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| Technical data sheet <small>011121MBA</small> | Cored welding wire ROBOTOOL 47-G |  Welding Alloys |
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CLASSIFICATION

EN 14700: T ZFe8

DESCRIPTION

- Seamless high fill copper coated tubular wire for semi-automatic gas shielded hardfacing
- Unique welder appeal
- Deposition rate increased by up to 20% when compared to solid wire
- Strong and tough hot working steel type deposit for service temperatures up to 550°C
- Wire does not pick up moisture, the wire feeding properties are excellent
- Designed for welding in horizontal, horizontal-vertical and vertical-up positions

APPLICATIONS

Hardfacing parts undergoing metal-to-metal wear, compression and moderate impact loads at high temperatures

Examples:

Hot shear blades, hot and cold punching tools, extrusion press pistons, forging and trimming tools etc.

TYPICAL ALL-WELD METAL ANALYSIS

| C | Mn | Si | Cr | Mo | Ti | Fe |
|------|------|------|------|------|------|------|
| 0.15 | 0.90 | 0.50 | 6.00 | 3.50 | 0.25 | Bal. |

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: As welded, 3-layer deposit on mild steel: 43 HRc
 After PWHT 550°C / 10hrs: 46 HRc

CONDITIONS OF USE

| Current type | Shielding gas | |
|--------------|---------------|-------------------------------------|
| DC+ | EN ISO 14175 | M12: Ar + 0.5 – 5 % CO ₂ |
| | | M13: Ar + 0.5 - 3% O ₂ |
| | | M21: Ar + 15 – 25 % CO ₂ |

OPERATING CONDITIONS

| Diameter [mm] | Intensity [A] | Voltage [V] | Stick-out | Gas flow rate |
|---------------|---------------|-------------|-----------|----------------|
| 1.2 | 110 - 300 | 16 - 32 | 12 -18 mm | 10 - 20 l/min. |
| 1.6 | 130 - 350 | 16 - 32 | 12 -18 mm | 10 - 20 l/min. |

Recovery: 98 %

WELDING POSITIONS

ROBOTOOL 47-G is primarily used in the flat and horizontal positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

PACKAGING

| Diameter | 1.2 mm | 1.6 mm |
|------------|----------------------------------|--------|
| | EN ISO 544 – ASME II C SFA-5.2 M | |
| Spool type | 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.