W	Market grade		

Chemical composition (wt. %)

C	Si	Mn	Cr	Ni	W	Ti	B
0.13	0.3	0.65	16.1	13.6	2.8	≥ 5°C	0.004

Thermal Expansions between 20°C | 68°F and ...

Temperature (°C °F)	100 212	200 392	300 572	400 752	500 932	600 1,112	700 1,292	800 1,472
Thermal expansion (10 ⁻⁶ m/(m.K) 10 ⁻⁶ inch/inch.°F)	15.7 8.7	16.7 9.3	17.1 9.5	17.4 9.7	17.6 9.8	17.8 9.9	18 10	18.7 10.4

The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.