

Chemical Composition

C ≤%	Si ≤%	Mn ≤%	P ≤%	S ≤%
0.10	1.00	2.00	0.045	0.015
Cr %	Ni %	Ti ≤%		
17.0-19.0	9.00-12.0	5xC		

Description

AISI 321 H / 1.4878 is an austenitic heat resistant stainless steel.

Special Properties

Middle resistance to carburized gases. Low resistance to oxidized and reduced sulphuric gases.

Steel Grade

AISI	UNS	Material No.	EN Designation
321H	S32109	1.4878	X8CrNiTi18-10

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
215	190	500-720	40	200
Resistant on air up to °C				
850				

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	0.73

Suitable Welding Filler Materials

1.4551/1.4829

Application

Furnace and apparatus engineering

Available Forms for AISI321H

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