



TRB44 (CuBe2)

technical datasheet

CHEMICAL COMPOSITION

Cu	Co	Be	Zr	Ni	Si	Other
Ret	0,35	1,8-2,2		0,35	0,1-0,2	

SPECIFICATIONS

DIN : 2,1247	ASTM: C17200	RWMA: CLASS IV
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MECHANICAL PROPERTIES

Tensile Strenght (Rm) N/mm ²	: 1150-1250
Yield Strenght (Rp 0,2) N/mm ²	: 900-1100
Elongation (A5) %	: Min 2
Hardness (HRC)	: 36-42
Elastic Modulus	: 135 x 10 ³ N/ mm ²

DESRPTION OF MATERIAL

CuBe2 contains; approximately 2% Beryllium, 0,6% Cobalt and Nickel. This copper alloy has considerably high mechanical properties, hardness with reasonable thermal and electrical conductivity. It is possible to reach different combinations of electrical conductivity and hardness by changing the heat treatment conditions.

PHYSICAL PROORTIES

Density	: 8,5 g/ cm ³
Specific Heat	: 0,42 j/g.k
Electrical Conductivity	: 24-30 MS/ m
Electrical Conductivity (I.A.C.S.)	: 38-48 %
Termal Conductivity	: 110-150 W/ m.K
Coefficient of Thermal Expansion	: 20-100 °C 17,0 X 10 ⁻⁶ /K
Working Temperature	: 3000 °C maks.

APPLICATIONS

CuBe uses as resistance welding electrodes in manufacturing of steel wheels, non-sparking safety tools, corrosion resistant, anti magnetic and high strenght bushings . Mould plates and cooling inserts in plastic injection industry.