

General Description:

- Continuous Belt Transport Furnace
- 30" IR Heat Chamber, up to 1000C
- 3 Separately Controlled Heat Zones
- 30" Cooling Chamber
- Controlled CDA, N₂, or Forming Gas (H₂/N₂ mixture) Process Atmosphere
- Reliable PLC Control System
- Windows PC-based User Interface with LCD Monitor and RAID backup
- Production Line Options



Furnace shown integrated with production line

The compact LA-309 is a general purpose furnace. **Process atmosphere** is controlled much like a clean room: pressurized gas is pushed through the heating chamber insulation providing a pre-heated, laminar flow for a uniform, stable atmosphere. **Precise temperature** is maintained by control thermocouples above the belt in each zone quickly sensing changing conditions. **IR quartz heating lamps** inside the chamber instantaneously adjust their output to achieve tight temperature control: each load through the furnace sees the same temperature.

The LA-309 can process substrates, wafers, PCBs, metal, ceramic, glass or polycarbonate parts for:

Package Sealing	Reflow Soldering	Brazing
Epoxy Die Attach	Hybrid/Thick Film Firing	Annealing, Tempering
Polymer Curing	General Thermal Processing	Metal Sintering

Thermal Processing

The LA-309 features a 30 in/76 cm IR heating chamber with 3 independently controlled heat zones, followed by a 30 in/76 cm cooling chamber, arranged as:

- | | |
|---|----------------|
| • Load Station | 15 in / 38 cm |
| • Entrance Isolation Baffle + Powered Exhaust | 15 in / 38 cm |
| • IR Heat Chamber Zone 1 | 7.5 in / 19 cm |
| • IR Heat Chamber Zone 2 | 15 in / 38 cm |
| • IR Heat Chamber Zone 3 | 7.5 in / 19 cm |
| • Transition Isolation Baffle + Powered Exhaust | 15 in / 38 cm |
| • Closed Atmosphere Cooling Chamber | 30 in / 76 cm |
| • Unload Station | 15 in / 38 cm |

LA-309 Controlled Atmosphere Furnace

Adjustable Gas Flow Controls:

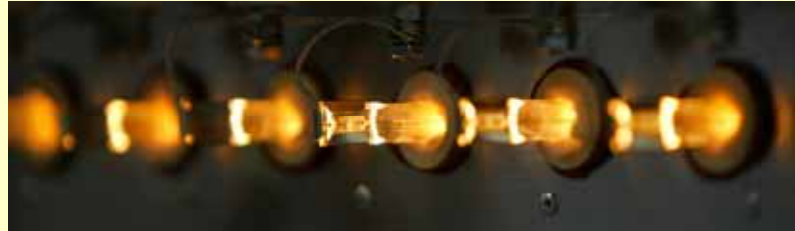
- Entrance Baffle
- Entrance Exhaust
- IR Zone 1
- IR Zone 2
- IR Zone 3
- Transition Baffle
- Transition Exhaust
- Cooling Chamber

Belt Transport:

- Speeds: 2-20 ipm*
5.1-51 cm/m
*other available
- Width: 9 in/23 cm

Heat Sources:

28 near-wave IR quartz halogen lamps, above & below the belt, SCR controlled



Facility Requirements	Power Required 208 Vac, 60 Hz: 27 kW, 73 A 380 or 400 Vac, 50 Hz: 27 kW, 38 A	Maximum Typical 10 kW, 27 A 10 kW, 14 A
	CDA or N₂ Process Gas Required Gas Purge Rate/Min: 2.0 Gas Supply: 8 SCFM @ 70 PSIG	
OPTIONS	Facility Exhaust Required Heat Chamber Exhaust: 8 SCFM, 150°C Cabinet Exhaust (Room Air): 1500 SCFM, <40°C	
	Operating Size and Weight Length: 123 in / 3.13 m Width: 37 in / 0.94 m Height: 67 in / 1.71 m Adjustable Conveyor Height: 34-37.5 in / 87.6-95.2 cm (above floor) Weight: approx. 1600 LB/730 kg	
	Element Monitor (Lamp monitor) Belt Cleaner (brush or ultrasonic) Circuit Breaker / 3 ph Disconnect	Gas Analyzers Line Filter Air Treatment System

ABOUT US. In 2006 GreenBridge Technology (formerly known as Radiant Technology Corporation), the original manufacturer of your RTC brand continuous belt IR furnace equipment, spun off its remaining furnace business to FurnacePros, a division of Lochaber Cornwall, Inc.

EXPERIENCE! Comprised of former GBT / RTC employees, FurnacePros staff are experienced in the manufacture and service of equipment and software formerly supplied by GreenBridge Technology and RTC, Inc. including continuous belt near infrared furnaces, ovens and dryers for 80°C to 1000°C uninterrupted production service. We provide service, control system upgrades, warranty support and spares for all models of RTC brand equipment purchased from FurnacePros, GreenBridge Technology, Inc or Radiant Technology Corporation. As FurnacePros, we continue our emphasis on linking technology with the environment and offer a renewed focus on service and support for your continuous belt furnaces.



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