# SHREE EXTRUSIONS LIMITED

## C65100 LOW SILICON BRONZE "B"

**EQUIVALENT SPECIFICATIONS**

| SPECIFICATIONS | DESIGNATION |
|---|---|
| ISO | CuSi1 |
| European | CuSi1 |
| Czech Republic | CuSi1 |

**ASTM B98**

C65100 is an engineering alloy at least as resistant to corrosion as copper itself, but much stronger, and with good fatigue endurance. 651 Bronze is an alloy noted for its brazeability, strength, corrosion resistance, and electrical properties. C65100 is one of the most weldable copper alloys. It is readily joined by all types of resistance welding. Joining by soldering or brazing is excellent. Joining by gas shielded arc welding and spot welding is also excellent, and by oxyacetylene welding, good.

### Typical Uses for C65100 Low Silicon Bronze "B":

**ELECTRICAL:** Conduit, Pole Line Hardware, Motor, Rotor Bars **FASTENERS:** Bolts, Cable Clamps, Cap Screws, Machine Screws, Nuts, Rivets, U Bolts, Fasteners, Screws **INDUSTRIAL:** Oil Refinery Plumbing Tube, Heat Exchanger Tube, Welding Rod, Hydraulic Pressure Lines **MARINE:** Hardware

### CHEMICAL COMPOSITION

| | Cu | Fe | Pb | Mn | Si | Zn |
|---|---|---|---|---|---|---|
| Min/Max | Rem | 0.8 | 0.05 | 0.7 | 0.80 - 2.0 | 1.5 |
| Nominals | 98.5000 | - | - | - | 1.5000 | - |

### PHYSICAL PROPERTIES

| Product Property | US Customary |
|---|---|
| Coefficient of Thermal Expansion | 9.9 Â• 10-6 per oF (68-212 F) |
| Density | 0.316 lb/in3 at 68 F |
| Electrical Conductivity | 12 %IACS @ 68 F |
| Electrical Resistivity | 86.4 ohms-cmil/ft @ 68 F |
| Melting Point - Liquidus | 1940 F |
| Melting Point - Solidus | 1890 F |
| Modulas of Elasticity in Tension | 17000 ksi |
| Modulus of Rigidity | 6400 ksi |
| Specific Gravity | 8.75 |
| Specific Heat Capacity | 0.09 Btu/lb/oF at 68 F |
| Thermal Conductivity | 33.0 Btu Â• ft/(hr Â• ft2Â•oF)at 68F |

### SIZES AVAILABLE :

| | |
|---|---|
| ROUND RODS | 8mm To 100 mm |
| HEX | 10mm To 60mm |
| SQUARE | 10mm To 60mm |
| FLAT | 0mm Min Thickness and max Width 120mm |
| BILLETS | Up to 200 mm |
| INGOTS | As per Specification |

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NABL / ISO : 15189
Accreditation Number M - 0000

ISO 9001:2000
DNV
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