

ULTRAMET 347H

MMA (SMAW)

ALL-POSITIONAL RUTILE MMA ELECTRODE FOR 321H/347H STAINLESS STEELS

PRODUCT DESCRIPTION

MMA rutile flux coated 347 electrode on high purity 304L core wire. Ultramet 347H 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 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.	0.04	0.5	--	--	--	18.0	9.0	--	8xC	--	2
Max.	0.08	2.0	0.9	0.025	0.030	21.0	11.0	0.50	1.00	0.50	8
Typical	0.05	0.7	0.7	0.01	0.02	19	9.5	0.05	0.5	0.07	4

* BS requires 10xC minimum.

ALL-WELD MECHANICAL PROPERTIES

As-welded	Room Temperature		High Temperature		
	Min.	Typical	650°C	732°C	815°C
Tensile strength [MPa]	560	650	354	308	233
0.2% proof strength [MPa]	350	500	283	269	206
Elongation (%) 4d	30	40	--	--	--
5d	25	37	19	20	7
Reduction of area [%]	--	52	47	38	23

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

Diameter (mm)	2.5	3.2	4.0
min. A	60	75	100
max. A	90	120	155

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight [kg]	
				can	carton	can	carton
METAL CAN	2.5	300	UM347H-25-1	210	630	3.7	11.1
	3.2	350	UM347H-32-1	115	345	4.2	12.6
	4.0	350	UM347H-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.