

Chemical Composition

C ≤%	Si ≤%	Mn ≤%	P ≤%	S ≤%
0.010	0.10	0.50	0.025	0.015
Cr %	Ni %	Fe ≤%	Al %	Cu ≤%
22.0-24.0	Rest	1.50	0.10-0.40	0.50
Co ≤%	Mo %			
0.30	15.0-16.0			

Description

Alloy 59 / 2.4605 is nickel-chromium-molybdenum alloy with extra low-carbon and silicon content.

Special Properties

Outstanding resistance to a wide range of corrosive media under both oxidizing and reducing conditions. Excellent resistance to crevice and pitting corrosion and to stress-corrosion cracking. Excellent resistance to mineral acids.

Steel Grade

Alloy	UNS	Material No.	EN Designation
59	N06059	2.4605	NiCr23Mo16Al

Mechanical Properties 20°C

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
340	≥ 690	40	210

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8.6	414	10.4	1.26

Suitable Welding Filler Materials

2.4609

Application

Waste incineration, acetic acid production, combustion gas desulfurization

Available Forms for ALLOY59

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