

ER90S-B3

TIG (GTAW)

2 1/4Cr-1Mo CREEP RESISTING STEEL TIG WIRE

PRODUCT DESCRIPTION

Wire for TIG welding 2 1/4Cr-1Mo creep resisting steels, conforming to the AWS/ASME specification.

CLASSIFICATIONS

AWS A5.28M ER90S-B3
ISO 21952-B W 2C1M

ASME IX QUALIFICATION

QW432 F-No 6
QW442 A-No 4

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Mo	Cu	Ni
Min.	0.07	0.40	0.40	--	--	2.30	0.90	--	--
Max.	0.12	0.70	0.70	0.020	0.020	2.70	1.20	0.35	0.20
Typical	0.1	0.5	0.5	0.010	0.015	2.4	1	0.1	< 0.1

ALL-WELD MECHANICAL PROPERTIES

Properties after PWHT	Min.	Typical 690°C/1h
Tensile strength (MPa)	620	665
0.2% proof strength (MPa)	540	550
Elongation (%) 4d	17	27
5d	15	25
Impact ISO-V(I) -10°C	--	> 150
Hardness (HV) (HV)	--	225
(HB)	--	220

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Argon	DC-	2.4	100A, 12V

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
1.6	5	PE TUBE	TER90SB3-16
2.0	5	PE TUBE	TER90SB3-20
2.4	5	PE TUBE	TER90SB3-24
3.2	5	PE TUBE	TER90SB3-32