

Technical data sheet

011121MBA

**Cored welding wire
TRI S 316L-O****CLASSIFICATION**

EN ISO 17633-A:	T 19 12 3 L U NO 3
ASME IIC SFA 5.22 / AWS A 5.22:	E316LT0-3
EN ISO 17633-B:	TS316L-F NO 0
Equivalent Material number :	1.4430
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Special flux cored self shielded stainless steel wire for open arc welding
- 19% chromium - 12% nickel -3% molybdenum - low carbon deposit
- The weld beads produced have a self-releasing slag covering that leaves a clean surface
- Sound deposits are obtained even in the presence of cross draughts
- Primary choice for cladding and rebuilding application
- Suited for joining
- Provides maximum productivity for outdoor jobs

APPLICATIONS

The TRI S series of wires is designed for on-site weld surfacing, repair and assembly of stainless steels. Good quality welds may be obtained, even when they are used in difficult weather conditions.
TRI S 316L-O is suitable for welding stainless steels with an alloy content between 16 to 21% Cr, 6 to 13% Ni and up to 3% Mo, stabilised and unstabilised types.

Examples:

AISI	UNS	Material number	EN Symbol
316	S31600	1.4401	X5 CrNiMo 17-12-2
316L	S31603	1.4404	X2 CrNiMo 17-13-2
316LN	S31653	1.4406	X2 CrNiMoN 17-12-2
316Ti	S31635	1.4571	X6 CrNiMoTi 17-12-2
318	S31640	1.4583	X10CrNiMoNb 18-12

APPROVALS

TÜV (02216.02), DB (43.128.03)

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	S	P
0.03	1.40	0.80	19.0	12.0	2.90	0.008	0.020

Typical ferrite level: 8 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
510	320	30	+ 20°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
700	500	35	+ 20°C: 55

SHIELDING GAS

None

OPERATING CONDITIONS

Current type	Gas flow rate	Stick out	Recovery
DC+	-	25 - 45 mm	88 %

WELDING POSITIONS

Flat, half up, half down

PACKAGING

Diameter	1.2 mm	1.6 mm	2.0 mm	2.4 mm
Spool type	EN ISO 544: BS300			
Weight	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.