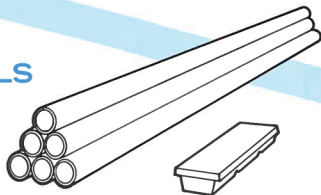


# MANUFACTURING AND PRODUCTION CAPABILITIES

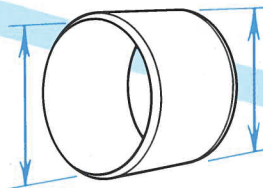
## MATERIALS



**Steel Tubing** is cold rolled electrical resistance welded, MT 1010 I.D. flash controlled.

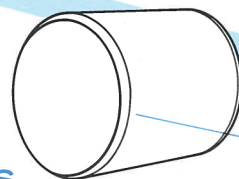
**Lining** is SAE 13 lead based babbitt.

## O.D./I.D. CAPACITY



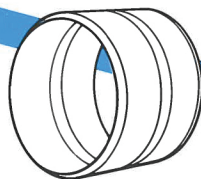
**Outside Dimension:** 3¾" maximum  
**Inside Dimension:** ¾" minimum

## LENGTHS AND CHAMFERS



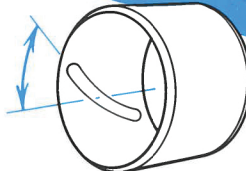
**Maximum Length:** 5.000"  
**Minimum Length:** 0.500"  
**Chamfers:** Inside: 45°  
Outside: 20° to 45°

## CIRCULAR GROOVES



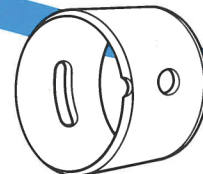
Up to 360° O.D. and I.D. grooves

## ANGULAR GROOVES

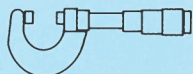


Angular grooves and closed loop grooves.

## OIL HOLES AND SLOTS



Punched holes and slots are worked from inside out to eliminate possibility of steel being formed into the bearing surface.



## TOLERANCES

**Finish O.D.:**  $\pm 0.0005$ "

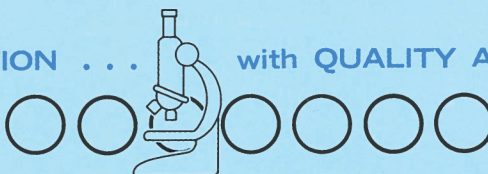
**Finish Wall:**  $\pm .0003$ "

**Length:**  $\pm 0.005$

Angular location of punched holes, slots and notches  $\pm 1$  degree.

All other dimensions unless otherwise specified are  $\pm .010$ ".

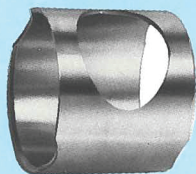
## PRECISION PRODUCTION . . . with QUALITY ASSURANCE



Dura-Bond offers plant and production capacity to accommodate flexible scheduling and delivery requirements. We are particularly competitive on long runs of special precision finished parts.

All production is controlled, inspected and tested in accordance with the requirements set forth in our "General Quality Standards." This list of standards specifies minimum control procedures and necessary documentation that make up our Quality Control System.





