TECHNICAL DATA SHEET

Stainless steel type 410

General notes:

- **Martensitic higher carbon steel** (Material number 1.4021, 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**	≤2.0
P	≤0.025	**S**	≤0.025	**Cr**	11.5-13.5

Mechanical properties

Density	**7.70 Kg/dm3**
Tensile strength, ultimate	**586-655 MPa**
0.2% Yield stress	**≥420 MPa**
Modulus of elasticity	**200 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	**0.46 J/(g K)**	*20°C*
Thermal conductivity	**30 W/(m K)**	*20°C*

Electrical properties

Resistivity	**0.06 E-6 Ohm.m**