

# **SALE INFORMATION**

# Glenro Vertical RADROUND Electric Infrared Preheat Oven

- Designed to remove moisture on a Braided Silicon Tube prior to extrusion
- All Stainless-Steel Construction
- 3" Max. Product Dia.
- Line Speeds to 36 FPM Depending on 0.D.
- 14' Overall Tower Height
- 4-Heaters, 2-Zones, 24-KW Total Power
- System purchased New 2021 at cost of almost \$85,000
- Line was set up, test run and put into storage
- Currently located in storage on the East Coast
- Attached is documentation obtained from original purchase
- Asking Price: \$45,000 + 18% Buyers Premium

For question please contact: Jeff Luggen, <u>Jeffjr@cia-industrial.com</u>

Davis 3.5 Rubber Extruder and Curing Tower available for purchase separately.

**Process Objective:** Preheat to remove surface moisture on a braided silicone tubing prior to extrusion, as well as to enhance bond.

# **Process Specifications:**

Product: Braided Silicone Tube

Product Outside Diameter: 0.625" to 2.5"

Line Speed:

@ 0.625" OD: 36 fpm @ 2.5" OD: 5 fpm

Product Rate:

@ 0.625" OD & 36 fpm: 65 lbs/hr @ 2.5" OD & 5 fpm: 82 lbs/hr

Product Temperatures:

Entrance:  $75^{\circ}F$ Exit:  $\sim \frac{250^{\circ}F}{}$ 

Orientation: Vertical (Up-pass, Down-pass)

Product Flow Direction:

Up-Pass: Bottom – to – Top
Down-Pass: Top – to – Bottom
Line Orientation: Right – to – Left

(when facing the control enclosure)

# **Specifications for Preheat Oven**

Maximum Product Diameter: 3"

Radiant Heated Length: 14' (7' up-pass, 7' down-pass)

Overall Tower Height: ~108"
Total Power: 24 kW
Number of Heaters: Four (4)
Number of Zones: Two (2)

Electrical Power Requirements: 480 volts 3-phase, 60 Hz, 43.3 Amp, unbalanced

Clean Room Classification: 7

Environment: General Purpose (Non-Hazardous)
Codes: UL 508A for Industrial Control Enclosures

#### Electrical Infrared Preheat Oven Tower - Item ID: IRE-OVEN-24KW-G-2200502

The Preheat Oven Tower will measure approximately 7' high (~10' high, including idler sheaves above heaters and legs to the floor) x 2.5' wide x 2.5' deep. It consists of tubular steel frame and is designed to hold four (4) RADROUND® Series 40 Heaters and four (4) idler sheaves; one (1) at the entrance of the tower below the up-pass heaters, two (2) at the top of the tower to center the product within the heaters, as well as to turn the product direction 180° and one (1) at the exit of the tower, below the down-pass heaters to again turn the product direction. The heaters will be aligned in two (2) vertical columns. The system framework also includes support legs to the floor with four (4) locking swivel wheels. The entrance and exit sheaves are 6" above the floor and the bottom of the heaters are 17" above the floor.

**our GA Drawing prior to fabrication.** In addition, heaters will be pre-wired directly to the control enclosure mounted on the oven. This system will be largely pre-assembled and tested prior to shipment to minimize customer's installation and start-up time.

The braided tubing will enter from the bottom of the tower via the GLENRO supplied idler sheave and travel upward through the two (2) in-line heaters. After exiting the second heater the tubing reaches two (2) idler sheaves, turns around 180°, and travels vertically downward through two (2) additional in-line heaters. The tubing will again change direction, turning 90° via the GLENRO supplied idler sheave, will enter the customer's existing extruder and will be pulled via the customer's existing driven puller and then rewound.

#### **Oven Features**

- ♦ High efficiency cylindrical RADROUND® infrared heater totally surrounds the product with uniform infrared heating.
- Four (4) Sets of adjustable, stainless steel, reflectors are provided at the entrance and exit of each set of heaters.
- A perforated metal guard surrounds the heaters and frame.
- ♦ Handles on the frame to allow the operator to conveniently push/pull the oven system into and out of position.
- ♦ The control enclosure, perforated guards, reflectors, sheaves, frame, wheels, handles and the heaters are constructed of stainless steel.

## **Specific Oven Components**

#### Infrared Heaters – Item ID: HTR-040-G4006-6-001-SP

Four (4) RADROUND® Series 40 Heaters, Model No. G4006-6-STD.

Type: Quartz, Solid Tube

ID: 6" Length: 42"

OD: 14" x 14" Kilowatts: 6 Volts: 480

Each heater includes:

- One (1) replaceable thermocouple, type C/A ("K"), to monitor and control element temperature.
- Heater cases are constructed of stainless steel.

