

ZERON® 100X

MIG (GMAW)

SOLID WELDING WIRE FOR SUPERDUPLEX STEELS

PRODUCT DESCRIPTION

Solid wire for MIG welding.

For applications where Zeron® 100X wire is to be used for welding supermartensitic stainless steels it is possible for wire to be supplied with a total hydrogen content of 3ppm maximum.

CLASSIFICATIONS

AWS A5.9M	ER2594
ISO 14343-A	G 25 9 4 N L
Weir Materials	MDS 12809/07
Approvals	ABS, TÜV

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 8

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	W	Cu	N	PRE _N	PRE _W
Min.	--	--	--	--	--	24.0	9.0	3.5	0.5	0.5	0.2	40	40
Max.	0.03	1.0	1.0	0.01	0.03	26.0	10.0	4.0	1.0	1.0	0.3	--	--
Typical	0.015	0.7	0.4	0.002	0.02	25	9.3	3.7	0.6	0.7	0.23	41	42

ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical
Tensile strength (MPa)	760	860
0.2% proof strength (MPa)	550	645
Elongation (%) 4d	15	25
5d	20	23
Reduction of area (%)	--	28
Impact ISO-V(I) -50°C	--	60
Hardness cap/mid (HV)	--	290

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Ar / He / CO ₂	pulsed	1.2	180A, 28V

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
0.8	1	S100	MZ100XMS-08
0.8	5	S200	MZ100XMD-08
0.8	12.5	S300	MZ100X-08
1.0	1	S100	MZ100XMS-10
1.0	5	S200	MZ100XMD-10
1.0	12.5	S300	MZ100X-10
1.2	12.5	S300	MZ100X-12

FUME DATA (WT % TYPICAL)

Fe	Mn	Ni	Cr	Cu	Mo	V	F	OES (mg/m ³)
7	6	1	7	0.5	0.2	<0.1	28	0.7

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.