

309S94

TIG (GTAW)

TIG WIRE WITH CONTROLLED CARBON AND FERRITE

PRODUCT DESCRIPTION

Solid wire for TIG welding

CLASSIFICATIONS

AWS A5.9M	ER309
ISO 14343-A	22 12 H
ISO 14343-B	SS309
UNS	S30980

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 8

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	FN
Min.	0.04	1.0	0.30	--	--	23.0	12.0	--	--	3
Max.	0.12	2.5	0.65	0.02	0.030	24.0	14.0	0.3	0.3	12
Typical	0.07	1.7	0.5	0.01	0.02	23.5	13	0.1	0.1	6

ALL-WELD MECHANICAL PROPERTIES

As welded	Typical
Tensile strength (MPa)	580
0.2% proof strength (MPa)	415
Elongation (%) 4d	42
5d	39
Reduction of area (%)	56
Hardness cap/mid (HV)	175/215

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Argon*	DC-	2.4	120A, 14V

* Also required as a purge for root runs.

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
1.6	2.5	PE TUBE	T309S94-16
2.4	2.5	PE TUBE	T309S94-24

HIGH TEMPERATURE ALLOYS

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.specialalloys.eu for any updated information.