



L A I X I N M E T A L



Beryllium Copper for Welding Industry

Description

Beryllium copper has extremely high and balanced tensile strength, yield strength, and hardness, so it has the best wear and bending resistance, as well as extremely high electrical and thermal conductivity. It has high annealing resistance and wear resistance, and has excellent wear resistance at high temperatures.



Grade	Chemical Composition								Mechanical Properties	
	Be, %	Co+Ni, %	Co+Ni+Fe	Pb, %	Co, %	Ni, %	Fe, %	Cu, %	Hardness Min	Electrical Conductivity Min. %IACS
C17200 CW101C CuBe2	1.8-2.0	Min. 0.2	Max. 0.6					Rem.	35 HRC	25
C17300 CW102C CuBe2Pb	1.8-2.0	Min. 0.2	Max. 0.6	0.2-0.6				Rem.	35 HRC	25
C17200 CW101C CuBe2	1.8-2.0	Min. 0.2	Max. 0.6		0.8-1.3	0.8-1.3	Max. 0.2	Rem.	35 HRC	25
CW103C CuCo1Ni1Be	0.4-0.7	Min. 0.2	Max. 0.6					Rem.	92 HRB	48
C17500 CW104C CuCo2Be	0.4-0.7				2.4-2.7			Rem.	92 HRB	48
C17510 CW110C CuNi2Be	0.2-0.6					1.4-2.2		Rem.	92 HRB	48

Application

Typical applications of beryllium copper in the welding field include spot welding, seam welding, projection welding, butt welding electrodes, stud welding chucks, current carrying arms, current carrying shafts, electrode clamps, EDM electrodes, etc

