

FERRITIC AND MARTENSITIC STEELS, INCL. PRECIPITATION HARDENING 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 Comps.

Technical data

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

Chemical composition (wt. %)

C	Si	Mn	Cr
0.11	0.4	0.4	12

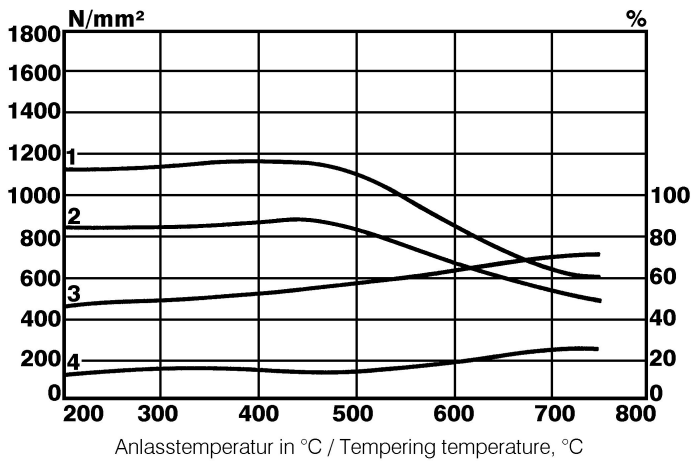
Heat treatment

Annealing

Temperature	745 to 825 °C 1,373 to 1,517 °F	Air
-------------	--------------------------------------	-----

Hardening and Tempering

Temperature	950 to 100 °C 1,742 to 212 °F	Oil, air.
-------------	------------------------------------	-----------



Physical Properties

Density	7.7 0.28	[kg/dm ³ lb/in ³]
Thermal conductivity	30 17.33	[W/(m.K) BTU/ft h °F]
Specific heat	460 109.8691	[kJ/kg K BTU/lb °F]
Spec. electrical resistance	0.6 2.84	[Ohm.mm ² /m 10 ⁻⁴ Ohm.inch ² /ft]
Modulus of elasticity	215 31.18	[10 ³ N/mm ² 10 ³ ksi]

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

Temperature (°C °F)	100 212	200 392	300 572	400 752
Thermal expansion (10 ⁻⁶ m/(m.K) 10 ⁻⁶ inch/inch.°F)	10.5 5.8	11 6.1	11.5 6.4	12 6.7

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.