

The ISOFIL AWD 21 is suitable for highly-stressed welded joints on oxygen-free copper and Cu materials. Very good processability and pore-free weld seams. When TIG welding large workpieces, preheating to 300° C is recommended.

Standardization and composition

ISO 24373	CuSn1 Cu1898
Cu	balance
Sn	0.75 - 0.90
Mn	0.15 - 0.30
P	0.005 - 0.020
Si	0.15 - 0.25
others	max. 0.5

Physical properties

Density (kg/dm³)	8.9
Melting range (°C)	1020 - 1050
Thermal conductivity (W / m x K)	120 - 145
Coefficient of linear mean expansion (10-6/K)	18.1
Electric conductivity (m / Ω x mm²)	15 - 20
Resistivity (Ω x mm² / m)	0.05 - 0.0667

Mechanical properties of the weld joint, standard data

Heat treatment	non treated
Tensile strength (MPa)	220
Elongation (%)	30
Brinell hardness (HB 2.5/62.5)	60
Notched bar impact test (Av (J))	75

Delivery options

Make-up	Weight/Length	Dimension
Drum / bedrabox	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