

# 9CrMoV-N

## SOLID WIRE FOR TIG, MIG AND SAW

### PRODUCT DESCRIPTION

Solid wire, non-copper coated, for TIG, MIG and SAW

### SPECIFICATIONS

	TIG	MIG	SAW
AWS A5.23M	--	--	EB91
AWS A5.28M	ER90S-B9	ER90S-B9	--
BS EN ISO 21952-A	W CrMo91	G CrMo91	--
BS EN 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	0.5	0.25	0.0054	0.008	9.0	0.6	1.0	0.05	0.2	0.05	0.03	<0.01

### ALL-WELD MECHANICAL PROPERTIES

PWHT 760°C / 2h	Min.	TIG typical	SAW typical LA4902 flux
Tensile strength [MPa]	620	780	720
0.2% proof strength [MPa]	415	675	610
Elongation (%) 4d	17	22	25
	5d	16	19
Reduction of area (%)	--	70	70
Impact ISO-V(I) +20°C	-- *	220	45
Hardness (HV) [mid]	--	265	230

\* Minimum impact required by BS EN ISO is 47 J.

### PARAMETERS

	Shielding gas	Current	Diameter (mm)	Parameters
TIG	Argon	DC-	2.4	100A, 12V
MIG	Ar + 1-3%O <sub>2</sub> or 5-20% CO <sub>2</sub>	DC+	1.2	260A, 26V
SAW	LA490	DC+	2.4	420A, 28V, 390mm/min

### PACKAGING DATA

Diameter (mm)	0.8/0.9/1.0/1.2	1.6	2.0	2.4	3.2
TIG	0.7 / 5 / 15 kg spools to order.	5 kg tube	5 kg tube	5 kg tube	5 kg tube
MIG	15kg spool	--	--	--	--
SAW	to order	to order	to order	25 kg coil	25kg coil

### FUME DATA

Fume composition (wt %); TIG and SAW fume are negligible:

Fe	Mn	Ni	Cr <sup>3</sup>	Cu	Mo	OES (mg/m <sup>3</sup> )
50	4	<0.4	6	< 0.5	0.5	5