

ULTRAMET 347

MMA (SMAW)

ALL-POSITIONAL RUTILE MMA ELECTRODE FOR 321/347

PRODUCT DESCRIPTION

MMA rutile flux coated 347 electrode on high purity 304L core wire.

Ultramet 347 has all the benefits of an advanced rutile flux design, including all-positional fixed pipework welding with the 2.5/3.2mm diameter electrodes.

Recovery is about 110% with respect to core wire, 65% with respect to the whole electrode.

CLASSIFICATIONS

AWS A5.4M	E347-16
ISO 3581	E 19 9 Nb R 3 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	Nb	Cu	FN
Min.	--	0.5	--	--	--	18.0	9.0	--	10xC	--	4
Max.	0.04	2.0	0.9	0.025	0.030	21.0	11.0	0.50	1.00	0.50	12
Typical	0.02	0.7	0.7	0.01	0.02	19	9.5	0.05	0.4	0.07	6

ALL-WELD MECHANICAL PROPERTIES

As-welded	Min.	Typical
Tensile strength (MPa)	560	650
0.2% proof strength (MPa)	350	500
Elongation (%) 4d	30	40
5d	25	37
Reduction of area %	--	52
Impact ISO-V(I) +20°C	--	70
-196°C	--	20
-196°C	--	53
		[1050°C + WQ]

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

Diameter (mm)	2.5	3.2	4.0
min. A	50	60	80
max. A	80	120	160

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	carton	can	carton
METAL CAN	2.5	300	UM347-25-1	204	612	3.7	11.1
	3.2	350	UM347-32-1	114	342	4.1	12.3
	4.0	350	UM347-40-1	77	231	4.1	12.3

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

* F=28% for basic coated Ultramet B347 but this does not affect the OES.

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.specialalloys.eu for any updated information.