

ULTRAMET B308LCF

MMA (SMAW)

BASIC MMA PIPE-WELDING ELECTRODE FOR CRYOGENIC 304L APPLICATIONS

PRODUCT DESCRIPTION

MMA electrode – designed and manufactured to give high moisture resistance using a basic flux system and high purity 304L core wire. **Ultramet B308LCF** is particularly suited to the most demanding vertical and overhead welding applications including fixed pipework in the ASME 5G/6G position. Under site conditions it is tolerant to adverse wind and drafts. Recovery is about 110% with respect to core wire, 65% with respect to the whole electrode.

CLASSIFICATIONS

AWS A5.4M E308L-15
ISO 3581 E 19 9 L B 4 2

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	--	--	2
Max.	0.04	2.0	0.90	0.025	0.030	21.0	11.0	0.50	0.5	5
Typical	0.03	1.2	0.3	0.01	0.015	18.5	10	0.05	<0.1	3

ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical
Tensile strength (MPa)	520	600
0.2% proof strength (MPa)	320	440
Elongation (%) 4d	35	44
5d	30	40
Reduction of area %	--	60
Impact ISO-V(J) +20°C	--	80-120
-196°C	--	35-50
Lateral expansion * (mm) -196°C	0.38	0.55

* Batch tested for Charpy lateral expansion >0.38mm at -196°C.

TYPICAL OPERATING PARAMETERS, DC +VE ONLY

Diameter (mm)	2.5	3.2	4.0
min. A	50	65	80
max. A	70	100	140

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	carton	can	carton
METAL CAN	2.5	300	UMB308LCF-25-1	210	630	4.0	12.0
	3.2	350	UMB308LCF-32-1	120	360	4.0	12.0
	4.0	350	UMB308LCF-40-1	80	240	4.0	12.0

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 B308LCF but this does not affect the OES