

Tuncop

Chemical Composition		W	Cu
	Tuncop 80/20	80	20
	Tuncop 75/25	75	25
	Tuncop 70/30	70	30

Code	WCu
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Material Properties	This copper alloy is also known as “Wolfram-containing copper”. It is produced by powder metallurgy and contains wolfram in the amount of 80 %. Wolfram possesses an outstanding resistance against the arc that occurs during welding. The high electrical conductivity of the copper allows this alloy to be used as an electrode.
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Application Area	As electrodes in butt welding and spot welding processes of stainless steels, such as welding of pan and pot handles, as high wear-resistant electrodes in sinking erosion treatments and in spot welding processes of resistance wires.
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Mechanical Properties	Tuncop 80/20	Tuncop 75/25	Tuncop 70/30
Hardness (HV)	230	200	170
Tensile strength (N/mm²)	490	440	390
Modulus of elasticity (20 °C) GPa	230	225	225

Physical Properties	Tuncop 80/20	Tuncop 75/25	Tuncop 70/30
Electrical conductivity 20°C (mΩ.mm²)	17	19	20
Electrical resistance 20°C (Ωmm²/m)	0.06	0.053	0.05
Thermal conductivity (20°C) (W/mK)	130	140	150
Density (g/cm³)	15.3	14.6	14.0