

# CORROSION RESISTANT STEELS - MARTENSITIC, SEMI- MARTENSITIC AND FERRITIC STEELS

## Available Product Variants

Plates

## Product Description

Heta treatable Chromium steel. Used for turbine components.

In a ground and polished surface-finish, corrosion resistant against water and steam.

## Applications

> Other Aerospace Components

## Technical data

Material designation		Standards	
Alloy 410	Market grade	B6	ASTM
1.4006	SEL	B6X	
X12Cr13	EN	5504	AMS
S41000	UNS	5613	
410	AISI	410S21	BS
SUS403	JIS	410S21	
SUS410			
12Ch13	GOST		

## Chemical composition (wt. %)

C	Si	Mn	Cr
0.11	0.4	0.4	12

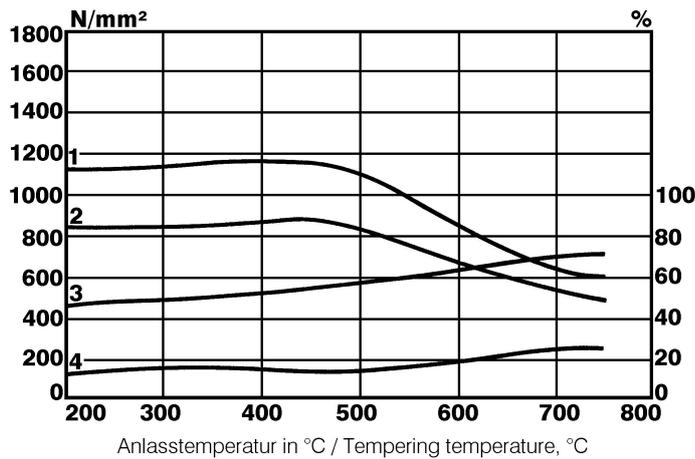
## Heat treatment

### Annealing

Temperature	745 to 825 °C	Air
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### Hardening and Tempering

Temperature	950 to 100 °C	Oil, air.
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## Physical Properties

Density	7.7	[kg/dm³]
Thermal conductivity	30	[W/(m.K)]
Specific heat	460	[kJ/kg K]
Spec. electrical resistance	0.6	[Ohm.mm²/m]
Modulus of elasticity	215	[10³N/mm²]

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

Temperature (°C)	100	200	300	400
Thermal expansion (10 <sup>-6</sup> m/(m.K))	10.5	11	11.5	12

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. 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.

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ONE STEP AHEAD.