Brief history of shot making.

It is believed that the origins of making shot started by folding/forming small pieces of cut lead sheet in to “round” lumps by hand or casting molten lead in moulds.

Then came the shot tower.

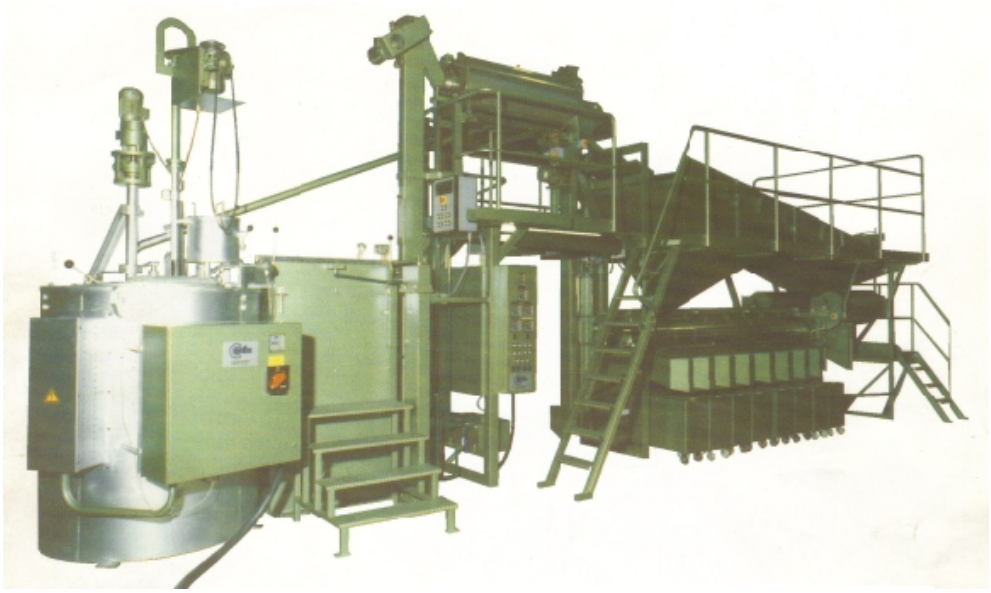
The process was invented by William Watts of Bristol, UK, and patented in the late 18th century.
Watts extended his house in Redcliffe, Bristol to build the first shot tower in 1782.

In a shot tower,lead is heated until molten, then dropped through a copper sive high up in the tower. The liquid lead solidifies as it falls and by surface tension forms tiny spherical balls. The partially cooled balls are caught at the floor of the tower in a water-filled basin.
The now fully cooled balls are checked for roundness and sorted by size; those that are "out of round" are remelted. A slightly inclined table is used for checking roundness.
To make larger shot sizes, a copper sieve with larger holes is used. However, the maximum size is limited by the height of the tower, because larger shot sizes must fall farther to cool. A polishing with a slight amount of graphite is necessary for lubrication and to prevent oxidation.

Today the Bliemeister (or short drop) method is used to make smaller shot sizes.

The larger sizes are made by the cold swaging process of feeding calibrated lengths of wire into hemispherical dies and stamping them into spheres.

locatelli Italy – shot tower.



Bliemeister shot maker
440kg per hour of No. 8 shot
570kg per hour of No. 6 shot

RAMBA - shot press