

Chemical Composition	Be	Ni	Co	Others	Cu
	0.4-0.7	0.8-1.3	0.8-1.3	max 0.5	rest

Code EN: CW103C, UNS No: C17540

Material Properties Hard copper alloy with high thermal conductivity amd high mechanical properties combined with good hardness and high temperature strength.

Application Area Spot welding electrodes and seam welding discs for stainless steel, monel and nickel alloys, flash welding dies, wire mesh electrodes, plastic blow and injection moulds and inserts in steel tools for higher cooling rates, nozzles and needles for hot runner systems, plunger tips in aluminum die casting machines, moulds for non-ferrous metal castings (as copper, brass, bronze), welding tools in plastic packaging.

Heat Treatment Delivered in heat treated condition.

Mechanical Properties	Hardness	HB	230-260
	Tensile strength	(N/mm ²)	700-900
	Yield strength	(N/mm ²)	600-700
	Elongation L:5d	%	10-15
	Modulus of elasticity (20°C)	GPa	130

Physical Properties	Electrical conductivity	MS/m	25-30
	Coefficient of thermal expansion (273 - 573 K)	10 ⁻⁶ /K	17
	Thermal conductivity(20°C)	W/m.K	200-230
	Density	g/cm ³	8.75