

Technical data sheet <small>011121MBA</small>	Cored welding wire ROBODUR K 450-G	 Welding Alloys
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CLASSIFICATION

EN 14700: T Fe1

DESCRIPTION

- Seamless high fill copper coated tubular wire for semi-automatic gas shielded hardfacing
- Hard martensitic deposit designed to resist abrasive wear with impact
- Unique welder appeal
- Deposition rate increased by up to 20% when compared to solid wire
- The wire does not pick up moisture, and its feeding properties are excellent
- Designed for welding in horizontal, horizontal-vertical and vertical-up positions

APPLICATIONS

ROBODUR K 450-G is used for surfacing and rebuilding parts subjected to impact and high compressive stresses.

Examples

Build-up of earthmoving equipment such as tractor rollers, idlers, chains and drive sprockets, excavator pads, electric shovel track carrier rolls, steel shafts, gear teeth, crane wheels, steel mill rolls, mine car wheels, dredge pins, dredge links, mixer parts, rail car couplings, steel mill roll couplings and any components subject to metal-metal wear.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo
0.30	1.4	0.6	2.8	0.5

Microstructure: martensite

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit on mild steel: 450 HB

CONDITIONS OF USE

Current type	Shielding gas
DC-, DC+ or pulsed	M12: Ar + 0.5 – 5 % CO ₂
	M13: Ar + 0.5 - 3% O ₂
	M20: Ar + 5 – 15 % CO ₂
	M21: Ar + 15 – 25 % CO ₂

OPERATING CONDITIONS

Diameter [mm]	Current [A]	Voltage [V]	Stick-out	Gas flow rate
1.2	110 - 300	16 - 32	12 – 25 mm	10 - 20 l/min.
1.6	130 - 350	16 - 32	12 – 25 mm	10 - 20 l/min.

Recovery: 98%

WELDING POSITIONS

ROBODUR K 450-G is suitable for both downhand and positional welding by adapting transfer mode and welding parameters as for solid wires.

PACKAGING

Diameter	1.2 mm - 1.6 mm
	EN ISO 544 – ASME II C SFA-5.2 M
Spool type	BS 300
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.