

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4841	X15CrNiSi25-21	314	S31400

Description

AISI 314 / 1.4841 is an austenitic and heat resistant steel.

Special properties

Good creep rupture strength. Very good resistance to high-corrosion. Resistant to scaling up to 1150°C.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.20	1.50-2.50	2.00	0.045	0.015
Cr %	Ni %	N %		
24.0-26.0	19.0-22.0	≤ 0.11		

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 ≥ %	Resistant on air up to °C
223	230	550-750	30	1150
Modulus of elasticity kN/mm ²				
196				

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
7.9	500	15	0.9

Suitable welding filler materials

1.4842

Application

Furnace and apparatus engineering

Available forms for 1.4841 / AISI 314

Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
						