MAGNOLIA

Since 1886

SPECIAL BRONZES FOR SPECIAL APPLICATIONS

#120 HIGH LEAD BRONZE

Formulated specifically for bearings that are difficult to lubricate or subject to high local heat, #120 High Lead is the ideal metal when lubrication is doubtful, yet strength is required. The higher lead content (20%) of Magnolia's #120 High Lead Bronze allows the bearing to withstand a harsher environment, absorbing dirt, grit and other foreign matter that may otherwise damage the shaft. #120 High Lead has as much as **3 times** the lead content of SAE 660 and only **1/3** the zinc content.

Magnolia's unique casting process overcomes the problems found in sand and centrifugal castings and assures that the lead is evenly dispersed throughout the metal. #120 High Lead has been readily substituted for alloy CDA 938, 941, 943, and 945 applications.

Typical Chemical Analysis

	COPPER	TIN	LEAD	ZINC
#120 High Lead	73-77%	5-7%	18-20%	≤1%

Typical Physical Characteristics

TENSILE STRENGTH	YIELD POINT	BRINELL	ELONGATION IN 2"
28,000	16,000	55	10

COMPARE QUALITY

The bronze shown in these unretouched photomicrographs are both very high leaded bronzes (20% lead), the difference being the casting process.

Note the superior consistency of mixture in the top photo. Cast in steel, using Magnolia's exclusive crystal control treatment, assures completely uniform dendritic crystallization and absence of segregation. This is the perfect bronze bearing metal.

Photomicrographs enlarged 500 diameters.

#120 HIGH LEAD BRONZE

SAND CAST HIGH LEADED BRONZE

The bottom photo is bronze cast in sand, without Magnolia's exclusive crystal control treatment. Notice the conglomerate sponge structure showing black segregated lead and white Cu-Sn crystals. This is ordinary bronze, definitely inferior in quality. Absolutely none of Magnolia Bronze products are cast in sand. Therefore, all are free from segregated elements, trapped gases and internal faults. Why just "hope" to get a good casting, when Magnolia will guarantee one.

- Steel-cast bronze up to 28½" O.D.; 30" O.D. of flange.
- Continuous cast bar up to 12½" O.D.
- Machined blanks or finished to print

Magnolia Metal Corp., 10675 Bedford Avenue, Suite 200, Omaha, Nebraska 68134
CALL: 800-228-4043 FAX: 402-455-8762

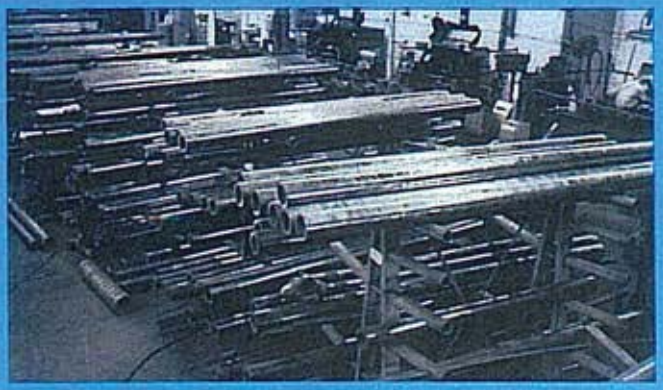
MAGNOLIA CARRIES HARD TO FIND ALLOYS:

MAGNOLIA'S AA HARD CDA 903

More commonly known as CDA 903, SAE 620 or Navy "G" metal, Magnolia's AA Hard Bronze is recommended for heavy duty applications where hardness and more strength are required. Containing 88% copper, 8% tin and 4% zinc, AA Hard Bronze has the advantage of high strength, yet is not as likely to score the shaft as an aluminum or manganese bronze will. AA Hard is used extensively in gears, rings, and impellers, as well as bushings and bearings.

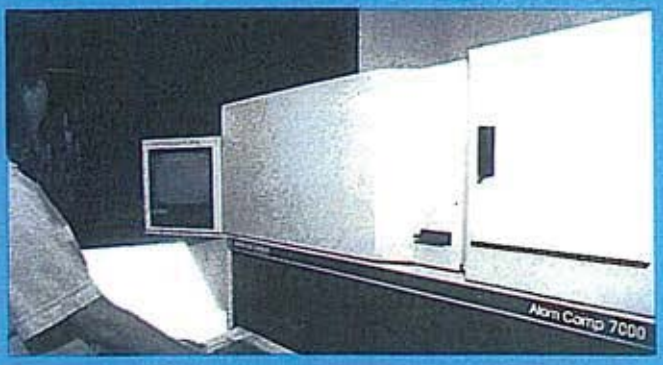
Magnolia stocks dust seals for all Banbury® mixers.

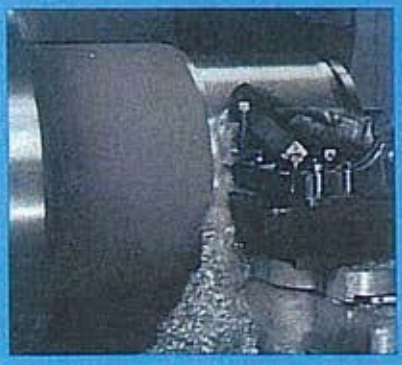
Magnolia also casts and carries CDA 936 (Modified SAE 64), CDA 937 (Cert. 64), and SAE 63. In addition to these standard alloys, Magnolia is capable of casting most tin bronzes and leaded tin bronzes on a special order basis. We will be glad to quote promptly.



INVENTORY:

Magnolia maintains over 2 million pounds of steel cast and continuous cast inventory specifically to handle RUSH and BREAKDOWN situations. We built our reputation on service.





QUALITY:

Guaranteed by using our Jarrell-Ash® Atom Computer 7000 Spectrometer. Magnolia's quality control procedure has resulted in returns of less than ½ of 1% of all bronze shipped over the last 10 years.

SERVICE:

A full service machine shop, our own foundry, an excellent product and qualified staff combine to provide the best possible service.

Sales Office: Magnolia Metal Corp., 10675 Bedford Ave, Omaha, Nebraska 68134
Plant: 63859 730 Rd., 6th Street, Auburn, Nebraska 68305
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CALL TOLL FREE: 800-228-4043

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