

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4509	X2CrTiNb18	441	S43940

Description

1.4509 / AISI 441 is a ferritic chromium stainless steel.

Special properties

Good resistance to stress corrosion cracking.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.03	1.00	1.00	0.04	0.015
Cr %	Ti ≤ %	Nb %		
17.5-18.5	0.10-0.60	3 x C +0.3-1.00		

Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²
200	200	420-620	18	220

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
7.7	460	25	0.6

Suitable welding filler materials

1.4316; 1.4502

Application

Exhauster, catalyser

Available forms for 1.4509 / AISI 441

Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings
				