

Technical data sheet

011121MBA

Cored welding wire

TETRA S 22 9 3L-G**CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	E2209T0-4 - E2209T0-1
EN ISO 17633-A:	T 22 9 3 N L R M21 3 - T 22 9 3 N L R C1 3
EN ISO 17633-B :	TS2209-F M21 0 - TS2209-F C1 0
UNS Number :	W39239
Equivalent Material Number:	1.4462
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Rutile flux cored stainless steel wire for gas shielded arc welding
- 23% chromium - 9% nickel - 3% molybdenum - nitrogen - low carbon duplex stainless steel deposit
- Exceptional resistance to moisture pick-up
- Attractive bead appearance, very good penetration and high productivity
- Excellent X-ray soundness
- Maximum performance in the flat and horizontal positions
- Welded with classical economical Ar-CO₂ mixtures or CO₂

APPLICATIONS

Welding wrought, forged or cast duplex stainless steels for service in the as-welded condition.
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
S32202	1.4062	
S32003		
S32101	1.4162	X2CrMnNiN 22-5-2

APPROVALS

TÜV (09296.02), DB (43.128.14), DNV

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N
0.03	1.2	0.8	23	9	3.1	0.14

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	25	-20°C: 35

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
830	650	26	-50°C: 27

SHIELDING GASM21 (Ar + 15 - 25% CO₂), M20 (Ar + 5% < CO₂ ≤ 15%) gas mixtures, or C1 (CO₂) according to EN ISO 14175**OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow
1.2	DC+	100 - 280	23 - 33	10 - 25	12 - 20 l/min.
1.6	DC+	150 - 400	23 - 35	10 - 25	12 - 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

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.