

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4828	X15CrNiSi20-12	309	S30900

Description

AISI 309 / 1.4828 is a heat resistant austenitic chromium-nickel-stainless steel.

Special properties

Resistant to scaling up to 1000°C. Low resistance to oxidizing sulphuric gases.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.20	1.50-2.50	2.00	0.045	0.015
Cr %	Ni %	N %		
19.0-21.0	11.0-13.0	≤ 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	500-750	30	1000
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	0.85

Suitable welding filler materials

1.4829

Application

Furnace and apparatus engineering

Available forms for 1.4828 / AISI 309

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