

Rotating Horizontal Split Tube Furnace - RHST / RHZS

General Information

The range of Carbolite Gero horizontal rotating tube furnaces offers the benefits of simultaneous heating and mixing of the sample, in addition to the use of an inert atmosphere.

The furnaces are suitable for continuous material processing. Residence time in the heated zone depends on the degree of inclination and the rotating speed (which can be controlled by the customer) and the length of the working tube, in addition to the flow properties of the material.

The design of the split furnace, drive system and feeder/ collection assemblies allows the work tube to be easily removed and replaced.

The single zone and 3-zone split tube furnaces have a maximum operating temperature of 1150 °C. All models are available with heated lengths of either 600 mm or 900 mm. The angle of inclination can be easily adjusted between horizontal and 10 °. The ceramic (IAP) work tube has an inner diameter of 75 mm. A safety switch automatically prevents heating and tube rotation when the furnace is opened.

It is essential to discuss your application with Carbolite Gero to ensure the suitability of the material for use in this equipment. Carbolite Gero cannot accept responsibility for your process due to the possibility of the material becoming sticky when heated and therefore not flow through the work tube.

Standard features

- 1150 °C maximum operating temperature; normal operating temperature range 650 °C - 1050 °C
- Heated lengths of 600 mm and 900 mm
- Single zone models fitted with Carbolite Gero 301 PID controller with single ramp to setpoint
- 3-zone models: Centre zone fitted with 301 PID controller. End zones fitted with 2132 slave controllers
- Single or 3-zone models
- Accepts work tube with inner diameter of 75 mm
- Adjustable inclination and rotation speeds offers flexibility of residence time
- Work tube rotation speed 1.5 to 10.0 revolutions per minute
- 5 litre capacity vibratory feeder and hopper
- The temperature controllers and associated equipment are housed within the integral control box
- Wire elements in high quality vacuum formed insulation ensure fast heat up, excellent temperature uniformity and short cool down times

Options (specify these at time of order)

- Quartz (up to 1100 °C) or metallic (up to 800 °C) work tubes
- 5 litre capacity heavy duty vibratory feeder and hopper
- Inert gas packages available on request

NEW

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Technical Specifications

RHST 11/75/600

Max temp (°C)	1150
Max. inner diameter accessory tube (mm)	75
Number of heated zones	Single zone
Dimensions: External H x W x L (mm)	1500 x 550 x 2200
Heated length (mm)	600
Work tube length	1500
Max power (W)	3800

RHST 11/75/900

Max temp (°C)	1150
Max. inner diameter accessory tube (mm)	75
Number of heated zones	Single zone
Dimensions: External H x W x L (mm)	1500 x 550 x 2200
Heated length (mm)	900
Work tube length	1500
Max power (W)	5500

RHZS 11/75/600

Max temp (°C)	1150
Max. inner diameter accessory tube (mm)	75
Number of heated zones	Three zone
Dimensions: External H x W x L (mm)	1500 x 550 x 2200
Heated length (mm)	600
Work tube length	1500
Max power (W)	3800

Rotating Horizontal Split Tube Furnace - RHST / RHZS

RHZS 11/75/900

Max temp (°C)	1150
Max. inner diameter accessory tube (mm)	75
Number of heated zones	Three zone
Dimensions: External H x W x L (mm)	1500 x 550 x 2200
Heated length (mm)	900
Work tube length	1500
Max power (W)	5500

Please note:

- Maximum continuous operating temperature is 100 °C below maximum temperature
- Heat up rate when using an optional ceramic work tube must be limited to 5 °C/min