

CHROMET 1V

BASIC COATED MMA ELECTRODE FOR CrMoV CREEP RESISTING STEELS

PRODUCT DESCRIPTION

MMA electrode with a basic, metal powder type, coating on low carbon high purity mild steel core wire. Moisture resistant coating provides very low weld metal hydrogen levels. Recovery is about 115% with respect to core wire, 65% with respect to whole electrode.

SPECIFICATIONS

AWS A5.5M	E9018-G H4
BS EN ISO 3580-A	E CrMoV1 B 3 2

ASME IX QUALIFICATION

QW432	F-No --
QW442	A-No --

WELDING POSITIONS (ISO/ASME)



PA/1G

PB/2F

PC/2G

PF/3Gu

PE/4G

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Mo	V
Min.	0.05	0.70	--	--	--	1.00	0.90	0.10
Max.	0.15	1.50	0.50	0.025	0.025	1.30	1.30	0.35
Typical	0.08	0.85	0.3	0.012	0.012	1.10	1.10	0.20

ALL-WELD MECHANICAL PROPERTIES

PWHT 700°C/h	Room Temperature			High Temperature		
	min	typical	+350°C	+400°C	+450°C	
Tensile strength (MPa)	590	800	750	730	695	
0.2% proof strength (MPa)	435	745	675	650	620	
Elongation (%) 4d	--	20	--	--	--	
5d	15	16	--	--	--	
Impact ISO-V(J) +20°C	24	60	--	--	--	
Hardness (HV) HV	--	275	--	--	--	

TYPICAL OPERATING PARAMETERS, DC +ve or AC (OCV: 70V Min)

Diameter (mm)	2.5	3.2	4.0	5.0
min. A	70	80	100	140
max. A	110	140	180	240

PACKAGING DATA

Diameter (mm)	2.5	3.2	4.0	5.0
Length (mm)	350	350	450	450
kg/carton	13.8	13.5	16.8	17.4
Pieces/carton	690	408	243	165

STORAGE

3 hermetically sealed ring-pull metal tins per carton, with unlimited shelf life. Direct use from tin will give hydrogen < 5ml/100g for longer than a working shift of 8h. For electrodes that have been exposed:

Redry 250 – 300°C/1-2h to ensure H_2 < 10ml/100g, 300 – 350°C/1-2h to ensure H_2 < 5ml/100g. Maximum 420°C, 3 cycles, 10h total.

Storage of redried electrodes at 50 – 200°C in holding oven or heated quiver: no limit, but maximum 6 weeks recommended.

Recommended ambient storage conditions for opened tins (using plastic lid): < 60% RH, >18°C.

FUME DATA

Fume composition, wt % typical

Fe	Mn	Cr	Ni	Cu	Pb	F	OES (mg/m ³)
15	5	< 0.5	< 0.1	< 0.2	< 0.1	18	5