

# Ball mill

A **Ball mill**, a type of Mill, is a cylindrical device used to grind (or mix) materials like ores, chemicals, ceramic raw materials and paints. Ball mills rotate around a horizontal axis, partially filled with the material to be ground plus the grinding medium. Different materials are used for media, including ceramic balls, flint pebbles and stainless steel balls.

**Ball mill**, a kind of horizontal drum-type rotating device, is a grate mill with external gear and double bins. Materials shall be evenly charged through quill shaft in feeding device into the first bin, which has step or waved lining with steel balls in different specifications. Steel balls are taken to a certain height by centrifugal force from drum rotation and then fall. Thus it will give a heavy blow to materials, playing a role of grinding. Materials after crushed in the first bin shall enter bin across single-layer diaphragm into the second, which is provided with flat lining with steel balls, to go through further grinding. Powder shall be discharged from discharging grating, ending the milling process.

**Ball mill** is mainly composed of charging and discharging, cyclone and rotation parts (like redactor, minor rotation gear, motor, electric machine, etc). Hollow axis is made of steel parts with a lining replacable. Major rotation gear, machined by rolling wheel of casting, is lined with wearing plate with fine wear-resisting property. This machine runs stably and reliably.

Based on difference of materials and discharging types, dry ball mill and wet ball mill are selectable.