## GLENRO's new standard heater design.

• The circuits' power lead wires will be wired to a ceramic terminal blocks within the heater's junction box/wiring trough.

Information contained herein is from the original purchase, Buyer must conduct their own diligence to confirm accuracy.

#### **Idler Sheaves**

Four (4) Idler sheaves are included.

One (1) Turning idler sheave located below the up-pass heaters:

- "U" Shaped Grove & "nested" for braided tubes that range from 0.625" 3" outside diameter.
- 3.75" Wide.
- Stainless Steel.
- 8" diameter for a gentle bend radius on the product.
- Low friction bearings no grease.

One (1) Turning idler sheave located above the up-pass heaters:

- "U" Shaped Grove & "nested" for braided tubes that range from 0.625" 3" outside diameter.
- 3.75" Wide.
- Stainless Steel.
- 4" diameter for a gentle bend radius on the product.
- Low friction bearings no grease.
- "X" axis adjustment: Manually adjustable side screw is provided on the top idler sheaves to center the varying diameter braided tubing within the up-pass Heaters.

One (1) Top turn-around idler sheave located above the down-pass heaters:

- "U" Shaped Grove & "nested" for braided tubes that range from 0.625" 3" outside diameter.
- 3.75" Wide.
- Stainless Steel.
- 12" diameter for a gentle bend radius on the product.
- Low friction bearings no grease.

One (1) Turning idler sheave located below the down-pass heaters:

- "U" Shaped Grove & "nested" for braided tubes that range from 0.625" 3" outside diameter.
- 3.75" Wide.
- Stainless Steel.
- 12" diameter for a gentle bend radius on the product.
- Low friction bearings no grease.

# SSR Control System – Item ID: CONTROL SYSTEM-IRE-2200502

The SSR Control System is designed to operate at 480 volts, 3-phase, 60 Hz. It will control four (4) RADROUND® Series 40 Heaters in two (2) zones. Total connected power is equal to 24 kW with a maximum input line current of 43.3 Amp, 3-phase, unbalanced. The control cabinet will meet UL 508A for Industrial Control Enclosures. **NOTE**: The control system includes a UL approved System Label.

The control is designed to adjust the voltage to the heaters by thermocouple feedback control loops, maintaining a constant element temperature in each zone. These temperatures are adjustable and, once set, requires no further attention.

Zone Descriptions

Zone 1: Up-Pass Column, two (2) RADROUND® Series 40 Heaters, Thermocouple Feedback, 12 kW

Zone 2: Down-Pass Column, two (2) RADROUND® Heaters Series 40 Heaters, Thermocouple Feedback, 12 kW

# **Operator Interface Components include:**

- Two (2) Eurotherm Temperature Controllers with digital display and manual control option.
- Two (2) 2-Position selector switches to turn heaters/zones on/off.
- Four (4) Load Indicators to show heater circuits are operating normally.
- One (1) Power-on light.

Thermocouple wire to facilitate connection of thermocouples to control.

# **Power Control Components include:**

- Two (2) Eurotherm, 480 volt, 25 Amp, 1-phase SSR Power Controllers to regulate power to the heaters.
- One (1) Control Transformer.
- One (1) Fused Disconnect with external operator.
- Four (4) Pairs of heater line fuses.
- Two (2) Contactors to interrupt heater power lines.

Price: \$84,869.00 One (1) Vertical RADROUND® Electric Infrared Preheat Oven

Tower as described herein.

**Terms:** 30% with order due on receipt of invoice

30% upon submittal of approval drawings due on receipt of invoice

30% ready to ship and due prior to shipment 10% on shipment net 30 days from date of invoice

F.O.B. ex-factory

**Shipment** 

Terms: Freight collect

Via Air Ride Equipped Truck

Customer must be prepared to receive and unload.

**Delivery:** The following delivery is based on our current manufacturing schedule. Please

advise should your delivery requirements be different.

Typically, 14 to 16 weeks after receipt of order and down payment.

Commercial

In the event that levies apply to this transaction, such as state, local, or any other

taxes, they are the full responsibility of the purchaser and are not included in the

price quoted above.

Price of this quotation is firm for 30 days.

Changes in specifications upon which this quotation is based will be made only if

accepted in writing by GLENRO, Inc.

All terms and conditions per attached Glenro Standard Terms Form TC2002

apply and Glenro Field Service Rates 2021 as updated.

**Alternate** 

Terms: Alternate terms and conditions, including payment terms, if requested, may

impact price and delivery and are to be presented to Glenro in writing for review

as soon as possible.

**Cancellation:** Should a cancellation occur after a purchase order has been placed the following

charges will apply:

a) 1 - 15 days - Time and expense

b) 16 - 30 days - 25% plus material

c) 31 – 60 days - 60% plus material

d) 61 – 75 days - 80%