— A HISTORY OF EXCELLENCE IN THE PRODUCTION  
OF TUBULAR STEEL PRODUCTS

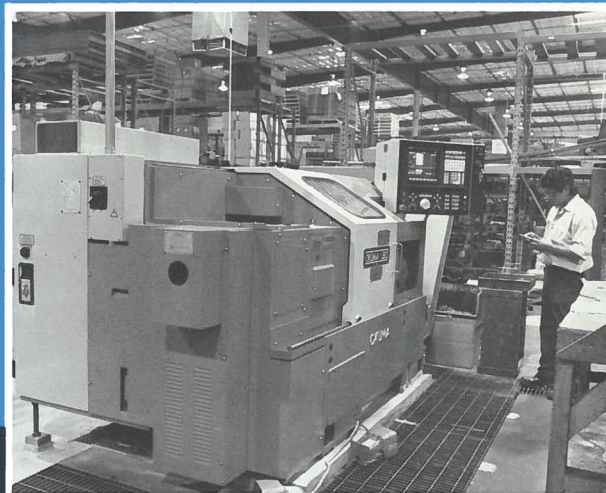
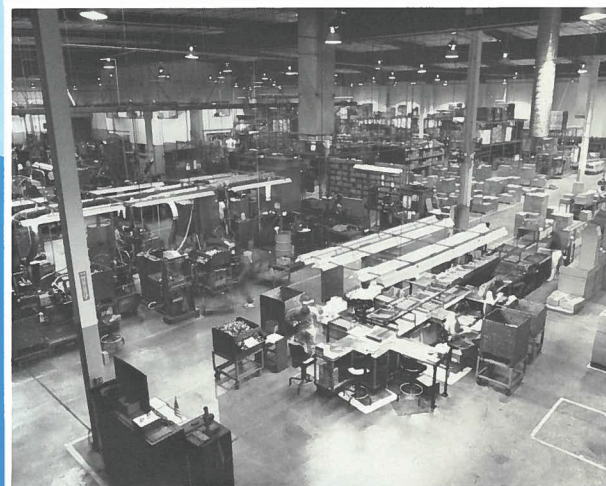
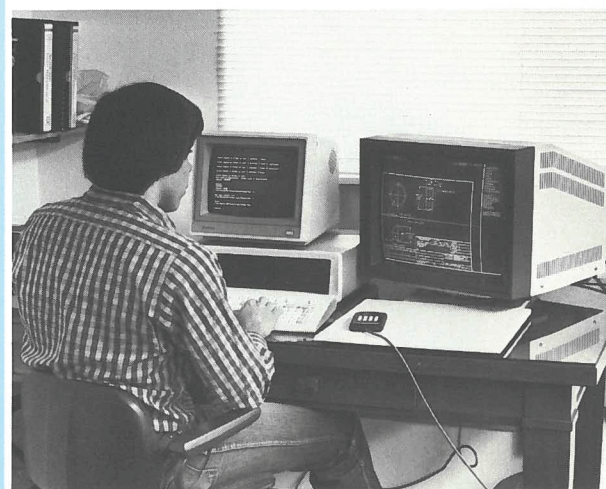
**Dura-Bond has an enviable record for efficient mass production of “all-round” camshaft bearings for automotive, industrial and marine applications.**

**The Dura-Bond bearing has gained distinction because it offers high precision at a moderate cost. Produced from steel tubing to which a lining of babbitt metal is bonded, the bearing has no splits or interlocking joints common to bearings made by the conventional strip method. The physical features of the product, coupled with the unique processes used in its manufacture have distinguished the Dura-Bond bearing for its ease of installation and precise fit.**



At the new 85,000 square foot Carson City facility, a sophisticated metal manufacturing technology has been developed. Dura-Bond has refined the science of babbitting, boring, punching and grooving tubular metal products on a mass production basis. Further, millions of parts have been turned out of the Dura-Bond plant with particular attention to product quality and precision. Hundreds of sizes are machined to extremely close tolerances. In the interest of extending this production capability,

Dura-Bond is now soliciting new customers who may have need of such high quality, precision manufacturing capability.





