


Technical data sheet <small>200722MBA</small>	Coated SMAW Electrode WA TETRA B 2594-E	
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CLASSIFICATION

ASME IIC SFA 5.4 / AWS A 5.4:	E2594-15
EN ISO 3581-A:	E 25 9 4 N L B 4 2
ASME IX Qualification	QW432 F-N° 5 QW442 A-N° 8

DESCRIPTION

- Basic coated superduplex stainless steel SMAW electrode
- 25% Cr - 9% Ni - 4% Mo - 0.25% N low carbon type with copper and tungsten addition
- Excellent resistance to pitting and stress corrosion cracking
- Good low temperature toughness
- Great welder appeal

APPLICATIONS

WA TETRA B 2594-E is used for welding superduplex grades and for heterogeneous welding between superduplex stainless steels and other stainless and mild or low alloyed steels.

Examples

UNS	Alloy	EN 10088	Material Number
S32550	52N+	X2CrNiMoCuN25-6-3	1.4507
S32750	2507	X2CrNiMoCuN25-6-3	1.4410
S32760	100	X2CrNiMoCuWN25-7-4	1.4501
S31803	2205	X2CrNiMoN22-5-3	1.4462

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si	Cr	Ni	Mo	Cu	W	N	Fe
0.04	1.5	0.5	25	9.3	3.7	0.7	0.7	0.23	Bal.

Typical delta ferrite level : 40 FN

$PRE_N = \%Cr + 3.3 \%Mo + 16 \%N \geq 40$

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
760	550	20	-50°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
900	700	27	-50°C: 50

OPERATING CONDITIONS

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Current [A]	50-80	70-110	90-150
- = +	~ 70V		

DC+ (recommended)

Re-drying: if necessary 2h at 350°C.

WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PF, PE

ASME IX: 1G, 2F, 2G, 3G, 4G

PACKAGING

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Weight/box [kg]	5	5	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.