

# Technical Data Sheet

## ROBODUR K 650



Low and medium alloyed steel -> Seamless copper coated metal cored wire for Gas Metal Arc Welding (GMAW)

### 1 GENERAL INFORMATION

EN 14700 : T Fe8

- Martensitic deposit containing finely dispersed hard carbides
- Ensures an optimal balance between abrasion, friction and impact resistance
- Abrasion resistance is maintained at service temperatures up to 500°C
- Deposition rate increased by up to 20% when compared to solid wire, with unique welder appeal
- Wire does not pick up moisture, and the wire feeding properties are excellent
- Designed for welding in flat, horizontal, horizontal-vertical and vertical-up positions



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

Abrasion	████████	████████	████████	████████	████████
Impact	████████	████████	████████	████████	████████
Metal-metal	████████	████████	████████	████████	████████
Corrosion	████████	████████	████████	████████	████████
Temperature	████████	████████	████████	████████	████████

### 2 ALL WELD METAL PROPERTIES

#### CHEMICAL ANALYSIS [%]

C	Mn	Si	Cr	Mo	V	W
0.5	1.2	1.2	5.4	1.3	0.4	1.2

#### HARDNESS

57-62 HRC (as welded, three-layers)

Direct current electrode negative polarity (DC-) reduces dilution and favours high hardness

### 3 RECOMMENDED WELDING PARAMETERS

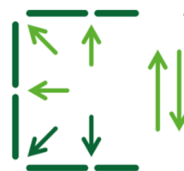
Diameter [mm]	Welding Position	Polarity	Current [A]	Voltage [V]	Stick-out [mm]
1.2	PA / 1G or 1F	DC+	150 - 250	24 - 28	20 ± 5
1.6	PA / 1G or 1F	DC+	200 - 300	24 - 28	20 ± 5

### WELDING PROTECTION

Shielding gas (EN ISO 14175)

- M12 (Ar + 0.5% ≤ CO<sub>2</sub> ≤ 5%)
- M13 (Ar + 0.5% ≤ O<sub>2</sub> ≤ 5%)
- M20 (Ar + 5% < CO<sub>2</sub> ≤ 15%)
- M21 (Ar + 15% < CO<sub>2</sub> ≤ 25%)

### WELDING POSITION



\*Out of position welding also possible using short circuit or pulsed arc modes of transfer

### 4 PACKAGING OPTIONS

Diameter [mm]	1.2 - 1.6
Standard packaging (EN ISO 544)	BS 300 spool
Weight [kg]	15

Other packaging requirements: please consult us