

# TIG NI59

Old reference: TIG Ni059

## Classification

AWS A5.14 : ERNiCrMo-13 ISO 18274 : S Ni6059 (NiCr23Mo16)

## **Description & Applications**

Nickel alloy for GTAW welding with high content of Cr and Mo, which gives it exceptional corrosion resistance. It is particularly recommended for cladding of carbon steels and for welding of C-276, C-22, alloy 59, other highly corrosion resistant Ni-alloys and special stainless steels.

Main applications: Works well in different environments, de-pollution (absorbers, chimneys), sea water and fertiliser, flue gas desulphurisation.

#### **Base material**

UNS	Alloy	DIN	Material N°
N0 <mark>6</mark> 059	59	NiCr23Mo16Al	2.4605
N0 <mark>6</mark> 022	C-22	NiCr21Mo14W	2.4602
N10276	C-276	NiMo16Cr15W	2.4819
N06455	C-4	NiMo16Cr16Ti	2.4610
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08926	254SMo	X1NiCrMoCuN25 20 6	1.4529

## **Typical Chemical Composition (%)**

	С	Si	Mn	Cr	Мо	Cu	Р	S	Fe	Co	Αl	Ti	V	Ni
Min				22.0	15.0						0.1			56.0
Max	0.010	0.10	0.5	24.0	16.5	0.50	0.015	0.010	1.5	0.3	0.4	0.5	0.3	
Туре	0.005	0.05	0.20	23.0	15.5	0.20	0.005	0.002	0.50	0.02	0.20	0.01	0.02	>56.0

### **All Weld Metal Mechanical Properties**

	R <sub>p0.2</sub> ( MPa )	$R_m$ (MPa)	A <sub>5</sub> (%)	KV	( J )
Min	-	-	-	-	-
Max					
Type	400	700	25	-	-

## **Welding Current & Instructions**

Welding mode	Shielding Gas
TIG = -	ISO 14175: I1 (Ar) : 6-12 l/min Back shielding : I1 (Ar) : 3-6 l/min

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