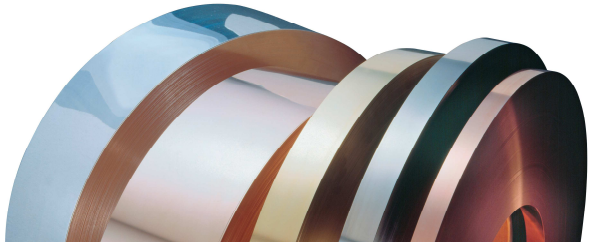
SUNDWIGER Messingwerk

Brass (Copper-Zinc)
MB37



Material Designation	
DIN-EN Symbol	CuZn37
DIN-EN	CW508L
UNS	C27200
JIS	C2720

Physical Properties		
Electrical conductivity soft	14.5	MS/m
Thermal conductivity	120	W/(m·K)
Thermal expansion coefficient **	20.2	10-6/K
Density	8.4	g/cm³
Modulus of elasticity	110	GPa = kN/mm²

* Reference values at room temperature
** Between 20 and 300 °C

Nominal Composition (mass content in %)	
Cu	Balance
Sn	< 0.05
Zn	37
Ni	< 0.2
Fe	< 0.05
Al	< 0.02
Pb	< 0.005
Other	< 0.1

Typical Applications

- Jewellery
- Metal ware
- Transistor carriers
- Deep drawing parts
- Stamped-bent parts
- Connectors

About The Alloy

MB37 is a brass having good workability, drawability and good properties on plating.

Among the Copper Zinc Alloys MB37 exhibits a high electrical and thermal conductivity at a moderate strength level. The colour of MB37 is due to the increased Zn content already deep yellow. Applications are found in terminal connectors, stamped and deep drawn parts.

The alloy is registered with the U.S. EPA as Antimicrobial and with respect to Pb and Cd meets the OEKO-TEX Standard 100.

Mechanical Properties *)

Temper condition		O30 **R 290** H 55	H01 **R 360** H 95	H02 **R 410** H 120	H03 **R 460** H 140	H04 **R 490** H 155	H06 **R 550** H 170
Tensile strength in N/mm²		290 - 370	360 - 440	410 - 490	460 - 530	490 - 560	550 - 640
0.2 % yield Strength in N/mm²		< 190	> 200	> 300	> 380	> 450	> 500
Elongation A_{L50} %		> 40	> 30	> 15	> 10	> 5	> 1
Vickers hardness HV		55 - 95	95 - 125	120 - 150	140 - 170	155 - 185	170 - 200
Electrical conductivity in % IACS		25	25	24	24	23	23
Minimum radius of the bending mandrel for 90° bend and strip thickness s							
0.10 ≤ s ≤ 0.25 mm	transverse parallel	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0.5 x s 1 x s
0.25 < s ≤ 0.50 mm	transverse parallel	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0 x s 0.5 x s	0 x s 1 x s	1 x s 2 x s

*) Reference values

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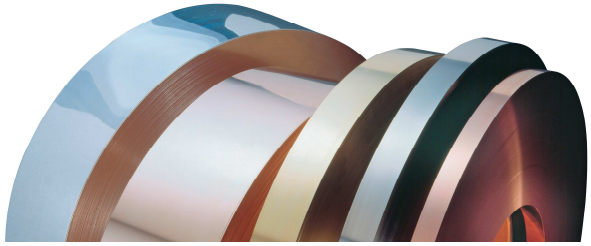

Processing Instructions	
Cold forming properties	very good
Machinability	satisfactory
Electroplating properties	very good
Hot-dip tinning properties	very good
Soldering	very good
Resistance welding	good
Gas shielded arc welding	satisfactory
Laser welding	sufficient

Available Dimensions
Bright pre-rolled strips 1 to 2.5 mm
Precision strip thickness from 0.05 to 1.2 mm
Strip width from 3.0 to 600 mm, but at least 10 times of the strip thickness
Other widths available on request.

Available Versions
Coils with standard outer diameters of 1200 mm
Strips in reel form with coil weight of up to 1500 kg
Multipancake up to 2.5 t
Hot-dip tinned strips
Profiled strips
Electroplated strips (tin, nickel)

Your Local Contact Person	
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