

Brand name | Microfer® 3127 hMo

Trade name | Alloy 31

Material No.	EN Designation	UNS	Alloy
1.4562	X1NiCrMoCu32-28-7	N08031	31

Description | 1.4563 / Alloy 31 is an iron-nickel-chromium-molybdenum alloy with a nitrogen addition.

Special properties | Outstanding resistance to corrosion of halide media. Outstanding resistance to sulphuric acid, even highly concentrated. Outstanding resistance to corrosion and erosion-corrosion in phosphoric acid media. Excellent resistance to localized corrosion.

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.015	0.30	2.00	0.02	0.01
Cr %	Mo %	Ni %	N %	Cu %
26.0-28.0	6.00-7.00	30.0-32.0	0.15-0.25	1.00-1.40

Hardness HB 30 ≤ HB	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
220	275	≥ 650	40	198

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8	450	11.7	1.03

Suitable welding filler materials | 1.4562; 2.4607; 2.4609

Application | Chemical industry, offshore

Available forms for 1.4562 / ALLOY 31

