

## 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)	11.50 - 13.50
Manganese (Mn)	0.0 - 1.50
Silicon (Si)	0.0 - 1.00
Nickel (Ni)	0.0 - 0.75
Carbon (C)	0.08 - 0.15
Phosphorous (P)	0.0 - 0.04
Sulphur (S)	0.0 - 0.02
Iron (Fe)	Balance

## ALLOY DESIGNATIONS

1.4006 is similar, **but may not be a direct equivalent to:**

410S  
UNS S41000  
410S21

## SUPPLIED FORMS

- Bar

## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	7.75 g/cm <sup>3</sup>
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 x10 <sup>-6</sup> Ω .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

**Address:** Please make contact directly with your local service centre, which can be found via the Locations page of our web site  
**Web:** [www.aalco.co.uk](http://www.aalco.co.uk)

## REVISION HISTORY

**Datasheet Updated** 13 March 2020

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