

TECHNICAL DATA SHEET

Stainless steel type 410

General notes:

- » **Martensitic higher carbon steel** (Material number 1.40006, AISI number 410)
- » The grade is basically an iron chromium alloy
- » Magnetizable
- » Good formability and ductility
- » It is a martensitic grade which exhibits good mechanical properties coupled with good corrosion resistance.
- » typical applications include tweezers and cutting tools for the electronic industry, watch-makers, jewelers and laboratory and medical applications in mild aggressive chemical environments

Composition

Component	Wt. %	Component	Wt. %	Component	Wt. %
C	≤0.15	Si	≤1.0	Mn	≤1.5
P	≤0.040	S	≤0.030	Cr	11.5-13.5

Mechanical properties

Density	7.70 Kg/dm³
Hardness, Vickers	210 HV
Tensile strength, ultimate	520-740 MPa
0.2% Yield stress	≥270 MPa
Modulus of elasticity	190 GPa

Thermal properties

Coef. of lin. therm expansion	10.5 E-6/°C	20°C-100°C
Coef. of lin. therm expansion	11.5 E-6/°C	20°C-300°C
Specific heat capacity	480 J/(Kg K)	20°C
Thermal conductivity	30 W/(m K)	20°C

Electrical properties

Resistivity	0.06 E-6 Ohm.m
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