

Technical data sheet

011121MBA

Cored welding wire
WA TUB SS 2209**CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	E2209T1-4 - E2209T1-1
EN ISO 17633-A:	T 22 9 3 N L P M21 1 - T 22 9 3 N L P C1 1
EN ISO 17633-B:	TS2209-F M21 1 – TS2209-F C1 1
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
- 22% chromium - 9% nickel - 3% molybdenum - nitrogen - low carbon duplex stainless steel deposit
- Specifically designed for out-of-position welding
- Good slag detachment, attractive bead appearance and very good penetration
- Excellent X-ray soundness
- Maximum productivity for completion of vertical welds
- 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

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N
0.03	0.9	0.5	23	9	3.1	0.13

Typical ferrite level: 40 FN

$PRE_N = Cr + 3.3 Mo + 16 N \geq 35$

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]	CVN [J]
690	450	20	-40°C : 47	-60°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]	CVN [J]
820	630	27	-40°C : 60	-60°C: 40

SHIELDING GAS

M21 (Ar + 15 - 25% CO₂), M20 (Ar + 5 - 15% CO₂) 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+	130 - 270	22 - 35	12 - 25	10 - 20 l/min.

WELDING POSITIONS

All positions

PACKAGING

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