

### Standards

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

### 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.

### 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	5 x C		

### 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> ≥ %	Resistant on air up to °C
215	190	500-720	40	850
Modulus of elasticity kN/mm <sup>2</sup>				
200				

### 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	0.73

### Suitable welding filler materials

1.4551; 1.4829

### Application

Furnace and apparatus engineering

### Available forms for 1.4878 / AISI 321 H

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