

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 |