

E16.8.2-15

MMA (SMAW)

BASIC PIPE WELDING MMA ELECTRODE FOR 3XXH STAINLESS STEEL

PRODUCT DESCRIPTION

MMA electrode with fully basic lime-fluoride flux on high purity 304L core wire. E16.8.2-15 is a basic coated all-positional electrode suited to the most demanding vertical and overhead welding applications, including fixed pipework in the ASME 5G/6G positions. Recovery is about 115% with respect to core wire, 65% with respect to whole electrode.

CLASSIFICATIONS

AWS A5.4M E16-8-2-15
ISO 3581 (E16 8 2 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.	0.04	0.5	--	--	--	14.5	7.5	1.0	--	1
Max.	0.08	2.5	0.60	0.025	0.03	16.5	9.5	2.0	0.75	6
Typical	0.05	1.8	0.3	0.01	0.02	15.5	8.5	1.2	0.05	3

* ISO 3581 E16 8 2 B 4 2 has Mo 1.50 – 2.50%

Mo controlled around 1.0 – 1.3% unless requested.

ALL-WELD MECHANICAL PROPERTIES

As-welded	Min.	Typical	High Temperature		
			650°C	732°C	816°C
Tensile strength (MPa)	550	> 660	294	230	165
0.2% proof strength (MPa)	320	430	216	187	132
Elongation [%] 4d	35	40	--	--	--
5d	25	37	27	36	57
Reduction of area [%]	--	35	61	70	75
Impact ISO -V(J) +20°C		110 (1.8)			
-20°C		95 (1.6)			
-100°C	--	50 (1.0)	--	--	--

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

TYPICAL OPERATING PARAMETERS, DC +VE. UNSUITABLE FOR AC.

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	E168215-25-1	200	600	3.5	10.5
	3.2	350	E168215-32-1	122	366	4.1	12.3
	4.0	350	E168215-40-1	80	240	4.2	12.6

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 updated information.