

SUPERMET 308L

MMA (SMAW)

GENERAL PURPOSE RUTILE 308L MMA ELECTRODE

PRODUCT DESCRIPTION

MMA electrode – rutile aluminosilicate flux on high purity 304L core wire giving very low typical carbon level.

'Low hydrogen' manufacturing technology ensures high resistance to weld metal porosity. 'Supermet Technology' gives acid rutile operability combined with controlled silicon content for maximum cracking/corrosion resistance.

Designed for ease of use, exceptional weld bead appearance and high weld metal integrity, primarily in the downhand and HV positions; smaller sizes offer all-positional operability.

Recovery is about 115% with respect to core wire, 65% with respect to the whole electrode.

CLASSIFICATIONS

AWS A5.4M	E308L-17
ISO 3581	E 19 9 LR 3 2
Approvals	TÜV

ASME IX QUALIFICATION

QW432	F-No 5
QW442	A-No 8

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	Ni	Mo	Cu	FN
Min.	--	0.5	--	--	--	18.0	9.0	--	--	3
Max.	0.04	2.0	0.90	0.025	0.030	21.0	11.0	0.5	0.5	10
Typical	0.02	0.8	0.6	0.01	0.02	19.5	10	0.10	0.05	6

ALL-WELD MECHANICAL PROPERTIES

As-welded	Min.	Typical
Tensile strength (MPa)	520	590
0.2% proof strength (MPa)	320	450
Elongation (%) 4d	35	45
5d	30	40
Reduction of area %	--	45
Impact ISO-V(I) +20°C	--	80

TYPICAL OPERATING PARAMETERS, DC +VE OR AC (OCV: 50V MIN)

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
min. A	50	60	75	100	130
max. A	70	90	120	155	210

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	box	can	box
METAL CAN	2.5	300	SM308L-25	209	627	3.7	11.1
	3.2	350	SM308L-32	123	369	4.3	12.9
	4.0	450	SM308L-40	83	249	5.5	16.5
	5.0	450	SM308L-50	52	156	5.3	15.9

Redrying : 200 – 300°C/1-2h to restore to as-packed condition. Maximum 400° C, 3 cycles, 10h total.

FUME DATA (WT % TYPICAL)

Fe	Mn	Cr	Ni	Mo	Cu	F *	OES (mg/m3)
8	5	5	0.8	-	< 0.2	16	1

* F=28% for basic coated Ultramet B308L but this does not affect the OES.