

BARTLETT SNOW™ ROTARY CALCINER

With a 130 years of experience, Raymond Bartlett Snow thermal products have successfully provided solutions in heat transfer applications for industries worldwide.

DESIGN BENEFITS

- Cylinder ranging from 6” to 120” in diameter and 7’ to 100’ length.
- Electric heating elements, oil or gas burner.
- Co-current or counter-current.

TYPICAL MATERIAL PROCESSED

- Activated Carbon
- Ceramic Compounds
- Sludges
- Contaminated Soils
- Ferrites
- Rare Earths
- Manganese Dioxide
- Titanium Oxide
- Tungsten Compounds
- Uranium Compounds
- Vanadium Compounds
- Zinc Oxides

For High Temperature Processing

Bartlett-Snow Rotary Calciners: A highly effective and cost efficient means for high temperature processing of various granular products and powders. Unit is specially designed to provide for controlled and uniform process conditions.

System Overview

Material is fed into a rotating cylinder that is externally heated according to process related time versus temperature criteria. As the cylinder rotates, the material is gently tumbled as it flows from the feed end of the cylinder to the discharge end. This action promotes uniform exposure of the product to a defined environment. Various processes employ reaction gases in direct contact with the product to propagate a given reaction or cover gases to protect the product.

Advantages

Compared to conventional tunnel kiln or mesh belt style equipment, Bartlett-Snow Calciners offer the following advantages:

- **Maximum Product Uniformity** - the material bed is constantly being turned over, all of it is exposed uniformly to its required environment.
- **Greater Yields** - all of the material is processed; none is overheated or under heated.
- **Reduced Process Time Factor** - due to uniform exposure and dynamics of the products, process time requirements are drastically reduced.
- **Reduced Capital Costs** - with reduced process time requirements, the equipment is smaller and therefore less costly.
- **Reduces Operating Costs** - Material is continuously conveyed eliminating the ongoing replacement costs of holding containers and automation devices.



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Typical Cylinder Capabilities

Max. Operating Temperature	621°C (1150°F)	815°C (1500°F)	982°C (1800°F)	1093°C (2000°F)	1370°C (2498°F)	1500°C (2732°F)	2000°C (3632°F)	Max. Tube Dia. mm (in.)	Max. Heated Lgth. mm (ft)
304 SS/316SS	X							3048 (120)	27432 (90)
309/310	X	X						3048 (120)	27432 (90)
330	X	X	X					3048 (120)	27432 (90)
Inconel	X	X	X	X				3048 (120)	27432 (90)
Quartz	X	X	X	X				609 (24)	6096 (20)
Alloy (proprietary)	X	X	X	X	X			457 (18)	2134 (7)
Mullite	X	X	X	X	X	X		203 (8)	2134 (7)
Alumina	X	X	X	X	X	X		203 (8)	1524 (5)
Silicon Carbide	X	X	X	X	X	X		356 (14)	2743 (9)
Graphite	X	X	X	X	X	X	X	457 (18)	3048 (10)

Available Equipment Features and Services

- Equipment Type
 - Continuous
 - Batch
- Method of Heating
 - Electric resistance
 - Natural gas
 - Propane
- Operating Atmosphere
 - Oxidizing
 - Reducing
 - Steam
 - Pyrolyzing
- Lubrication Systems
 - Auxiliary backup capability
 - Bearings
 - Gears/Sprockets
 - Riding rings
 - Rolling components
 - Seals
- Cylinder Drives
 - Auxiliary backup drives
 - Chain drives
 - Gear drives
 - Tube rotation monitoring
 - Fixed and variable speed
- Components
 - Adjustable slope capability
 - Off-gas systems
 - Gas mixing panel
 - Heat recovery system
 - Innovative equipment seals
 - Integral product cooling
 - Material metering equipment
 - PLC control systems
- Services
 - Process development
 - Size selection capabilities
 - Installation & commissioning
 - Operation & maintenance training
 - OEM replacement parts
 - Technical field service

