

Technical data sheet

011121MBA

Cored welding wire
TETRA S B 22 9 3L-G**CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	E2209T0-4
EN ISO 17633-A:	T 22 9 3 N L B M21 3
EN ISO 17633-B:	TS2209-F M21 0
UNS Number:	W39239
Equivalent Material Number:	1.4462
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Basic flux cored duplex stainless steel wire for gas shielded arc welding
- 22% chromium - 9% nickel - 3% molybdenum - nitrogen - low carbon duplex stainless steel deposit
- Exclusive slag system and fine tuning of the compositional balance ensure good impact toughness levels
- Excellent weld metal quality and X-ray soundness
- Maximum performance in the flat and horizontal positions
- Welded with classical economical Ar-CO₂ mixtures

APPLICATIONS

Welding wrought, forged or cast duplex stainless steels for service in the as-welded condition when high impact toughness in horizontal or flat position is required
Heterogeneous welding between duplex stainless steels and other stainless and mild or low alloyed steels

Examples:

UNS	Material number	EN Symbol
S31803	1.4462	X2CrNiMoN 22-5-3
S32205	1.4462	
S32304	1.4362	X2CrNiN 23 4

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N	S	P
0.03	0.90	0.35	23.5	9.40	3.30	0.18	0.006	0.022

Typical ferrite level: 40 FN
PRE_N = Cr + 3.3 Mo + 16 N ≥ 35

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
690	480	20	-40°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
830	650	28	-40°C: 60

SHIELDING GAS

M21 (Ar + 15 - 25% CO₂) or M20 (Ar + 5% < CO₂ ≤ 15%) 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 - 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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