UNIQUE/PERENY

ROTARY TUBE KILNS AND FURNACES
MODELS TO 3100°F/(1700°C)

FOR DYNAMIC DRIYING, CALCINING, SINTERING, AND OTHER HEAT TREATMENT OF POWDER.

The key to producing uniform, heat processed powders and granules is equal thermal treatment of every particle. UNIQUE/PERENY Rotary Tube Furnaces are specifically designed for continuous, dynamic drying, decomposition, sintering, calcining, and other heat treatment of powders and granules at temperatures up to 3100°F(1700°C). These Furnaces are routinely operated in air or other atmospheres to process traditional and advanced materials such as ferrites, titanates, nitrides, metallics, aluminas, carbides, catalysts, reducible oxides and minerals.

The rotary Tube Furnace offers advantages over static or batch processes because material flows freely through a sloping, heated rotating tube where it is tumbled constantly, causing uniform heat treatment of every particle. Both the slope angle and the rotation speed may be varied to provide a wide range of material throughput rates. Indirect heating and multiple temperature zone control provide the means to adjust the temperature profile of the process**.** Electric or gas fired production and pilot scale models are available.

STANDARD FEATURES: 1000°C, 1340°C and 1700°C Models

- Reinforced steel case and welded superstructure to form an integral unit with attractive exterior finish.
- Rugged ceramic tube of shock resistant mullite easily accessible for changeover to other ceramic or metal alloy tubes.
- Precision tube rotating drive mechanism with adjustable DC motor (0-10 RPM) and machined gear drive train with roller bearing guides at both ends of the tube.
- Hydraulic operated lift for adjusting tube slope angle of inclination from 0 to 5 degrees above horizontal.
- Ceramic furnace lining rated up to 3200°F backed with energy efficient, graded multilayer insulation.
- Heating components amply rated for maximum heat transfer, temperature uniformity and service life.
- Programmable, microprocessor based multiple temperature zone controls with over temperature protection. UL/CSA/CE listed components

449 Route 31, P.O. BOX 246 • Ringoes, NJ 08551
TEL:609-466-1900 FAX: 609-466-3608
E-MAIL: INFO@HED.COM, WEB: WWW.HED.COM

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Optional Features

- Custom built units designed to meet specific work requirements.
- Electric or gas heated models rated for available service.
- Custom ceramic or metal alloy tubes with internal flights.
- Auxiliary ports, air circulation and accelerated cooling systems.
- Atmosphere gas-tight construction and burn-off provisions.
- Neutral or reducing atmosphere muffle-retorts with various seals.
- Atmosphere gas mixing and flow control panels.
- Adjustable automatic material feeder with required capacity hopper.
- Double wall stainless shell material collection cooling hopper with interlocked discharge valves.

Typical Application

- Drying, sintering, calcining, minerals, synthetics, ferrites, titanates, nitrides, alumina, silica, carbon catalysts, absorbents, reducible oxides.

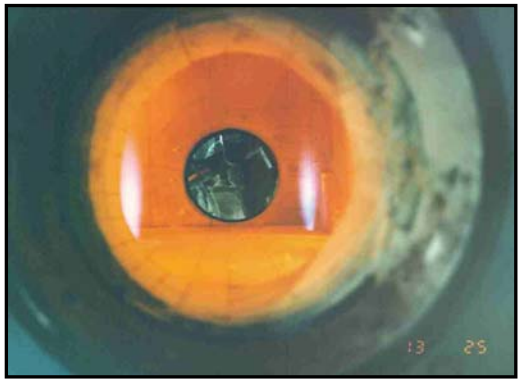
Specifications

UNIQUE/PERENY	RTC Series Kilns	ME=(1200°C/2192°F), SC=(1500°C/2732°F), KS=(1700°C/3092°F)			
HED Part No.	Model No.	Tube	Tube	Overall Size	Electrical Rating
		Volume	DIA.xLEN.	W x D x H	Kw
50-20-0122-0100	RTC-372	2.3 L	76x1825mm	745x915x1905mm	18
50-20-0122-0101	RTC-472	4.2 L	102x1825mm	2745x915x1905mm	24
50-20-0122-0102	RTC-690	11.7 L	152x2285mm	3200x1065x2135mm	30
50-20-0122-0103	RTC-896	22.2 L	203x2435mm	3350x1065x2135mm	50
50-20-0122-0104	RTC-1096	34.5 L	254x2435mm	3350x1220x2135mm	70
50-20-0122-0105	RTC-1296	49.7 L	305x2435mm	3350x1220x2135mm	90

Dimensions shown are approximate and are in millimeters. Electrical resistor heated models suffix; ME=Metallic (1200°C), SC=Silicon Carbide (1500°C), KS=Molydisilicide (1700°C). Custom equipment available on request.

*Specifications are approximate and subject to change without notice.

Twin Tube Systems



Fuel Fired or Electric Systems

Feeders & Discharge Hoppers

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