

CuCr1Zr | Round bars



Alloy	CuCr1Zr, CW106C
Condition	drawn, solution annealed, hardened
Norm	DIN EN 12163
Tolerance	DIN 1756, h11 $\varnothing$ 6 mm +0/-0.08 mm $\varnothing$ 8-10 mm +0/-0.09 mm $\varnothing$ 11-18 mm +0/-0.11 mm $\varnothing$ 19-30 mm +0/-0.13 mm $\varnothing$ 31-50 mm +0/-0.16 mm $\varnothing$ 51-75 mm +0/-0.19 mm
Machinability	medium
Hot Workability	good
Cold Workability	good
Electr. Conductivity	app. 79 % IACS / app. 46 MS/m
REACH	no obligation
RoHS	conform

Mechanical Properties:

	Tensile strength R_m	Yield stress $R_{p0.2}$	Elongation A	Hardness HB
Ø 6 - 30 mm R470-H150	$\geq 470 \text{ N/mm}^2$	$\geq 420 \text{ N/mm}^2$	$\geq 8 \%$	150-180
Ø 31 - 50 mm R430-H135	$\geq 430 \text{ N/mm}^2$	$\geq 350 \text{ N/mm}^2$	$\geq 10 \%$	135-175
Ø 51 - 75 mm R370-H120	$\geq 370 \text{ N/mm}^2$	$\geq 250 \text{ N/mm}^2$	$\geq 16 \%$	120-160

Chemical Analysis

Cu Rest
 Cr 0.5 - 1.2 %
 Zr 0.03 - 0.3 %
 Fe max. 0.08 %
 Si max. 0.1 %
 Others max. 0.2 %

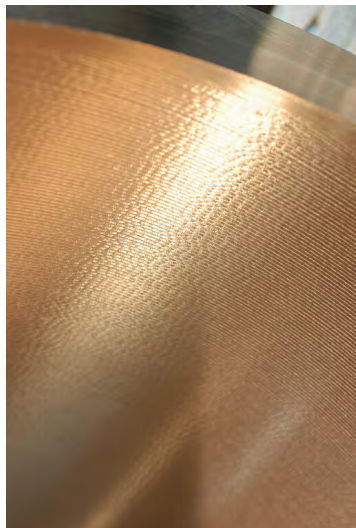
Very high electrical and thermal conductivity at medium strength values. High softening temperature, long life. Electrodes for resistance welding- Thermal conductivity at 20 °C: 167-320 W/m K, electrical conductivity at 20 °C: 26-48 m/Ω · mm², fully cured approx. 43-48 m/Ω · mm²

Comparable Specifications

CuCrZr, 2.1293, DIN 17666
 C18150 UNS
 C102, BS 2872, 2874

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DATA SHEET



Alloy	CuCr1Zr, CW106C
Condition	forged, premachined
Norm	DIN EN 12163
Tolerance	+1 / -0 mm
Machinability	medium
Hot Workability	good
Cold Workability	good
Electr. Conductivity	app. 79% IACS / app. 46 MS/m
REACH	no obligation
RoHS	conform

Mechanical Properties:

	Tensile strength R_m	Yield stress $R_{p0.2}$	Elongation A	Hardness HB
R370-H120	$\geq 370 \text{ N/mm}^2$	$\geq 250 \text{ N/mm}^2$	$\geq 16 \%$	120-160

Chemical Analysis

Cu Rest
 Cr 0.5 - 1.2 %
 Zr 0.03 - 0.3 %
 Fe max. 0.08 %
 Si max. 0.1 %
 Others max. 0.2 %

Very high electrical and thermal conductivity at medium strength values. High softening temperature, long life. Electrodes for resistance welding. Thermal conductivity at 20 °C: 167-320 W/m K, electrical conductivity at 20 °C: 267-48 m/Ω · mm², fully cured approx. 43-48 m/Ω · mm²

Comparable Specifications

CuCrZr, 2.1293, DIN 17666
 C18150 UNS
 C102, BS 2872, 2874