# Stainless Steel 1.4006 Bar



#### **SPECIFICATIONS**

Commercial	410
EN	1.4006

Grade 410 / 1.4006 is a hardenable martensitic stainless steel available in bar form only.

# CHEMICAL COMPOSITION

EN 10088-3:2005 1.4006 Steel			
Element	% Present		
Chromium (Cr)	11.5 - 13.5		
Manganese (Mn)	1.5 max		
Silicon (Si)	1 max		
Nickel (Ni)	0.75 max		
Carbon (C)	0.08 - 0.15		
Phosphorous (P)	0.04 max		
Sulphur (S)	0.02 max		
Iron (Fe)	Balance		

## **ALLOY DESIGNATIONS**

1.4006 is similar, but may not be a direct equivalent

410S UNS S41000 410S21

# SUPPLIED FORMS

Bar

#### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	7.75 g/cm³
Thermal Expansion	9.9 x10 <sup>-6</sup> /K
Modulus of Elasticity	300 GPa
Thermal Conductivity	24.9 W/m.K
Electrical Resistivity	$0.57~\text{x}10^{-6}~\Omega$ .m

## MECHANICAL PROPERTIES

EN 10088-3:2005 Bar Up to 160mm Dia or Thickness	
Property	Value
Proof Stress	450 Min MPa
Tensile Strength	650 - 850 MPa
Elongation A	15 Min %

Mechanical properties vary significantly according to heat treatment temperature.

Material in the annealed condition shall have a hardness reading of 220 HB Max and a Tensile Test reading Of 730 MPA Max.

#### CORROSION RESISTANCE

Moderate in non-chloride containing environments

#### CONTACT

Please make contact directly with your local service centre, which can be found via the Address:

Locations page of our web site

Web: www.aalco.co.uk

### **REVISION HISTORY**

**Datasheet Updated** 13 March 2020

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