How to Make a Babbitting Mandrel

for your Little Giant Powerhammer

Using a mandrel, or dummy shaft, allows collars to be used to stop the flow of the molten babbitt (see photo). Also, keyways in the actual main shaft present a problem when pouring babbitt, and the weight of the flywheel interferes with the babbitting process. Using a mandrel eliminates the problems of trying to use the actual main shaft.

Size of Hammer	25 LB	50 LB	100 LB
Diameter of Shaft	1 5/8"	2"	2 ½"
Length of Shaft	20"	26"	30"

Obtain the correct size of cold rolled steel from your local metal supplier. Polish the mandrel to ensure there are no burrs on it.

To prevent the hot babbitt from running out of the bearing cavity, collars must be placed on the end of each bearing, in conjunction with damming compound.

WARNING Only use damming compound meant for this purpose; the brand we sell is Moldpak. Do not use substitutes that may have moisture content, as this can result in steam pockets that will cause the hot babbitt to bubble out.

Place collars on shaft as shown in photo. To make collars for a 100 LB mandrel, turn a piece of stock to 2 ½" inside diameter by approximately 4 ¼" outside diameter, and approximately 1 ½" thick. Use damming compound between collar and bearing upright.

Collar for 25 LB Mandrel.....$9.00 each
Collar for 50 LB Mandrel.....$15.50 each
Babbittrite Damming Compound (2 LB).....$48.50
Babbitt (per pound).....$8.20