



Alloy Name	
AMW-24	CuZn20
IS	CuZn20
ISO	CuZn20
UNS	C24000
JIS	C2400

Chemical Composition	Weight percentage
Cu	78.5 - 81.5 %
Pb	≤ 0.05 %
Fe	≤ 0.05 %
Zn	Remainder %
Total Impurity	< 0.15 %

Main Applications

Electrical :	Battery Caps,Rotor Bars,AC Motors
Industrial :	Pump lines, Welding Wire, Flexible Hose
Consumers :	Clock Dails,Musical Instrument Parts
Architecture :	Ornamental Components

Physical Properties Typical values in annealed temper at 20 °C

Density	8.67	g/cm ³
Thermal expansion coefficient -191 .. 16 0 .. 300°C	9.0	10 ⁻⁶ /K
	18.8	10 ⁻⁶ /K
Specific heat capacity	0.380	J/(g·K)
Thermal conductivity	142	W/(m·K)
Electrical conductivity (1 MS/m = 1 m/(Ω mm ²))	≥ 19	MS/m
Electrical conductivity (IACS)	32.8	%
Thermal coefficient of electrical resistance (0 .. 200 C)	1.5	10 ⁻³ /K
Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed	99....115	GPa
	119	GPa

Mechanical Properties (EN 1652)

Temper	Tensile Strength	Yield Strength	Elongation Minimum	Hardness HV
	Rm MPa(N/mm ²)	Rp0.2 MPa(N/mm ²)	A50mm %	

80/20 Characteristics

CuZn20 has excellent cold forming, good hot forming properties and is well suited for e.g. coinage, beating, embossing. This alloy has a higher strength than pure copper. CuZn20 has good welding and brazing properties as well as a good corrosion resistance and is not fragile to stress corrosion and dezincification. It is principally used in jewellery, metal goods, watch industry and in electronic industry for installation

part



O (SOFT)	265 Min	< 150	40 Min	80 Max
HB (Half Hard)	340 Min	≥ 200	10 Min	95 Min
HD (Hard)	400 Min	≥ 320	5 Min	120 Min