



# TIG M13/4

Old reference: TIG 410NiMo

## Classification

AWS A5.9 : ER410NiMo

ISO 14343-A : W 13 4

## Description & Applications

Solid rod for GTAW of martensitic Cr-Ni stainless steels with a similar chemical composition like grade 410NiMo. Mainly used for maintenance and repair of casting parts...

**Main applications:** Repair of casting used for turbine and pumps...

### Base materials

### Martensitic stainless steels and castings:

UNS	Alloy	EN 10088	Material N°
J91540	CA6-NM	G-X5CrNi13-4	1.4313
S41500		X3CrNiMo13-4	1.4313
		G-X4CrNi13-4	1.4317
		G-X5CrNiMo13-4	1.4407
		X3CrNiMo13-4	1.4413
		G-X4CrNiMo13-4	1.4414

## Typical Chemical Composition ( % )

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co
Min				11.0	4.0	0.4		-			-
Max	0.05	0.5	0.6	12.5	5.0	0.7	0.5	-	0.03	0.02	-
Type	0.02	0.45	0.50	12.3	4.2	0.50	0.08	0.01	0.02	0.01	0.05

## All Weld Metal Mechanical Properties\*

	R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV ( J )		Hardness ( HB )
Min	500	750	15	-	-	
Max						
Type	750	840	19	+20°C	120	As welded: ~ 290

\* After PWHT 580°C / 8h

## Welding Current & Instructions

Welding mode	Shielding Gas
TIG = -	ISO 14175 : I1 (Ar) 6-12 l/min Back shielding: I1 (Ar) / N1 (Nitrogen) : 3-6 l/min

FT En-TN28-250319

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