Technical data sheet 011121MBA	Cored welding wire # TETRA V 307-G	Welding Alloys

CLASSIFICATION

EN ISO 17633-A: T 18 8 Mn P M21 1 - T 18 8 Mn P C1 1
ASME IIC SFA 5.22 / AWS A 5.22: (E307T1-4 - E307T1-1) nearest*
Equivalent Material number: 1.4370
* TETRA S 307-G contains no added Mo and typically contains 6 % Mn

* (ASME IX Qualification QW432 F-N° 6 QW442 A-N° 8)

DESCRIPTION

- Rutile flux cored stainless steel wire for gas shielded arc welding
- Chromium - nickel – manganese stainless steel deposit
- Attractive bead appearance, very good penetration and high productivity
- Excellent X-ray soundness
- Specifically designed for out-of-position welding
- Maximum productivity for completion of vertical welds
- Welded with classical economic Ar-CO_2 mixtures or CO_2

APPLICATIONS

- Repair jobs where high strength and toughness combined with work hardening are required.
- Joining austenitic manganese steels to themselves or to other steels.
- Buffer layer on manganese steels, or on hardenable and unknown steels, before hardfacing.
- Maintenance on air hardenable and “hard-to-weld” steels.
- Armour plate.

Examples:

Alloy	EN Symbol	Material number
14% Mn	X120Mn12	1.3401

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo
0.11	6	0.8	19	9.5	0.2

Typical ferrite level: 7 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
550	400	25	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
650	480	32	+20°C: 60

Hardness – as welded: 170 HB
Hardness – after cold working: 500 HB

SHIELDING GAS

M21 (Ar + 15 - 25% CO_2), M20 (Ar + 5 - 15% CO_2) gas mixtures, or C1 (100% CO_2) according to EN ISO 14175

OPERATING CONDITIONS

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow rate
1.0	DC+	100 - 180	20 - 30	12 - 20	10 – 20 l/min
1.2	DC+	130 - 270	22 - 35	12 - 25	10 – 20 l/min

WELDING POSITIONS

All positions

PACKAGING

Diameter	1.0 – 1.6 mm	
	EN ISO 544 – ASME IIC SFA-5.2 M	
Spool type	S200	BS300
Weight	5 kg	15 kg

Other packaging and other diameters: please consult us