

MAGNOLIA

**LEAD-FREE
B-1® BRONZE**
Pat. #5,413,756

**Can You
Tell The
Difference?**

*Clearly the
right one...*

B-1®

Photomicrograph
100x

Magnolia B-1® Lead-Free Bronze
CDA 89320

Leaded Tin Bronze
CDA 93200

NOW YOU DON'T HAVE TO SACRIFICE PERFORMANCE when you switch to a lead-free bearing alloy. Other currently offered "lead-free" compounds have focused only on being lead-free. Most are hard, brittle, and lack the anti-galling properties critical to bearing applications. Some of these materials even contain zinc. Generic low leaded alloys, such as CDA 903 and CDA 954, are actually referred to as "hard bronzes", and have poor machinability ratings, adding to their already high cost. MAGNOLIA B-1® LEAD-FREE BRONZE was specifically designed to match the properties of the leaded alloys it replaces.

Typical Physical Properties		
	Magnolia B-1® Lead-Free Bronze CDA 89320	Leaded Tin Bronze CDA 93200
Tensile Strength	40 ksi	35 ksi
Yield Strength	20 ksi	18 ksi
Elongation	30%	20%
Brinell Hardness	80	65
Machinability	80	70

Nominal Chemical Composition		
	Magnolia B-1® Lead-Free Bronze CDA 89320	Leaded Tin Bronze CDA 93200
Cu	89%	83%
Sn	6%	7%
Pb	—	7%
Bi	5%	—
Zn	—	3%

**Simply the Best
Alternative**

- Safety** – Lead content of less than 1/10th of 1%.
- Cost** – Even a better machinability rating than CDA 932.
- Performance** – Provides the protection needed in a bearing.

When just being LEAD-FREE isn't good enough: **LEAD-FREE Magnolia B-1® Bronze**



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