

START SMALL. MELT QUICKLY. MAXIMIZE PRODUCTIVITY

Introducing

EZ-MELT ECO BRONZE SHOT



The smallest, yet most versatile, member of our product line.

EZ-Melt Shot provides more surface area in a furnace that results in more efficient melting and reduced BTU consumption than traditional Ingot.

Advantages:

ENERGY:

- Reduces melt time 10% or more
- Reduces BTU consumption
- Liquidus is only 1616 °F

LABOR & PRODUCTIVITY:

- Labor saving
- Reduces pinch points vs traditional ingot
- Ideal form for charge automation
- Low dross
- No supplemental Phosphorus required

Material Performance

- High strength
- High fluidity
- Low gassing

MADE WITH



C87850 - ECO BRONZE has been recognized in a university study as the leading lead-free alloy for environmental friendliness, efficient manufacturing of component parts and end-of-life recyclability.

ECO BRONZE® Characteristics:

- High strength
- Corrosion resistant
- Good machinability
- Low pouring temperature
- Short solidification range
- Less prone to dispersed microporosity
- High detail replication
- Lead free*



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C87850

Silicon Bronze Alloy Properties

C87850 Copper Silicon Bronze Alloy Properties

| | |
|--|-----------|
| Melting Point - Liquidus (°F) | 1616 |
| Melting Point - Solidus (°F) | 1571 |
| Density (lb/cu in.) | 0.3 |
| Electrical Conductivity (%IACS at 68°F) | 8 |
| Thermal Conductivity (Btu/sq ft/ft hr/°F at 68°F) | 21.8 |
| Coefficient of Thermal Expansion (x10 ⁻⁶ /°F, 68-212°F) | 10.3 |
| Coefficient of Thermal Expansion (x10 ⁻⁶ /°F, 68-392°F) | 10.3 |
| Coefficient of Thermal Expansion (x10 ⁻⁶ /°F, 68-572°F) | 10.4 |
| Specific Heat Capacity (Btu/lb/°F at 68°F) | 0.09 |
| Annealing Temperature Range (°F) | 930-1110 |
| Hot Working Temperature Range (°F) | 1200-1400 |



Minimum Mechanical Properties (ASTM B505, B584, B806)

| Casting Method | Tensile Strength (ksi) | Yield Strength (ksi) | Elong. % | Brinell Hardness 500 lb Load |
|-----------------|------------------------|----------------------|----------|------------------------------|
| Sand | 59 | 22 | 16 | |
| Permanent Mold | 64 | 32 | 16 | |
| Continuous Cast | 65 | 25 | 8 | 103 |



Chemistry Specification (ASTM B30)

| Cu (%) | Si (%) | P (%) | Pb (%) | Fe (%) | Sn (%) | Ni (%) | Mn (%) | Sb (%) |
|--------|---------|-----------|----------|----------|----------|----------|----------|----------|
| 75-78 | 2.7-3.4 | 0.05-0.20 | 0.09 max | 0.10 max | 0.30 max | 0.20 max | 0.10 max | 0.10 max |

For further information please contact:

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To learn more or obtain a list of ECO BRONZE® plumbing manufacturers visit

www.ECOBRONZE-USA.COM

