


Technical data sheet <small>011121MBA</small>	Cored welding wire TETRA S 318L-G	
---	--	---

CLASSIFICATION

ASME IIC SFA 5.22 / AWS A 5.22	(E318T0-4 - E318T0-1)*
EN ISO 17633-A	T 19 12 3 Nb R M21 3 - T 19 12 3 Nb R C1 3
EN ISO 17633-B	TS318-F M21 0 – TS318-F C1 0
Equivalent Material number	1.4576
* This grade is not yet classified in AWS and ASME specifications for stainless steel electrodes for flux cored arc welding	
* (ASME IX Qualification QW432 F-N° 6 QW442 A-N° 8)	

DESCRIPTION

- Rutile flux cored stainless steel wire for gas shielded arc welding
- 19% chromium - 12% nickel - 3% molybdenum - niobium stabilised deposit
- Attractive bead appearance, easy slag release, very good penetration and high productivity
- Excellent X-ray soundness
- Maximum performance in the flat and horizontal positions
- Welded with classical economic Ar-CO₂ mixtures or CO₂

APPLICATIONS

TETRA S 318L-G is suitable for welding stabilised stainless steels with alloy content between 16 - 21% Cr, 6 -13% Ni and up to 3% Mo. It is also used for corrosion resistant weld overlays.

Examples:

AISI	UNS	Material number	EN Symbol
316Ti	S31635	1.4571	X6 CrNiMoTi 17-12-2
316Cb	S31640	1.4580	X6 CrNiMoNb 17-12-2
318	S31640	1.4583	X10CrNiMoNb 18-12

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Nb	S	P
0.03	1.50	0.90	19.5	12.0	2.90	0.45	0.008	0.020

Typical ferrite level: 10 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
520	350	25	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
620	480	34	+20°C: 45

SHIELDING GAS

M21 (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 rate
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.