

Technical data sheet

011121MBA

Cored welding wire

TETRA S B 316NFL-G**CLASSIFICATION**

EN ISO 17633-A: T 18 16 5 N L B M21 3
 Equivalent Material number : 1.4440

DESCRIPTION

- Basic flux cored stainless steel wire, with high-alloy strip for gas shielded arc welding
- Exclusive slag system and fine tuning of the compositional balance insure good impact toughness levels and resistance to hot cracking
- Attractive weldability
- Excellent X-ray soundness, ductility and impact toughness
- Maximum performance in the flat and horizontal positions
- Welded with classical economic Ar-CO₂ mixtures

APPLICATIONS

TETRA S B 316NFL-G is suitable for welding austenitic CrNiMo-corrosion resistant steel.
 The raised molybdenum level and the added nitrogen provide improved resistance to pitting in high chloride environments, to intergranular corrosion and to stress corrosion

Examples:

AISI	UNS	Material number	EN Symbol
316L	S31603	1.4404	X2CrNiMo 17-12-2
316LN	S31653	1.4406	X2CrNiMoN 17-11-2
316LN	S31653	1.4429	X2CrNiMoN 17-13-3
317L	S31703	1.4438	X2CrNiMo18-15-4
317LN	S31726	1.4439	X2CrNiMoN 17-13-5

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N	S	P
0.03	3.0	0.25	19.5	16.5	4.0	0.10	0.015	0.015

Typical ferrite level: 0 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
480	300	25	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
600	420	40	+20°C: 70

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+	100 - 260	18 - 32	12 - 25	10 - 20 l/min.
1.6	DC+	150 - 300	22 - 32	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

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.