SUPERMET 16.8.2

MMA (SMAW)

RUTILE MMA ELECTRODE FOR 3XXH STAINLESS STEEL

PRODUCT DESCRIPTION

General purpose, all-positional MMA electrode with rutile-aluminosilicate flux on high purity 304L core wire.
Manufactured with 'controlled hydrogen' and moisture resistant flux covering technology to ensure high resistance to weld porosity.
Recovery is about 115% with respect to core wire, 65% with respect to whole electrode.

CLASSIFICATIONS

AWS A5.4M	E16-8-2-17
ISO 3581	(E 16 8 2 R 3 2)

ASME IX QUALIFICATION

QW432	F-No 5
QW442	A-No 8

WELDING POSITIONS (ISO/ASME)

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo*	Cu	FN
Min.	0.04	0.5	--	--	--	14.5	7.5	1.0	--	1
Max.	0.08	2.5	0.60	0.25	0.03	16.5	9.5	2.0	0.75	6
Typical	0.05	1	0.45	0.01	0.02	15.5	8.5	1.2	0.05	3

* Mo controlled around 1.0 – 1.3% unless requested otherwise.
ISO 3581 E16 8 2 B 4 2 has Mo 1.50 – 2.50%.

ALL-WELD MECHANICAL PROPERTIES

As-welded		Min.	Typical	High Temperature 650°C	732°C	816°C
Tensile strength (MPa)		550	640	310	232	161
0.2% proof strength (MPa)		320	420	225	179	126
Elongation (%)	4d	35	42	--	--	--
	5d	25	42	28	47	43
Reduction of area (%)		--	45	52	59	55
Impact ISO and LE*-V(J(mm))	+20°C	--	> 70 (>1.3)	--	--	--
	- 50°C	--	> 50 (>0.9)	--	--	--

* LE = Charpy lateral expansion, mm (0.38mm = 15 mils)

TYPICAL OPERATING PARAMETERS, DC +VE OR AC (OCV: 55V 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 can	No of pieces box	Weight (kg) can	Weight (kg) box
METAL CAN	2.5	300	SM1682-25	204	612	3.9	11.7
	3.2	350	SM1682-32	120	360	4.4	13.2
	4.0	350	SM1682-40	81	243	4.5	13.5

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	Mo	Cu	F	OES (mg/m³)
8	5	0.7	5	0.1	0.2	16	1

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 udpated information.

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