


Technical data sheet <small>011121MBA</small>	Coated SMAW Electrode WA TETRA 309LMo-E	 Welding Alloys
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CLASSIFICATION

ASME IIC SFA 5.4 / AWS A 5.4:	E309LMo-17
EN ISO 3581-A:	E 23 12 2 L R 3 2
ASME IX Qualification	QW432 F-N° 5 QW442 A-N° 8

DESCRIPTION

- Rutile coated stainless steel SMAW electrode
- 24% chromium - 13% nickel – 2.5% molybdenum - low carbon deposit
- Exhibits higher corrosion resistance than 309L types
- Complements Welding Alloys cored wires TETRA S 309LMo-G and TETRA V 309LMo-G

APPLICATIONS

- Welding stainless steels of similar composition or ferritic stainless steels.
- Joining stainless steels to mild and low-alloyed steels.
- Rebuilding and buffering before cladding or hardfacing.
- Maintenance on “hard-to-weld” steels.

Examples

Dissimilar welds between CrNi(Mo) stainless steels and mild or low alloyed CMn steels, for service temperatures up to 350°C.

WA TETRA 309LMo-E has superior resistance to dilution when compared to 309L deposits because of its higher alloy and ferrite content. Compared to the AWS 312 weldments it benefits from an improved strength/ductility balance.

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si	Cr	Ni	Mo	Fe
0.02	0.8	0.7	23.5	12.5	2.6	Bal.

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN (J)
550	350	25	+20°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN (J)
700	570	30	+20°C: 55

OPERATING CONDITIONS

Electrode Ø x L [mm]	2.0 x 300	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 450
Current [A]	45	70	100	135	180
= +	~ 70V				

Re-drying: 1h at 250°C, if necessary.

WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PE, PF
ASME IX: 1F, 1G, 2F, 2G, 3F, 3G, 4F

PACKAGING

Electrode Ø x L [mm]	2.0 x 300	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 450
Weight/box [kg]	4.0	5.0	5.0	5.0	6.5

Other packaging and other sizes: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.