

1.4521

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	< %	< %	< %	< %
17.0-20.0	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 200	0.2% Yield strength R _p > N/mm ² 320	Tensile strength R _m N/mm ² 450-650	Elongation A ₅ > % 20	Modulus of elasticity kN/mm ² 220
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Physical Properties 20°C

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



