

ROBODUR K 600-G

CLASSIFICATION

EN 14700 T Fe2

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
- Martensitic weld metal contains finely dispersed hard carbides ensuring an optimal balance between abrasion, friction and impact resistance
- Wire does not pick up moisture, the wire feeding properties are excellent
- Designed for welding in horizontal, horizontal-vertical and vertical-up positions
- Abrasion resistance is maintained at service temperatures up to 450°C

APPLICATIONS

Robodur K 600-G is used for hardsurfacing components that must combine resistance both to abrasion and to moderate impact.

Examples

Bucket teeth, bucket lips, bulldozer blades, crusher jaws, scraper blades, chutes, pump housings, conveyor screws, slide plates, gear teeth, crusher hammers, drilling bits, ploughshares, reamers etc.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo	Fe
0.50	1.20	0.70	6.00	0.70	Rest

Structure: martensite

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Peak hardness in the range 50HRc – 62HRc may be achieved in three layers. Direct polarity reduces dilution and favours higher hardness.

Preheat will be determined by the application and whether micro cracking in the deposit is acceptable. According to the base material preheating in the range 150°C – 300°C may be necessary.

When welding on 13% Mn steels or air hardenable steels, a tough and malleable buffer layer should be deposited using Tetra S 312-G.

CONDITIONS OF USE

Current type	Shielding gas	
DC (+)	EN ISO 14175	M12 / M13 / M20 / M21

OPERATING CONDITIONS

Diameter [mm]	Amperage [A]	Voltage [V]	Stick-out [mm]	Gas flow [l/min]
1.2	100 - 300	24 - 32	12 - 25	10 - 20
1.6	150 - 300	24 - 32	12 - 25	10 - 20
2.0	200 - 400	24 - 32	12 - 30	10 - 20
2.4	250 - 450	24 - 32	12 - 30	10 - 20

Recovery: > 95 %

WELDING POSITIONS

Robodur K600-G, up to Ø 1.6 mm, is suitable for downhand as well as for positional welding by adapting transfer mode and welding parameters as for solid wires

STANDARD DIAMETERS (mm)

1.2, 1.6, 2.0, 2.4

Other diameters: please consult us

PACKAGING

Diameter	2.4 mm		2.4 mm
Standard packaging [EN ISO 544]	Spool : BS 300	Coil : B 450	Drum
Weight	15 kg	25 kg	Up to 330 kg