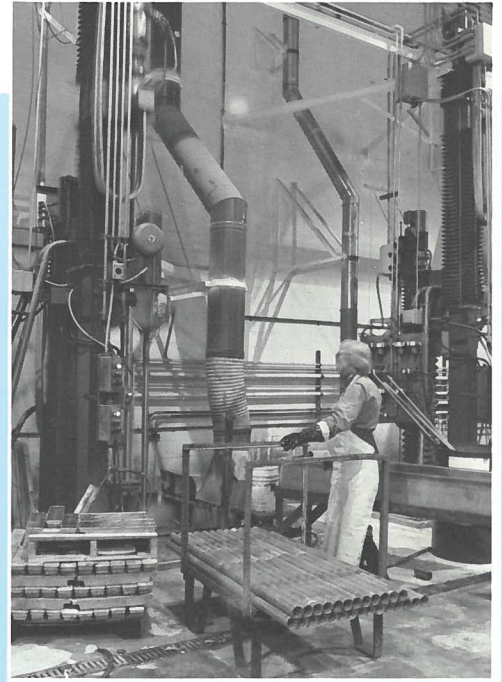
# Dura-Bond®

IF YOU HAVE A PRODUCT THAT INCORPORATES ANY OR ALL OF THESE MANUFACTURING PROCESSES, YOUR FURTHER INQUIRY IS INVITED

## BABBITTING

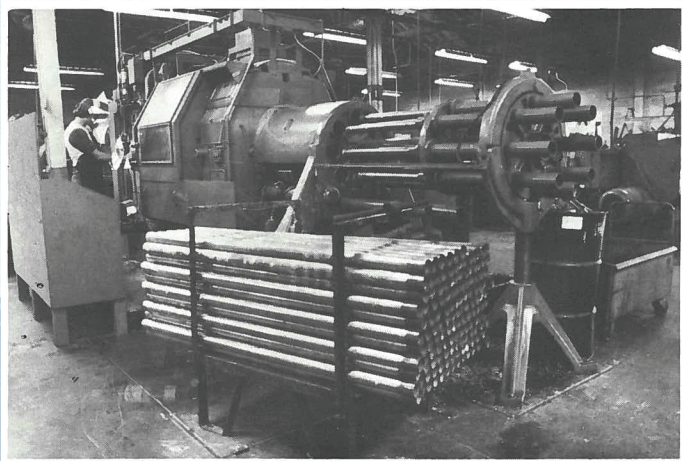
After a molten caustic bath, metal tubing is rinsed and lightly etched to assure perfect babbitt bond. The lining of babbitt is cast inside of the prepared tubing, with special vertical automatic centrifugal casting machines used for this purpose.

The thickness of the babbitt lining is precisely controlled by the automatic machine settings — an exclusive feature of the Dura-Bond babbitting process.



## AUTOMATIC SCREW MACHINING

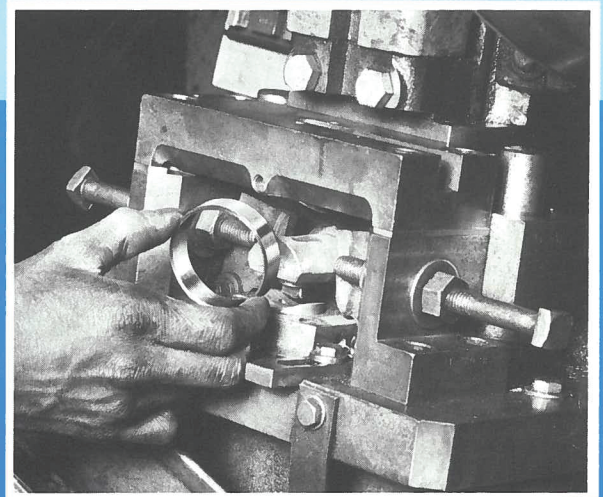
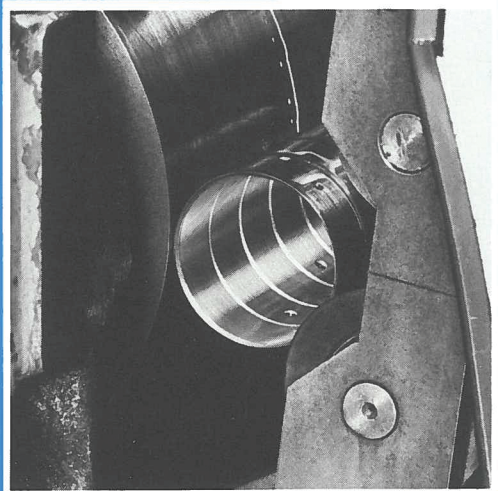
Rough boring, facing, chamfering and parting are performed on 4, 6, and 8-spindle machines. Though normally used in camshaft bearing production, these automatic machines have — on occasion — been tooled for contract manufacturing of other parts made from tube or bar stock.



## CENTERLESS GRINDING AND BORING

The outside diameter of the parts is centerless ground to less than 50 micro-inches finish.

Precision I.D. boring is accomplished on a specially designed centerless boring machine developed exclusively for the Dura-Bond product. Constant wall thickness is maintained within six ten thousandths of an inch.



## PUNCHING AND GROOVING

A short stroke press punches holes from the inside of the part. The press ram stops in the middle of the stroke so holes are punched on both upward and downward strokes. Angular or circumferential grooves may be milled into the part, and presses are equipped with indexing features for multiple holes.