

# Stainless Steel

## 1.4006 Bar



Amari ireland Ltd

### 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.amari-ireland.com](http://www.amari-ireland.com)

### REVISION HISTORY

Datasheet Updated 13 March 2020

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