

**Technical
data sheet**

011121MBA

Cored welding wire
TRI S 309LMo-O**CLASSIFICATION**

EN ISO 17633-A:	T 23 12 2 L U NO 3
ASME IIC SFA 5.22 / AWS A 5.22:	E309LMoT0-3
EN ISO 17633-B:	TS309LMo-F NO 0
Equivalent Material number :	1.4459
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Special flux cored self shielded stainless steel wire for open arc welding
- 24% chromium - 13% nickel - 3% molybdenum - low carbon deposit
- The weld beads produced have a self-releasing slag covering which 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 309LMo-O is suitable for:

- Welding stainless steels of similar composition or ferritic stainless steels.
- Joining stainless steels to mild and low-alloyed steels.
- Rebuilding and buffering before cladding or hardfacing.
- Maintenance on « hard-to-weld steels ».

Examples

Dissimilar welds between stainless CrNiMo stainless steels and mild or low alloyed CMn steels, for service temperatures up to 350°C. TRI S 309LMo-O has superior resistance to dilution when compared to 309L deposits because of its higher alloy and ferrite content. Compared to the AWS 312 weldments it benefits from an improved strength/ductility balance.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	S	P
0.03	1.80	0.80	24.0	13.0	2.80	0.008	0.020

Typical ferrite level: 20 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
550	350	25	+ 20°C: 27

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
640	570	30	+ 20°C: 40

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.