

**Technical data sheet**

011121MBA

Cored welding wire

**TETRA S B D57L-G****CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	E2594T0-4
EN ISO 17633-A:	T 25 9 4 Cu N L B M21 3
EN ISO 17633-B:	TS2594-F M21 0
UNS Number:	W39594
Equivalent Material Number:	1.4507
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

**DESCRIPTION**

- Basic flux cored super duplex stainless steel wire for gas shielded arc welding
- 25% chromium - 9% nickel - 4% molybdenum - copper - nitrogen - low carbon deposit
- Exclusive slag system and fine tuning of the compositional balance insure good impact toughness levels
- $PRE_N \geq 40$ , CPT tested at 45°C
- Excellent weld metal quality and X-ray soundness
- Maximum performance in the flat and horizontal positions
- Welded with classical economic Ar-CO<sub>2</sub> mixtures

**APPLICATIONS**

Welding super duplex grades in the downhand and flat positions when increased impact toughness is required. Heterogeneous welding between super duplex stainless steels and other stainless and mild or low alloyed steels.

**Examples:**

UNS	Material number	EN Symbol
S32520	1.4507	X2 CrNiMoCuN 25-6-3
S32550	1.4507	X2 CrNiMoCuN 25-6-3
S32750	1.4410	X2 CrNiMoN 25-7-4
S39274		
S39277		
S39553		
	1.4468	GX2 CrNiMoN 25-6-3
	1.4515	GX2 CrNiMoCuN 26-6-3
	1.4517	GX2 CrNiMoCuN 25-6-3-3
S32760	1.4501	X2 CrNiMoCuWN 25-7-4

**TYPICAL ALL-WELD METAL ANALYSIS**

C	Mn	Si	Cr	Ni	Mo	Cu	N	S	P
0.03	1.30	0.30	25.4	9.70	3.70	1.00	0.26	0.008	0.015

Typical 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]	As [%]	CVN [J]
760	550	20	-45°C: 32

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES**

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
910	720	25	-45°C: 45

**SHIELDING GAS**

M21 (Ar + 15 - 25% CO<sub>2</sub>) or M20 (Ar + 5% < CO<sub>2</sub> ≤ 15%) gas mixtures according to EN ISO 14175

**OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow rate
1.2	DC+	130 - 250	24 - 32	12 - 25	10 - 20 l/min.
1.6	DC+	150 - 300	24 - 33	12 - 25	10 - 20 l/min.

**WELDING POSITIONS**

Flat, Horizontal

**PACKAGING**

Diameter	1.2 mm		1.6 mm
	EN ISO 544 – ASME IIC SFA-5.2 M		
Spool type	S200	BS300	BS300
Weight	5 kg	15 kg	15 kg

Other packaging and other diameters: please consult us

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