bedra
intelligent wires

Ms80b (C24000)

Material Designation *

UNS	C24000
EN	CuZn20 (CW 503 L)
JIS	C2400
GB	H80

Chemical Composition

Cu	78.5-81.5	%
Zn	Balance	%

Characteristics

It has high strength, good plasticity, good forming performance. It has quite strong corrosion resistance in the air and seawater.

Typical Applications

It is suitable for all kinds of light stamping parts, sugar machinery and ship parts, hardware, etc.

Physical Properties

Density ①	8.67	g/cm^3
Electrical conductivity ①	32	%IACS
Thermal conductivity ①	140.3	W/(m·K)
Coefficient of thermal expansion ②	18.4	10^{-6} / K
Modulus of elasticity	119	GPa

Note①: Temperature for testing is 20°C.
Note②: Temperature range for testing is 20-300°C.

Fabrication Properties

Cold workability	Excellent
Hot workability	Fair
Brazing	Excellent
Machinability compared with C36000	20%

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Mechanical Properties

Diameter	Temper	Tensile Strength	Yield Strength	Elongation
mm		MPa min.	MPa min.	% min.
3 < Φ ≤ 12	H02	540	420	--
12 < Φ ≤ 18	H02	--	--	--
25 < Φ ≤ 50	H02	--	--	--
50 < Φ ≤ 80	H02	--	--	--
3 < Φ ≤ 12	H04	690	550	--
12 < Φ ≤ 18	H04	--	--	--
25 < Φ ≤ 50	H04	--	--	--

Tolerance and Delivery Form

Diameter	Standard coil weights	Tolerance③	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

Note③: The tolerances listed in the table are specified as all plus or all minus. When tolerances are specified as plus and minus (±), 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