

Brand name | INCOLOY® Alloy 800 H Nicrofer® 3220 H

Trade name | Alloy 800 H

Material No.	EN Designation	UNS	Alloy
1.4958	X5NiCrAlTi31-20	N08810	800 H

Description | Alloy 800 H / 1.4958 is an austenitic high-strength solid-solution nickel-iron-chromium alloy.

Special properties | Good resistance to reducing, oxidizing and nitriding atmospheres. Metallurgical stability in long-term application at high temperatures.

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.03-0.08	0.70	1.50	0.015	0.01
Cr %	Ni %	N %	Ti ≤ %	Cu %
19.0-22.0	30.0-32.5	≤ 0.030	0.20-0.50	≤ 0.50
Al %	Co %	Nb %		
0.20-0.50	≤ 0.50	≤ 0.10		

0.2% Yield strength $R_p$ ≥ N/mm <sup>2</sup>	Tensile strength $R_m$ N/mm <sup>2</sup>	Elongation $A_5$ ≥ %	Resistant on air up to °C	Modulus of elasticity kN/mm <sup>2</sup>
170	500-750	35	1100	194

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
7.94	460	12	0.99

Suitable welding filler materials | 2.4648

Application | Pressure vessels and steam boilers, chemical industry, petrochemical industry

Available forms for 1.4958 / ALLOY 800 H

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