

Brass

Ms62 (C27450)

Material Designation*

UNS	C27450
EN*	CuZn37 (CW 508 L)*
JIS	C2801
GB	H62

*Similar to CuZn37 (CW 508 L)

Chemical Composition

Cu	60-65	%
Zn	Balance	%



Characteristics

It has high zinc content and high strength, which is suitable for hot working, easy cutting, brazing and welding. It has high corrosion resistance, but fair machinability at cold working.

Typical Applications

This is lead-free cutting alloy. It is widely used in hardware, machinery, electronics, valve body, bathroom and other industries. And it is suitable for all kinds of deep drawing and bending parts, such as pins, rivets, washers, screw nuts, conduits, pressure gauge springs, screens, radiator parts, etc.

Physical Properties

Density ^①	8.44	g/cm ³
Electrical conductivity ^①	27	%IACS
Thermal conductivity ^①	114	W/(m·K)
Coefficient of thermal expansion ^②	19.7	10 ⁻⁶ /K
Modulus of elasticity	110	GPa

Note①: Temperature for testing is 20°C.

Note②: Temperature range for testing is 20-300°C.

Fabrication Properties

Cold workability	Excellent
Hot workability	Excellent
Brazing	Excellent
Machinability compared with C36000	70%

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Mechanical Properties

Diameter	Temper	Tensile Strength	Yield Strength	Elongation
mm		MPa min.	MPa min.	% min.
3 < Φ ≤ 12	H02	390	270	10
12 < Φ ≤ 18	H02	370	250	14
25 < Φ ≤ 50	H02	--	--	--
50 < Φ ≤ 80	H02	--	--	--
3 < Φ ≤ 12	H04	590	450	--
12 < Φ ≤ 18	H04	490	360	--
25 < Φ ≤ 50	H04	--	--	--

Tolerance and Delivery Form

Diameter	Standard coil weights	Tolerance ^③	Coil ID
mm	kg	mm	mm
0.1 < Φ ≤ 0.3	1-5	0.01	Spool packing
0.5 < Φ ≤ 0.8	5-12	0.01	160-200
0.8 < Φ ≤ 1.1	15-25	0.02	270-300
1.1 < Φ ≤ 1.6	18-30	0.02	260-300
1.6 < Φ ≤ 2.5	25-40	0.03	320-350
2.5 < Φ ≤ 4.0	30-45	0.03	370-400
4.0 < Φ ≤ 6.5	45-60	0.04	370-400
6.5 < Φ ≤ 10.0	200-400	0.04	1000-1200
8.0 < Φ ≤ 12.0	200-400	0.05	1200-1400

Note^③: The tolerances listed in the table are specified as all plus or all minus. When tolerances are specified as plus and minus (\pm), half the values given.

*Composition UNS
 Conductivity UNS
 Mechanical Properties For reference only, measured at room temperature, 68°F(20°C).
 Fabrication Properties UNS, Machinability for reference only.
 Other Physical Properties For reference only

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