



SEPOR, INC.
718 N. FRIES AVE.
P. O. BOX 578
WILMINGTON, CA 90748
PHONE: 310-830-6601
FAX: 310-830-9336

ROTARY LABORATORY KILN

Applications:

Carefully controlled roasting can be important for many process operations, such as roasting ore prior to leaching and recovery of metal values. This laboratory furnace permits roasting of such material at a designated temperature with a controller input of desired atmosphere and with an off-gas which can be collected and analyzed.

Typical applications include roasting of sulfides in oxidizing atmosphere for conversion to soluble sulfates, roasting of sulfides in presence of reducing atmosphere to approach the metallic stage, roasting of silicates in chloridizing roast to produce water soluble or volatile chlorides or removal of organics by oxidizing roasting.

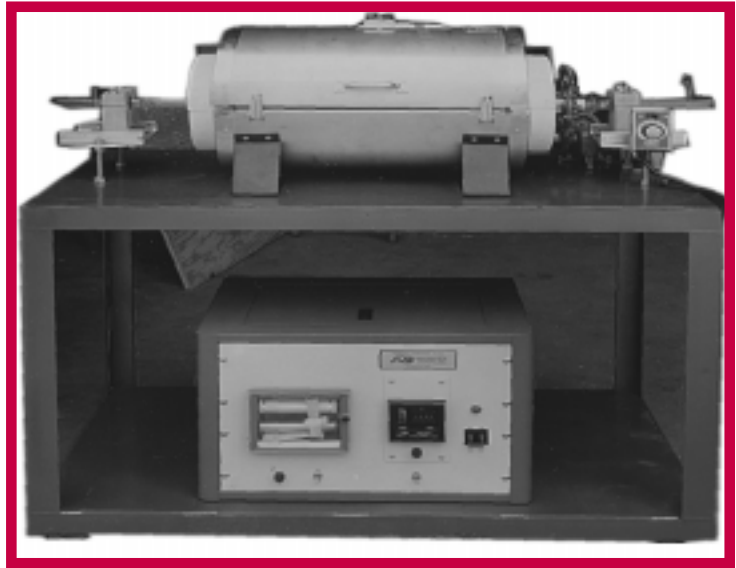
Advantages:

The kiln is constructed of Vycor to withstand the high temperatures and to give good corrosion resistance. The internal surface of the kiln is dimpled to lift and tumble the charge. The stationary ends of the kiln are sealed to the rotating kiln through spring loaded ball joints to accommodate thermal expansion of the kiln. Variable drive speed provides flexibility to meet specific conditions.

The temperature inside of the kiln is measured, controlled and recorded.

The shell protecting the refractory is constructed of 304 stainless steel. The support mechanisms which support the kiln are constructed of 304 stainless steel.

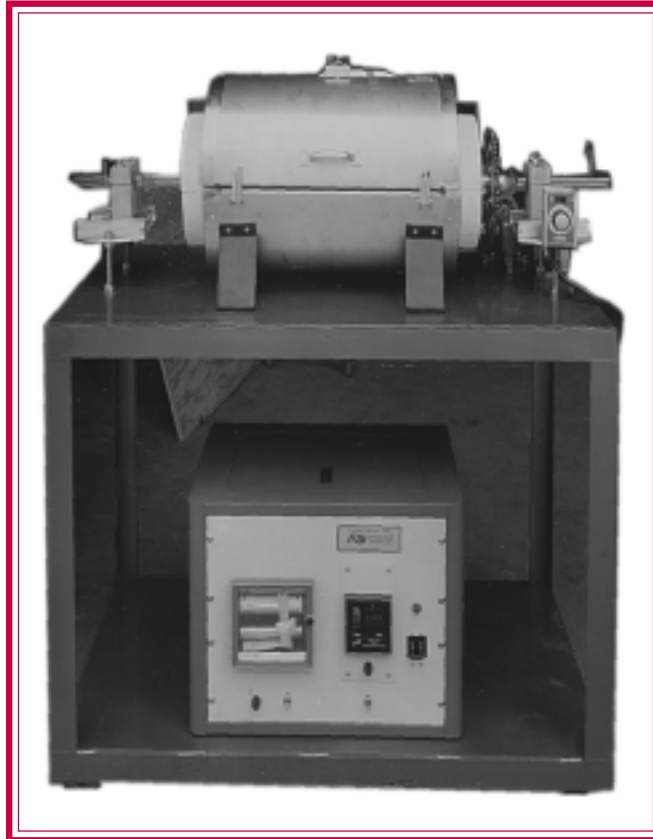
The unit is conveniently mounted on a portable steel support table, provided with rubber tired casters.



Laboratory Rotary Kiln Shown On Benchtop In Open Position

Catalog Number	Description	Shipping Weight
0901-001	4" Diameter Rotary Kiln 6" Diameter Rotary Kiln	600 Lbs. 720 Lbs.

Technical Specifications



The Laboratory Rotary Kiln with temperature controller-recorder, mounted on a portable steel support is shown above.

Specifications:

Shell:

21" long x 15" wide x 14" high, 304 stainless steel with ceramic fiber insulation.

Material: Vycor with built in lifters.

Size: Major diameter 3 inches, major diameter length is 10".

Seals: Spring loaded ball joints.

Supports: Adjustable 304 stainless steel base and rods.

Heating elements: Two 5.75" ID by 18" long, each rated 4,460 watts for 230 volt , single phase operation.

Maximum temperature range: Up to 1,100 degrees C.

Drive Motor:

1/15 HP AC/DC gearmotor with 3 to 100 RPM range, 115 V/1 Ph/50 or 60 Hz

Drive:

Roller Chain

Temperature Controls:

Digital setpoint controller with deviation indicator, on-off switch and temperature recorder. Includes thermowell and thermocouple for insertion into kiln.

Portable Stand:

Mild Steel, epoxy painted with casters.

Overall Dimensions:

48 inches high by 24 inches wide by 44 inches long.