

Technical data sheet

011121MBA

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

EN ISO 17633-A:

T Z 25 10 U NO 3

DESCRIPTION

- Special flux cored self shielded stainless steel wire for open arc welding
- Austenitic type deposit for dissimilar welding, allowing an improved tolerance to dilution on a wide range of steels
- 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
- Suited for joining high tensile strength steels (minimum yield strength up to 500 MPa)
- Provides maximum productivity for outdoor jobs
- Excellent impact toughness

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 309SD-O is suitable for:

- Joining and cladding of steels with 22 - 26% Cr and 8 - 14% Ni contents and of ferritic stainless steels
- Welding of 18Cr – 8Ni type steels in corrosive environment requiring an over alloyed filler metal
- Joining stainless steels to mild and low-alloyed steels.
- Rebuilding and buffering before cladding or hardfacing.
- Maintenance on « hard-to-weld steels ».

TYPICAL ALL-WELD METAL ANALYSIS

| C | Mn | Si | Cr | Ni | N | S | P |
|------|-----|-----|----|----|------|-------|-------|
| 0.04 | 1.3 | 0.8 | 25 | 10 | 0.07 | 0.008 | 0.020 |

Typical ferrite level: 30 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp0.2% [MPa] | As [%] | CVN [J] |
|----------|--------------|--------|-----------|
| 560 | 500 | 25 | -20°C: 40 |

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp0.2% [MPa] | As [%] | CVN [J] |
|----------|--------------|--------|------------|
| 800 | 630 | 28 | -20°C: 105 |

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.