

9CrMoV-N

SOLID WIRE FOR SAW WELDING OF MODIFIED 9Cr-1Mo CREEP RESISTING STEELS

PRODUCT DESCRIPTION

Solid wire for SAW welding of modified 9Cr-1Mo creep resisting steels

CLASSIFICATIONS

AWS A5.23M EB91
ISO 24598-A S CrMo91
APPROVALS TÜV

ASME IX QUALIFICATION

QW422 P-No 15E group 1
QW432 F-No 4
QW442 A-No 5

CHEMICAL COMPOSITION [WIRE WT %]

	C	Mn*	Si	S	P	Cr	Ni*	Mo	Nb	V	N	Cu	Al
Min.	0.08	0.40	0.15	--	--	8.5	0.40	0.85	0.03	0.15	0.03	--	--
Max.	0.13	0.80	0.50	0.010	0.010	9.5	0.80	1.10	0.08	0.25	0.07	0.10	0.04
Typical	0.10	0.45	0.25	0.004	0.008	9.2	0.45	1.0	0.05	0.2	0.05	0.03	<0.01

Mn+Ni≤1.0%, typical <0.9%
For nickel below 0.4%, see 9CrMoV.

ALL-WELD MECHANICAL PROPERTIES

PWHT 760°C / 2h	Min.	Typical with LA490 flux
Tensile strength (MPa)	620	720
0.2% proof strength (MPa)	415	610
Elongation (%) 4d	17	25
5d	16	23
Reduction of area (%)	--	70
Impact ISO-V(I) +20°C	-- *	60
Hardness (HV) (mid)	--	230

* Minimum impact required by ISO is 47 J.

TYPICAL OPERATING PARAMETERS

Flux	Current	Diameter (mm)	Parameters
LA490	DC+	2.4	420A, 28V, 390mm/min

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
2.4	25	B415	SA9CRM0VN-24
3.2	25	B415	SA9CRM0VN-32