

# MANUFACTURE

## HOT METAL & MOULDING



Workers with moulding box for pillar box, 1984



Moulding box with mould for pillar box, 1984



Filling container with molten metal at cupola spout, 1984. A Hyster truck is supporting the container while it is filled with molten iron.



Moulders pouring molten iron from ladle into moulding box, 1950s (The Scotsman)

In the Moulding Shop the patterns, often made up of many different components, would each be placed in a moulding box, set in sand in a very particular way, and carefully consolidated. They were then removed to leave an appropriately shaped void in the sand.

Molten iron was then brought from the stream at the spout of a cupola (furnace) in one of a variety of different shaped containers, before being transferred to a "ladle" of one of a number of different types, some hand-held. The ladle was then used to pour the molten iron into the moulding box.



Moulder pouring molten iron from bogie into a ladle, 1950s

Over the years a variety of conveyances were used to move molten iron round the foundry floor, including the 2-man, 2-wheeled "bogie". In later years Hyster trucks, with balance weights manufactured in the Lion Foundry were used, affording the foundrymen a satisfying opportunity to make constant practical use of their own handiwork.

After an appropriate period for cooling, the iron castings were removed from the moulding boxes and taken to the Dressing Shop for finishing work



Molten iron being poured from ladle into moulding box, 1984



Moulders at work, 1950s



Moulders pouring metal into moulding boxes with hand ladles, 1984



Aerial view of the Lion Foundry site, 1923. The River Luggie is to the left of the foundry, with the Forth & Clyde Canal at the top of the picture. The railway line is beyond the River Luggie, and there is a branch line crossing the Luggie and into the foundry yard.