



TIG 24/12S

Old reference: TIG 309LSi

Classification

AWS A5.9 : ER309LSi

ISO 14343-A : W 23 12 L Si

Description & Applications

Low carbon solid rod with increased Silicon content for GTAW of stainless steels with similar chemical composition like 309 and 309L. Well adapted for welding of dissimilar steels like low alloy steels, ferritic stainless steel like 430, martensitic stainless steel like 410. Also suitable for welding high temperature steels and as buffer layer before hardfacing.

Its high ferrite content allows greater dilution without risk of cracking. High Silicon content improves alloy fluidity during welding.

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

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	P	S
Min		0.65	1.0	23.0	12.0				
Max	0.03	1.00	2.5	25.0	14.0	0.5	0.5	0.03	0.02
Type	0.015	0.85	1.8	23.3	13.7	0.10	0.10	0.02	0.01

Delong ferrite: ~12%

All Weld Metal Mechanical Properties

	R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	320	510	25	-
Max				-
Type	420	620	27	+20°C 130

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.

FT En-TN18-251119

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company Selectarc Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for Selectarc Group. **Fumes:** Consult information on MSDS, available upon request.