2.4631 ALLOY 80 A

Brand name

NIMONIC® Alloy 80A

Trade name

Alloy 80 A

Standards

Material No.	EN Designation	UNS	Alloy
2.4631	NiCr20TiAl	N07080	80 A

Description

Alloy 80 A / 2.4631 is a nickel-chromium alloy with aluminum and titanium.

Special properties

Good corrosion resistance equal to Alloy 75. Creep strength up to 800°C.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.04-0.10	1.00	1.00	0.03	0.015
Cr %	**Ni %**	**Ti ≤ %**	**Cu %**	**Al %**
18.0-21.0	Rest	1.80-2.70	≤ 0.20	1.00-1.80
Co %	**B %**	**Fe %**		
≤ 2.00	≤ 0.008	≤ 1.50		

Mechanical Properties 20°C

0.2% Yield strength R_p ≥ N/mm²	Tensile strength R_m N/mm²	Elongation A_5 ≥ %	Resistant on air up to °C	Modulus of elasticity kN/mm²
590	≥ 980	12	950	225

Physical Properties 20°C

Density g/cm³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm²/m
8.2	420	13	1.09

Suitable welding filler materials

2.4648

Application

Components for gas and steam turbine

Available forms for 2.4631 / ALLOY 80 A

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

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