


Technical data sheet <small>080122MBA</small>	Coated SMAW Electrode WA TETRA V 312-E	 Welding Alloys
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CLASSIFICATION

ASME IIC SFA 5.4 / AWS A 5.4: ~E312-16
EN ISO 3581-A: E 29 9 R 3 2

DESCRIPTION

- Rutile coated stainless steel SMAW electrode
- 29% Cr - 9 %Ni duplex stainless steel deposit
- Good welder appeal, smooth arc, self-detaching slag.
- Complements Welding Alloys cored wires TETRA S 312-G and TETRA V 312-G

APPLICATIONS

Its high alloy content and high ferrite give WA TETRA V 312-E extreme tolerance to hot cracking and to dilution with a wide range of base materials. Preheat can often be avoided or minimised. The weld deposit work hardens and gives good wear and friction resistance.

Examples:

- Welding stainless steels of similar composition or ferritic stainless steels.
- Joining stainless steels to mild and low-alloyed steels.
- Buffer layers before hardfacing.
- Maintenance on "hard-to-weld" steels.
- Welding high carbon hardenable steels of known or unknown composition and most steels subject to cracking such as tool steels, manganese steels, spring steels and high-speed steels

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Si	Mn	Cr	Ni	Mo	Fe
0.1	1.0	0.6	29.0	9.5	0.5	Bal.

Typical ferrite level: 45 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
660	450	15	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
800	630	25	+20°C: 50

OPERATING CONDITIONS

Electrode ØxL [mm]	2.0x300	2.5x350	3.2x350	4.0x350	5.0x450
Current [A]	45	70	100	135	180
= +	~ 70V				

Re-drying: 1h at 250°C, if necessary.

WELDING POSITIONS

ISO 6947: PA, PB, PC, PD, PE, PF, PG
ASME IX: 1F, 1G, 2F, 2G, 3F, 3G, 4F, 4G, 5G

PACKAGING

Electrode ØxL [mm]	2.0x300	2.5x350	3.2x350	4.0x350	5.0x450
Weight/box [kg]	4,0	5,0	5,0	5,0	6,5

Other packaging and other diameters: 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.