



Product datasheet

Drum Pelletiser

Perfectly well-rounded materials

Burning fine-grained materials in bulk requires uniform particle size distribution, high material densities and maximum flowability – all of which requires careful preparation. Our drum pelletiser is a highly specialised machine designed to prepare your materials for burning in the high-temperature shaft kiln. The drum pelletiser ensures your materials have sufficient porosity for the kiln gas to be properly distributed inside the bulk.

The design of the drum pelletiser is both simple and highly sophisticated to ensure material transport in both directions inside the horizontally arranged drum. The drum system is the best solution to generate almost perfect spherical shapes due to the random rolling motion inside the charge.

Fine-grained material, which is fine ground powder, dust or precipitate, is fed into the inlet of the drum pelletiser. Granulation seeds and internally recycled pellets are added to the bed of material and water is mixed in. The amount of cold water and the rotational speed of the drum are central to the quality of pellets formed. In addition, the internal design of the drum is aligned to feed material properties as well as product requirements with respect to uniformness and mechanical stability.

Drum Pelletiser

The drum is subdivided into two process segments: In the front section the pellets are formed when seed grains and screen underflow, which are internally recycled, pick up mass through the addition of water and contact with fresh feed while agitated in the material bed. In the rear section mature pellets are discharged as overflow from a spiral type screen. Smaller diameter pellets that have not reached the desired geometry yet pass the spiral screen and are internally returned towards the front end to pick up more mass.

As soon as the number of pellets in circulation decreases, fresh seed material will be fed so that new pellets can develop. Most drum internals are equipped with a rubber lining, which acts as wear protection and provides the necessary friction for the pellet's rotation.

Technical specification

Fields of application

Calcined materials, such as alumina or spinel

Dolomite dust (e.g. from off-gas cleaning)

Fine-grained materials

Main features

High pellet density and stability

Uniform and adjustable pellet diameters

Low formation of fine material (low recycle rate during screening)

Considerably lower investment costs compared to a briquetting plant

Low maintenance costs

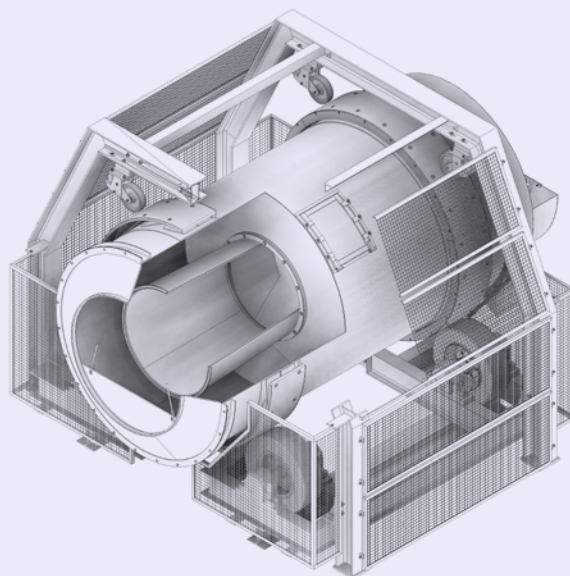
Low power consumption

Only water required as binding agent

Design parameters

Daily output: up to 60 tons

Defined diameters between 10 and 30 mm



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