



Thickness Range : 2.5mm to 0.05mm Width Range : 8mm to 400mm Surface Roughness: 0.15 to 0.25 Ra Scale Grain Size : Fine i.e. No Orange Peel effect on deep drawing Coil Weight : 8Kgs/mm width .

63/37 Characteristics

CuZn37 is the major brass alloy for the cold forming process. Even though brasses with lower Zinc content have better cold forming properties, CuZn37 is the most used alloy. Reasons for this are on the one hand economical due to lower price of Zinc compared to Copper, on the other hand the forming properties of this alloy meet the demand of many applications

| Alloy Name | |
|------------------|--------|
| AMW-27 | CuZn37 |
| IS/ISO | CuZn37 |
| DIN CEN/TS 13388 | CW508L |
| ASTM | C27200 |
| JIS | C2720 |

AMWL offers CuZn37 rolled products with high purity and minimum impurities like Iron and Lead to take care of Lead Leaching Test. The Rolled products are in shape Foils, Strips, Sheets and circles/discs to meet our customers needs for industrial manufacturing. AMWL can provide Coil weight of 8Kg/mm width.



| Chemical Composition | Weight percentage |
|----------------------|-------------------|
| Cu | 61.50 - 64.50 % |
| Pb | |
| Fe | ≤ 0.05 % |
| Zn | Remainder % |
| Total Impurity | < 0.30 % |

Main Applications

| | |
|---------------------------------------|---|
| Industrial & Automobiles : | Connectors, Deep Drawn Parts, Stamped Parts, Radiator Tanks and Radiator Cores, Automobile Light reflectors, radiator tube. |
| Electrical : | Components for the electrical industries |
| Consumers : | Style Jewellery, Snap Buttons, Zippers, eyelet fasteners, Flash Lights, |

Physical Properties Typical values in annealed temper at 20 °C

| | | |
|--|----------|---------------------|
| Density | 8.44 | g/cm ³ |
| Thermal expansion coefficient -191 .. 16 | 17.0 | 10 ⁻⁶ /K |
| 0 .. 300°C | 20.2 | 10 ⁻⁶ /K |
| Specific heat capacity | 0.377 | J/(g·K) |
| Thermal conductivity | 121 | W/(m·K) |
| Electrical conductivity (1 MS/m = 1 m/(Ω mm ²)) | 15 | MS/m |
| Electrical conductivity (IACS) | 27 | % |
| Thermal coefficient of electrical resistance (0 .. 200 C) | 1.7 | 10 ⁻³ /K |
| Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed | 99...110 | GPa |
| | 110 | GPa |

Mechanical Properties (EN 1652)

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

| | | | | |
|----------------------|---------|--------|--------|---------|
| O (Soft) | 280 Min | < 180 | 40 Min | 80 Max |
| HA (quarter Hard) | 340 Min | ¡Ÿ 170 | 30 Min | 75 Min |
| HB (Half Hard) | 385 Min | ¡Ÿ 300 | 15 Min | 110 Min |
| HD (Hard) | 460 Min | ¡Ÿ 400 | 5 Min | 135 Min |
| HE (extra Hard) | 525 Min | ¡Ÿ 450 | | 165 Min |
| HS (Spring Hard) | 670 Min | ¡Ÿ 600 | | 185 Min |