

bercoweld® K3 is a special copper wire for coated electrodes. Suitable for arc welding of copper as well as joining copper with steel, gray cast iron and Ni alloys from 3mm wall thickness. Especially suitable for large workpieces.

Pulsed power welding is recommended.

Preheating of the base material is usually not necessary.

Standardization and composition

ISO 24373	CuZ (CuP)
Cu	balance
P	0.05 - 0.07

Physical properties

Density (kg/dm³)	8.9
Melting range (°C)	ca. 1080
Thermal conductivity (W / m x K)	293 - 364
Coefficient of linear mean expansion (10-6/K)	17
Electric conductivity (m / Ω x mm²)	41 - 52
Resistivity (Ω x mm²) /m	0.0192 - 0.0244

Mechanical properties of the weld joint (standard data)

Heat treatment	non treated
Tensile strength (MPa)	220
Elongation (%)	40
Brinell hardness (HB 2.5/62.5)	50
Notched bar impact test (Av (J))	65

Delivery options

Make-up	Weight/Length	Dimension
Drum / bedradox	175 - 200 kg	0.80 - 1.60 mm
SD300 / BS300 / K300	12 - 15 kg	0.80 - 2.40 mm
H500 / H560 / H760	150 - 250 kg	0.80 - 2.40 mm
Coils	25 - 100 kg	1.60 - 6.00 mm
Rods	250 - 3000 mm	1.60 - 6.00 mm