

Technical Datasheet: Stainless steel type 430

General Notes

- Material number 1.4016, DIN 36AXPB.SA, AISI number 430
- Magnetizable
- · Good formability and ductility.
- It is a ferritic, non-hardenable plain Chromium stainless steel with excellent finish quality.
- Excellent resistance to nitric attack

Composition

Component	Wt.%	Component	Wt.%	Component	Wt.%
С	0.0-0.08	Si	≤1.0	Mn	0.0-1.0
Р	≤0.04	S	≤0.02	Cr	16.0-18.0

Mechanical properties:

Density 7.75 g/cm³

Tensile strength, ultimate: 450-600 MPa

0.2% Yield stress ≥240 MPa

Modulus of elasticity 200 GPa

Thermal properties

Coef. of lin. therm expansion: 10.4 E-6/°C 20°C-100°C Coef. of lin. therm expansion: 11.0 E-6/°C 20°C-300°C

Specific heat capacity: $0.46 \text{ J/(g\cdot K)}$ Thermal conductivity: $23.9 \text{ W/(m\cdot K)}$

Electrical properties

Resistivity 0.06 E-6 Ohm.m