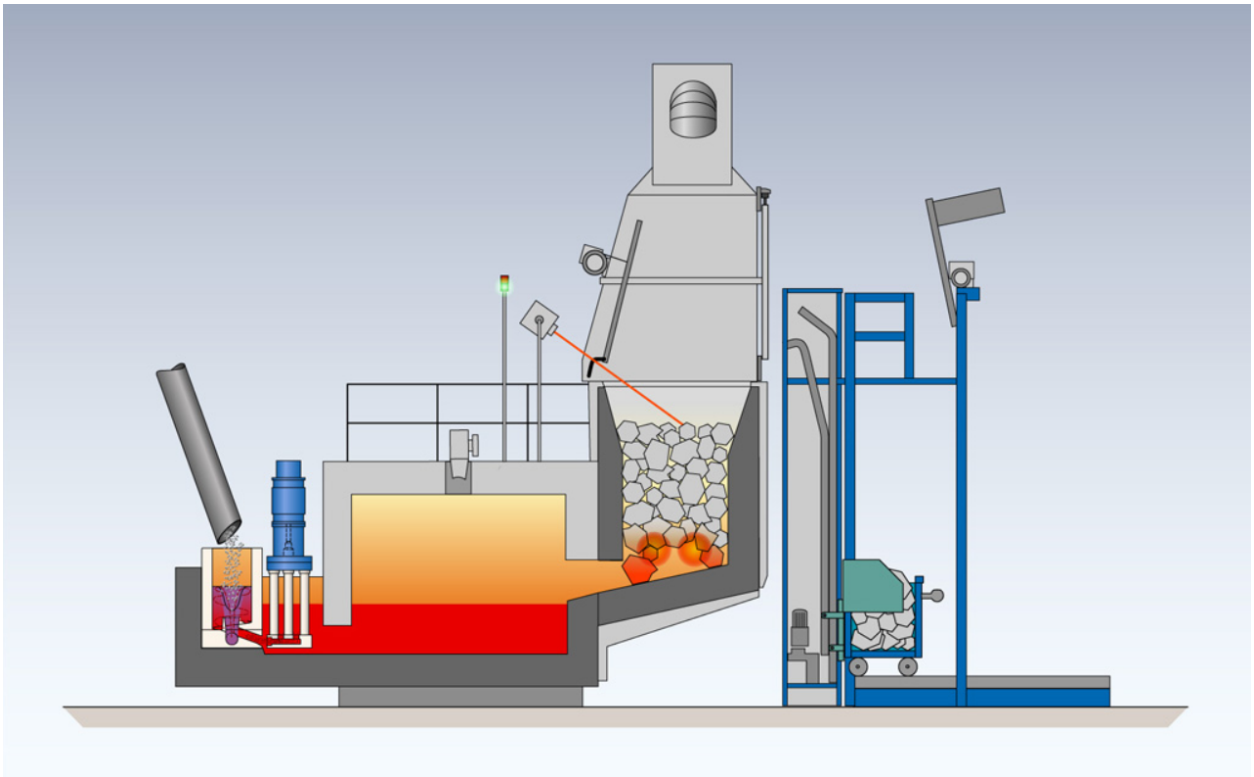
Aluminium beverage cans

This method is not used in regular households as high temperatures are required in the process of recycling.

- Cans are collected from Municipal wastes and then were cut, non-magnetic into small-sized pieces

- These pieces were cleaned and prevented from any contact with air. (Since Al may react with air)

- Blocks are loaded in the furnace and heated up to 750 °C ± 100 °C to produce molten Aluminium



- Solid waste and gases are removed from Aluminium. We use Chlorine and Nitrogen gas for these processes mainly. Ammonium perchlorate is used as it is the main source of Nitrogen, Chlorine, Oxygen when heated

- Samples are taken for spectroscopic analysis. Depending on the final product desired, high-purity aluminium, copper, zinc, manganese, silicon, and/or magnesium is added to alter the molten composition to the proper alloy specification.

- Solid waste produced sometimes may contain Aluminium in it.

It is used as a filler in asphalt and concrete

- Tilting rotary furnaces are used for recycling aluminium scrap, which gives higher recovery compared to reverberatory furnaces (Skelner Furnace).