



TIG 24/12C

Classification

AWS A5.9 : ER309

ISO 14343-A : W 22 12 H

Description & Applications

High carbon solid rod for GTAW of stainless steels with similar chemical composition like 309. Well adapted for welding of dissimilar steels like low alloy steels, ferritic stainless steel like 430, martensitic stainless steel like 410.

Main applications: Boiler making, civil engineering, maintenance and repairs...

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	N	Fe
Min	0.04		1.0	23.0	12.0								
Max	0.12	0.65	2.5	24.0	14.0	0.5	0.5	-	0.03	0.02	-	-	Rem.
Type	0.08	0.40	1.7	23.4	13.2	0.10	0.08	0.01	0.02	0.01	0.06	0.06	Rem.

All Weld Metal Mechanical Properties

	R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	350	550	25	-
Max				-
Type	400	600	30	+20°C 140

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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