

Technical data sheet

011121MBA

Cored welding wire
TETRA S D760-G**CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	E2594T0-4
EN ISO 17633-A:	T Z 25 9 4 Cu W N L R M21 3
EN ISO 17633-B:	TS2594-F M21 0
UNS Number:	W39594
Equivalent Material number:	1.4501
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Special flux cored super duplex stainless steel wire for gas shielded arc welding
- 25% chromium - 9% nickel - 4% molybdenum - copper - tungsten - nitrogen - low carbon deposit
- $PRE_N \geq 40$
- Attractive bead appearance, very good penetration profile, high productivity
- Excellent weld metal quality and X-ray soundness
- Maximum performance in the flat and horizontal positions
- Classical economic Ar-CO₂ mixtures are used for welding

APPLICATIONS

- Welding superduplex grades.
- Heterogeneous welding between superduplex 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	W	N	S	P
0.03	1.10	0.70	25.0	9.30	3.60	0.70	0.70	0.24	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	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
900	750	25	-29°C: 30

SHIELDING GASM21 (Ar + 15 - 25% CO₂) or M20 (Ar + 5 - ≤ 15% CO₂) gas mixtures according to EN ISO 14175**OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow
1.2	DC+	130 - 250	24 - 35	12 - 25	10 - 20 l/min.
1.6	DC+	150 - 300	24 - 35	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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