

Brand name | Incoloy® 825, Nicrofer 4221

Trade name | Alloy 825

Material No.	EN Designation	UNS	Alloy
2.4858	NiCr21Mo	N08825	825

Description | Alloy 825 / 2.4858 is a titanium-stabilized nickel-iron-chromium alloy with copper and molybdenum.

Special properties | Good resistance to stress-corrosion cracking. Good resistance to oxidizing and non-oxidizing hot acids.

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.025	0.50	1.00	0.02	0.015
Cr %	Mo %	Ni %	Ti ≤ %	Cu %
19.5-23.5	2.50-3.50	38.0-46.0	0.60-1.20	1.50-3.00
Al %	Co %	Fe %		
≤ 0.20	≤ 1.00	Rest		

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
240	≥ 550	30	195

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8.1	440	10.8	1.12

Suitable welding filler materials | 2.4621

Application | Phosphor and sulphur acids plants, oil and gas production

Available forms for 2.4858 / ALLOY 825	Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
							