

## 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 <sub>0.2</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	200	420-620	18	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	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
				