

Short Name	CW106C	Chemical Composition (Reference values in %)	Cr	Zr	Cu
Code	CuCr1Zr		0,8	c. 0,08	balance
	C18150				

Classification	ISO 5182 R.W.M.A.	Class A 2/3 Class 2
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Properties	Precipitation hardened copper alloy with excellent hardness and high electrical and thermal conductivity.
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Applications	<ul style="list-style-type: none"> • High performance sheets and plates for electrical applications • Base plates for resistance welding multi-tools • arms for electrical high loaded welding guns
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Mechanical Properties (Reference values)	Conditions		solution annealed, aged, machined or cold rolled				
	Thickness	mm	≤ 5	>5 – 10	> 10 – 20	>20 - 100	
	Hardness (typical)	HB 10/2,5	130 *)	160	140	030	125
	Tensile strength	N/mm ²	>360	>490	>470	>440	> 370
	Yield strength	N/mm ²	>290	>470	>370	>340	>270
	Elongation L5D long.	%	>15	>7	8	10	12
	Bendability		yes	no	yes	n. a.	n. a.

Physical Properties	Electr. conductivity 293 K (20 °C)	MS/m	min. 43 (min. 74 % IACS)
	Electrical resistance 293 K (20 °C)	m/Ω.mm ²	0.023 (Reference values)
	Coeff. of electrical resistance 273-573 K (0-300 °C)	1/K	0,00367
	Coeff. of thermal expans. 273-593 K (0-320 °C)	1/K	17,0 × 10 ⁻⁶
	Specific heat		0,376
	Thermal conductivity 293 K (20 °C)	W/m.K	approx. 320
	Density	g/mm ³	8,9

Products	Sheets and plates 1,5 – 20mm x 820mm x 3000mm. aged and cold rolled
	Sheets and plates >20 – 100mm x 820mm x 3000mm. aged and surface milled
	Various offcuts to customer specifications

*) material is heat treated to maximum bendability

All statements as to the properties or utilization of the materials and products mentioned in this datasheet are only for the purpose of description. Guarantees in respect of the existence of certain properties or utilization at the material mentioned are only valid if agreed upon in writing.