



TRCZ (CuCrZr)

technical datasheet

CHEMICAL COMPOSITION

Cu	Cr	Be	Zr	Ni	Si	Other
Rest	0,3-1,2		0,03-0,2			

SPECIFICATIONS

DIN: 2,1293	ASTM: C18150	RWMA: CLASS II
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MECHANICAL PROPERTIES

Tensile Strength (Rm) N/mm ²	: 350-440
Yield Strength (Rp 0,2) N/mm ²	: 300-350
Elongation (A5) %	: Min.8-15
Hardness (HB 30)	: 100-160
Elastic Modulus	: 120 x 10 ³ N/ mm ²

DESCRIPTION OF MATERIAL

CuCrZr contains; approximately 1% Chromium and 0,1% Zirconium. This alloy has good hardness and high electrical and thermal conductivity after forging and heat treatment processes.

PHYSICAL PROPERTIES

Density	: 8,96 g/ cm ³
Specific Heat	: 0,38 j/g.k
Electrical Conductivity	: 49-59 MS/ m
Electrical Conductivity (I.A.C.S.)	: 70-76 %
Thermal Conductivity	: 320 W/ m.K
Coefficient of Thermal Expansion	: 20-100 °C 17,0 X 10 ⁻⁶ /K
Working Temperature	: 500 °C maks.

APPLICATIONS

It uses as spot welding electrodes, electrode holders and seam welding discs in resistance welding, electrodes for spark erosion, moulds for continuous casting of steel and aluminium, electrical components working under mechanical stress and dies working under low pressure in casting of non ferrous metals.