

RAYMOND® IMP™ MILL

Flash Drying & Flash Calcining System

With a 130 years of experience, Raymond is a leader in the design and manufacture of industrial milling equipment and has set the standard in size reduction.

For Pulverizing and Drying

The Raymond Imp Mill System: Versatile and dependable high speed air-swept swing hammer impact mill designed for fine and medium grinding of soft non-metallic minerals, coals, various chemical compounds, food products and other materials.

The imp mill is capable of effectively pulverizing almost any solid material with a nominal one inch (25mm) top size that is softer than 2 on the Mohs Scale to a fineness of 1,000 microns or as little as 5 microns.

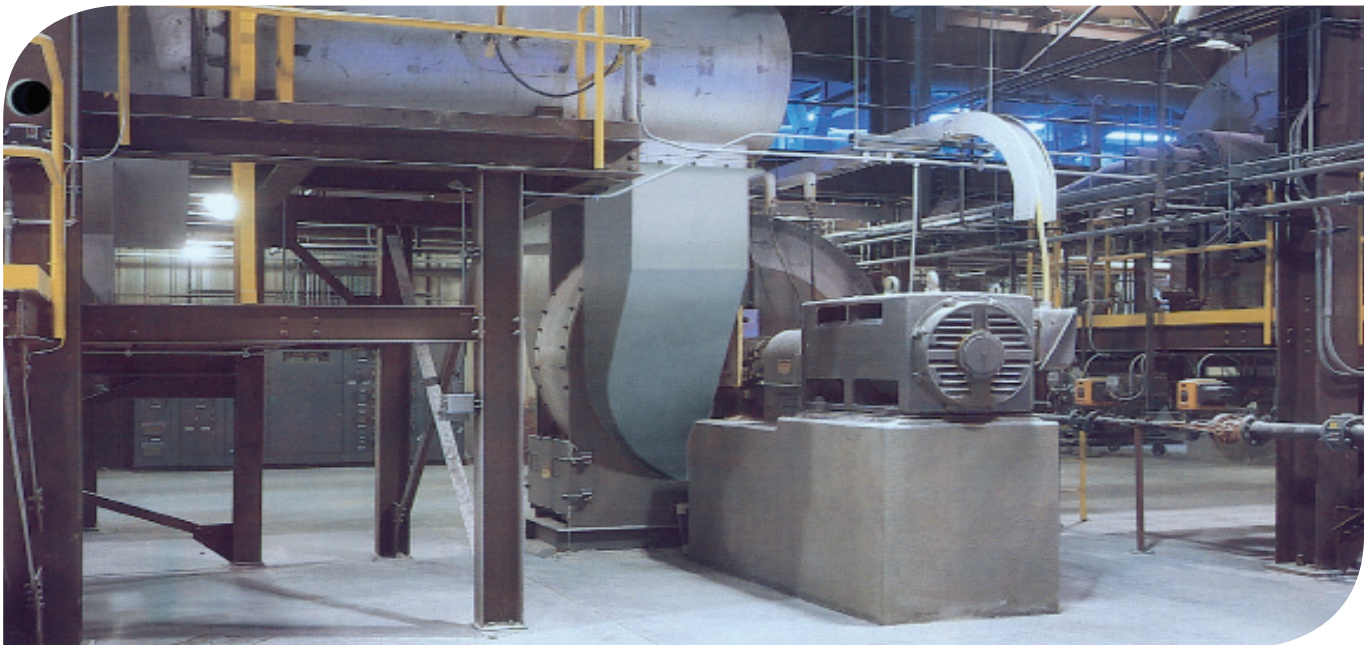
Raymond Imp Mill Flash Drying System

Various materials contain free water in the form of moisture that has to be removed in order to increase the value of the pulverized material and allow it to be handled more efficiently. The imp mill system has the flexibility to pulverize and dry the material simultaneously.

The mill system with flash drying requires waste heat or a source of heated air. The heated air is used to flash dry the material as it is pulverized and swept from the mill. Depending on the initial moisture content of the feed, a portion of the dried product may be combined with moist material in a double paddle mixer. This “conditioned” feed is easier to handle and is more efficiently dried and pulverized. A vent is provided to remove a portion of the moist air returning the balance to the system where it is mixed with fresh, hot air from the air heater.

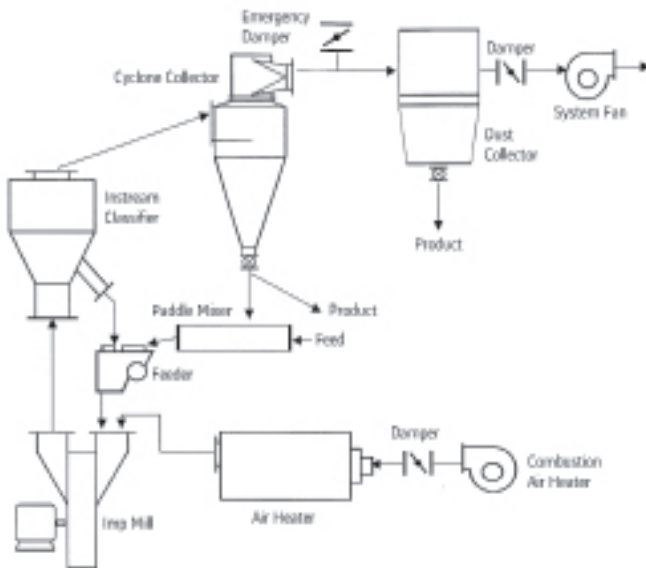
ADVANTAGES

- Available in six sizes.
- Capabilities from 250 to 40,000 lb/hr.
- Flexibility to pulverize and dry simultaneously.
- Heavy-duty welded plate construction.



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In addition to free moisture, some materials, such as gypsum, contain a chemically-bound water that must be removed in order to change the physical characteristics of the material. This process, known as calcining, can be easily accomplished by the imp mill system.

Essentially similar to the imp mill system with flash drying, the system with flash calcining provides a number of special features that make it suitable for the higher temperatures involved. Our experience in processing gypsum, by-product gypsum and waste wallboard provides our customers with a single source equipment supply for processing gypsum and the manufacturing of gypsum wallboard stucco.

CONSTRUCTION FEATURES

- Heavy-duty construction - housing and bases feature heavy gauge steel plate construction for structural rigidity, long service life and the mass required to ensure smooth performance.
- Housing liners - mill housing fitted with bolt-on replaceable liners, available in a variety of alloys.
- Bearings - cast iron split pillow block with self-aligning spherical roller bearings.
- Hammers - available in various shapes and materials to assure maximum grinding action and efficiency.
- Housing - split housing design provides quick access to mill interior, reducing maintenance costs and lost productions.
- Hammer disks/rotor assembly - constructed of heavy gauge steel plate with abrasion resistant liners, mounted on a hot-rolled steel shaft and electronically balanced at high speed for smooth operation, long life and the inertia to absorb heavy impact.

