

### Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4521	X2CrMoTi18-2	444	S44400

### Description

1.4521 / AISI 444 is a ferritic chromium stainless steel with molybdenum in addition.

### Special properties

Equal corrosion resistance to 1.4401/4404. Excellent resistance to stress corrosion cracking caused by chlorides.

### Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.025	1.00	1.00	0.04	0.015
Cr %	Mo %	N %	Ti ≤ %	
17.0-20.0	1.80-2.50	≤ 0.030	4x(C+N)+0.15	

### Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
200	320	450-650	20	220

### Physical Properties 20°C

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
7.7	430	23	0.8

### Suitable welding filler materials

1.4430

### Application

Cold heading parts, heat exchanger tubes

### Available forms for 1.4521 / AISI 444

Sheets/Plates	Tubes/Pipes	Fittings
		