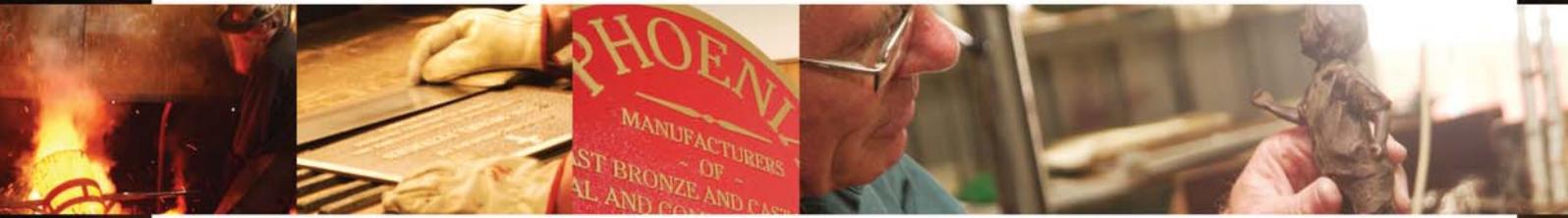


PLAQUE MANUFACTURING PROCESS



> Overview

Phoenix Foundry manufactures Cast Bronze Memorial Plaques and markets these across Australia and overseas. The plaques range in size from 30mm to 800mm and each contains a unique inscription and a variety of design features. Some 1500 to 2000 plaques are produced each month. There are 8 stages within the production process:

1. Plaque Design

The layout of the inscription, motifs and other design features are keyed up in computer programs from information provided by the customer.



2. Negative Production

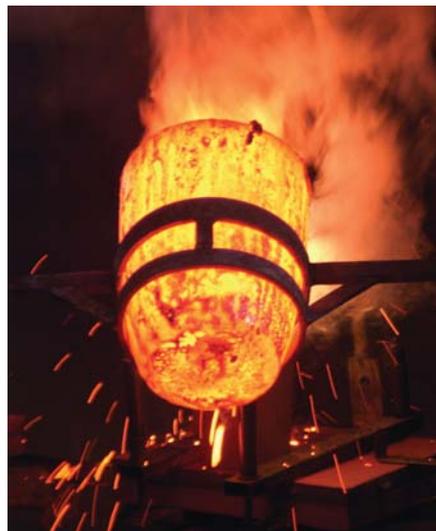
The plaque designs are transferred to a photographic negative in an image setter.

3. Moulding

The patterns are placed in a mould box and covered with a thin layer of a blend of selected virgin sands. The remainder of the box is filled with a mix of silica sand and binder which hardens the sand after a short time interval. This mould is stripped from the box and assembled with other sections ready to receive the molten bronze.

4. Pouring

Bronze ingots are melted in a gas fired or induction crucible furnace to a temperature of around 1200°C. The molten bronze is poured into the mould and solidifies in the form of the finished plaque. On cooling the mould is broken and the casting recovered.



5. Fettling

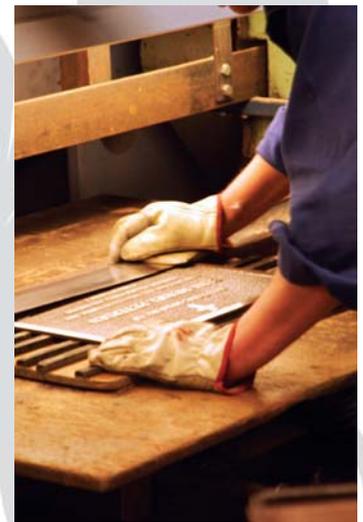
This stage of the process involves cutting off excess bronze from around the plaque, water and sand blasting and edge finishing to prepare the plaque for further processing.

6. Detailing

Within this stage fittings are attached and any irregularities are eliminated.

7. Finishing & Painting

The plaque is painted with background colour in a spray booth. The surface of the plaque containing the inscription is then ground with a belt finishing machine to bring up the bronze metallic colour on the raised inscription and other design features. A clear protective layer of paint is then sprayed on and the plaque baked in an oven to harden this protective layer.



8. Inspection and Packing

The plaques then undergo a final quality inspection and are packed ready for dispatch.

For more information about Phoenix Foundry and our products visit www.phoenixfoundry.com.au

