

Brand name | Nicrofer® 3718

Standards	Material No.	EN Designation	AISI/SAE	UNS
	1.4864	X12NiCrSi35-16	(330)	N08330
	Alloy			
	330			

Description | Alloy 330 / 1.4864 is a heat resistant nickel-iron-chromium alloy.

Special properties | Good oxidation and scale resistance. Good mechanical properties with high strength at elevated temperatures.

Chemical Composition	C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
	≤ 0.15	1.00-2.00	2.00	0.045	0.015
	Cr %	Ni %	N %		
	15.0-17.0	33.0-37.0	≤ 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
	223	230	550-750	30	1100
	Modulus of elasticity kN/mm <sup>2</sup>				
	194				

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
	8	550	12.5	1

Suitable welding filler materials | 1.4863

Application | Furnace and apparatus engineering

Available forms for 1.4864 / AISI 330	Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
							