

Brand name | Nicrofer® 45 TM

Trade name | Alloy 45

Material No.	EN Designation	UNS	Alloy
2.4889	NiCr28FeSiCe	N06045	45

Description | Alloy 45 / 2.4889 is a high-chromium, austenitic nickel-chromium-iron alloy.

Special properties | Excellent oxidation behavior up to 1000°C. Good heat resistance and creep properties. Excellent resistance in oxidizing, reducing, nitriding and sulphur contained media.

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.05-0.12	2.50-3.00	1.00	0.02	0.01
Cr %	Ni %	Cu %	Co %	Fe %
26.0-29.0	≥ 45.0	≤ 0.30	≤ 1.50	21.0-25.0
Ce %				
0.03-0.09				

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	≥ 620	35	193

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8	500	13	1.18

Suitable welding filler materials | 2.4621

Application | Waste incineration, coal gasification, refinery furnaces

Available forms for 2.4889 / ALLOY 45

