

Bartlett-Snow™ Rotary Kilns

Providing Solutions for High Temperature Applications

Since 1885, Bartlett-Snow™ rotary thermal processing equipment and systems have been successfully solving heat transfer applications around the world for the chemical, petrochemical, ceramic, high tech metal, food, fertilizer, plastic, industrial solid waste, contaminated soil, and nuclear industries.

Bartlett-Snow™ rotary kilns are known for their high on-line availability and operational integrity for tough applications involving high temperatures, corrosive conditions and atmospheric control operation. As a result of this expertise, we can help you develop plans for your particular processing needs from the earliest conception, through design, fabrication, installation, and start-up of the process equipment.

Our capabilities include pilot plant and laboratory testing in a modern facility to determine physical and chemical data for process development and proper equipment size selection.

Our experience includes over 3,500 rotary units that covers the full spectrum of calcining, cooling, drying, pyrolyzing, reducing, oxidizing, heat treating, incinerating, pelletizing, granulating, and mixing applications. Bartlett-Snow™ direct-fired refractory-lined kilns are provided for applications requiring material temperatures up to 3000°F and atmospheres that are oxi-



60" diameter x 65' long Bartlett-Snow™ Rotary Kiln

dizing or slightly reducing. The units are arranged for co-current or counter-current operation, with the counter-current arrangement most frequently utilized. Bartlett-Snow™ rotary kilns are designed and shop fabricated in sizes ranging from 24" to 120" in diameter, and 12' to 160' in length.



Typical Materials Processed:

- Alumina
- Petroleum Coke
- Zircon Sand
- Silica Foundry Sand
- Catalyst Carriers
- Activated Carbon
- Kaolin Clay
- Bauxite Clay
- Aggregates
- Ore Concentrates
- Calcium Carbonate
- Titanium Oxide
- Chromium Oxide
- Ferrites



**Air Preheater Company
Raymond Operations**

The Bartlett-Snow™ rotary kiln design consists principally of a revolving refractory-lined cylinder supported in two riding rings, each resting on two trunion rolls. The cylinder is rotated by means of a girth gear and pinion drive arrangement.

Although most kiln cylinders have the same diameter throughout their length, we can provide special kilns with enlarged firing ends to retain the processed material longer in the area of highest temperature, in order to meet unique processing requirements.

The time for material to pass through the kiln is controlled by the slope of the cylinder to the horizontal, the speed of cylinder rotation and the velocity of the gases through the cylinder. The revolving cylinder imparts a rolling and mixing action to the material which produces a homogeneous end product.

Both ends of the cylinder are enclosed by stationary breechings with rotary seals as required for the application. The feed breeching is refractory-lined and can utilize a feed chute or a variety of feeding mechanisms.



102" diameter x 100' long Bartlett-Snow™ Rotary Kiln

At the discharge end, the refractory-lined firing hood is carriage mounted so that it can be rolled back to permit access to the cylinder interior.

Rotary kilns are provided with automatic temperature, pressure and electrical controls, with burner systems capable of firing natural gas, propane and/or oil.

Alstom Power, Air Preheater also provides the following services:

- pilot plant material testing
- replacement parts
- field service support

Contact your local Alstom Power, Air Preheater, Bartlett-Snow™ representative for further information.



Rotary Kiln Cylinder

