

**Quality Control:** Finished parts closely inspected to insure and maintain your standard of excellence.

## CALL: 800-228-4043

#### www.magnoliabronze.com



#### **MAGNOLIA GUARANTEES NO REJECTS**

Magnolia Bronzes are guaranteed to be free from all defects. In Magnolia Bronze there are no blowholes, no sand spots, no segregated elements, no flaws... no under-surface faults of any kind to cause rejection.

In accordance with industry practices, guarantee is limited to free replacement of material returned. But why just "hope" to get a good casting? Magnolia's quality control procedure has resulted in returns of less than ½ of 1% of all bronze shipped over the last 20 years. This standard of excellence combined with our special alloy and our unique casting process assures you of the best possible value in bearing bronze.



AVAILABLE IN NOW LEAD.FREE BRONEW B. 7



# **EXCELLENCE IN FINISHED BEARINGS PRECISION • PRICE • PERFORMANCE**

# **SINCE 1886**

# www.magnoliabronze.com

TOLL FREE 1-800-228-4043 | FAX 402-455-8762 bronzesales@magnoliabronze.com

#### MAGNOLIA CORPORATION

www.magnoliabronze.com

#### **MAGNOLIA METAL CORPORATION**

Office: 10675 Bedford Ave #200 Omaha, NE Plant: 63859 730 Rd, Auburn, NE Toll Free: 800-228-4043 | Fax:402-455-8762 bronzesales@magnoliabronze.com

#### **OUALITY A BETTER PROCESS: A BETTER PRODUCT**

Magnolia Bronze bushings and bearings, die cast in steel molds, remain absolutely free of any hidden sand particles which may damage the shaft. Our unique casting process allows for a uniform, or "isotropic" crystal structure unlike that found in sand cast metals.

In addition to eliminating all pattern costs, the Magnolia casting method gives you a perfect bearing metal at a price often surprisingly lower than the original equipment manufacturer's replacement part.

Send your own blueprint in detail for guoting and ordering purposes. We handle all inquiries promptly.

#### **A BETTER BRONZE: A BETTER PRODUCT** CDA 936 SUPERIOR TO CDA 932

Tests conducted in both a national laboratory and a major university confirm Magnolia CDA 936 consistently outperforms CDA 932 (SAE 660) under the most difficult conditions in test after test.

#### CDA 936: BETTER BECAUSE

- Higher lead content gives better lubricating properties and provides a better co-efficient of friction. Bearings run cooler, last longer.
- One and half times as resistant to pounding.
- Acid resisting to sulphite fluids due to lower zinc content. CDA 936 can be used in areas where CDA 932 would corrode.

#### **TYPICAL PHYSICAL CHARACTERISTICS**

	TENSILE STRENGTH	YIELD POINT	BRINELL	ELONGATION IN 2°
CDA 936	35,000 psi	21,000 psi	65	15
CDA 932	35,000 psi	18,000 psi	65	15

#### **CHEMICAL COMPOSITION**

	COPPER	TIN	LEAD	ZINC
CDA 936	79% - 83%	6% - 8%	11% - 13%	<1%
CDA 932	81% - 85%	6% - 7.5%	6% - 8%	2% - 4%



#### STANDARD COMMERICAL **MACHINE TOLERANCE** (UNLESS OTHERWISE SPECIFIED)

Inside Diameter: Up to 3" I.D. ..... ±.001" 3" I.D. and up ..... ±.0015" Outside Diameter: Up to 3" 0.D. ..... +.002" to + .003" 3" 0.D. to 5" ...... +.003" to + .005" 5" O.D. and up .....+.003" to .006" Concentricity (Total Indicator Reading) <sup>3</sup>/<sub>4</sub>" through 3" 0.D. .....003 maximum Over 3" through 8" O.D.....004 maximum All lengths will be held to ±.005"

#### **THE BEST BRONZE: TESTED & PROVEN** Laboratory Tests Prove It!

At Magnolia, we don't just say we have a better alloy, we have proven it. Independent tests at both a national laboratory and a major university demonstrated the durability of C93600.

The bearings were run with inadequate lubrication until temperatures exceeded 400°F. Under these severe conditions, in some instances the CDA 932 wore out three times faster than CDA 936. In no test did CDA 932 outperform CDA 936.

Newly completed tests by a major university also prove that Magnolia's CDA 936 alloy has a significantly higher failure resistance than CDA 932. Despite extreme circumstances, operating without lubrication, CDA 936 ran an average of 78% longer than CDA 932, and with none of the incidents of severe shaft scoring found among the CDA 932 tests.

#### **CAPABILITIES**

#### **COMPUTER NUMERICALLY CONTROLLED LATHES**

- Machined parts up to 10" O.D.; 10 to 1,000 pieces
- Capable of intricate detailing and exacting tolerances

#### SUPPLYING ALL YOUR FINISHED PARTS NEEDS

- Capable of machining  $\frac{1}{2}$ " to 34" O.D.
- Quantities of 1 to 1,000 pieces
- Precision guaranteed Return rate of less than ½ of 1%!

#### **MAGNOLIA ALSO MAKES:**

- Continuous Cast Bronze up to 12 ½" O.D. Lengths up to 144".
- Semi-Finished machined bronze to 34" O.D.
- Lead and tin base babbitts.
- Babbitted bearings.



### **LEAD-FREE B-1 BRONZE**



#### PRICE

A computerized cost system, combined with modern machining equipment and our own foundry, enable Magnolia to provide some of the most competitive pricing in our industry.

#### **SERVICE**

Magnolia maintains over 2 million pounds of continuously cast and steel-cast inventory specifically to handle rush and breakdown situations

We have built our reputation on service!



#### LARGE PARTS UP to 34" O.D.

FULL DETAILING: Milling • Drilling • Grooving • Split & Sweats

#### SPECIAL ALLOYS

Magnolia also stocks Bronze in CDA 937 (Cert 64), #120 High Lead Bronze (20% lead) similar to an SAE 67, AA Hard or CDA 903 and SAE 63. In addition to these standard alloys, Magnolia is capable of casting most tin bronzes and leaded tin bronzes on a special-order basis.

#### **Resolve your lead concerns the** easy way with our B-1 Bronze. It's the best alternative.

- Superior performance characteristics required in bearings
- Lower net cost than generic lead-free bronzes
- Addresses environmental and workplace concerns