

## 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		

## 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.

## Steel Grade

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

## Mechanical Properties 20 C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</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>
223	230	500-750	30	196
Resistant on air up to °C				
1000				

## 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
7.9	500	15	0.85

## Suitable Welding Filler Materials

1.4829

## Application

Furnace and apparatus engineering

## Available Forms for AISI309

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