



TIG 16/8M

Old reference: TIG 16-8-2

Classification

AWS A5.9 : ER16-8-2

ISO 14343-A : W 16 8 2

Description & Applications

High carbon content solid rod with low ferrite for GTAW of high temperature stainless steels like 304H, 316H, 347H. Mainly used for creep resistant construction or assembly with high service temperature up to 650-700°C.

Main applications: Petrochemical or incineration industry, nuclear plant.

Base materials

Austenitic heat resisting steels

UNS	Alloy	EN 10095	Material N°
S30409	304H	X6CrNi18-11	1.4948
S31609	316H	X6CrNiMo17-13	1.4919
S34709	347H	X6CrNiNb18-10	1.4550

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	N
Min		0.30	1.0	14.5	7.5	1.0		-			-	-
Max	0.10	0.65	2.0	16.5	9.5	2.0	0.5	-	0.03	0.02	-	-
Type	0.04	0.45	1.8	16.0	8.6	1.2	0.15	0.01	0.02	0.01	0.05	0.08

All Weld Metal Mechanical Properties

	R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	320	550	35	-
Max				-
Type	370	580	38	+20°C 60

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

Back shielding with Argon or Nitrogen gas or with copper backing support to avoid "back end" rust phenomena.

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