

### Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4845	X8CrNi25-21	310 S	S31008

### Description

AISI 310 S / 1.4845 is an austenitic and heat resistant steel.

### Special properties

Similar to AISI 314 / 1.4841, but with higher ductility. Good creep rupture strength. Very good resistance to high-corrosion. Resistant to scaling up to 1050°C.

### Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.10	≤ 1.50	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 <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
192	210	500-700	35	1050
Modulus of elasticity kN/mm <sup>2</sup>				
196				

### 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

1.4842

### Application

Furnace and apparatus engineering

### Available forms for 1.4845 / AISI 310 S

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