ER80S-B2

MIG (GMAW)

1¼Cr-½Mo CREEP RESISTING STEEL MIG WIRE

PRODUCT DESCRIPTION

Wire for MIG welding 1¼Cr-½Mo creep resisting steels, conforming to the AWS/ASME specification.

CLASSIFICATIONS

AWS A5.28M	ER80S-B2
ISO 21952-B	G 1CM

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 3

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Mo	Ni	Cu
Min.	0.07	0.4	0.4	-	-	1.2	0.4	-	-
Max.	0.12	0.7	0.7	0.020	0.020	1.5	0.65	0.2	0.35
Typical	0.10	0.5	0.5	0.01	0.015	1.3	0.5	<0.1	0.10

ALL-WELD MECHANICAL PROPERTIES

Properties after PWHT		Min.	Typical 690°C/4h
Tensile strength (MPa)		550	590
0.2% proof strength (MPa)		470	480
Elongation (%)	4d	19	26
	5d	17	20
Impact ISO-V(J)	-10°C	-	>115
Hardness	(HV)	-	195
	(HB)	-	190

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Ar-5%CO_2	DC+	1.2	280A, 26V

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
0.8	15	S300	MER80SB2-08
0.9	15	S300	MER80SB2-09
1.0	15	S300	MER80SB2-10
1.2	15	S300	MER80SB2-12

FUME DATA (WT % TYPICAL)

Fe	Mn	Cr^3	Ni	Mo	Cu	OES (mg/m^3)
55	5	0.4	<0.1	<0.5	1.2	5