

# LA-306

## COMPACT HIGH TEMPERATURE INFRARED FURNACE

- Production and Laboratory Applications
- 30-inch IR Heat Chamber, up to 1000°C
- 3 Separately Controlled Heat Zones
- Controlled CDA, N2, & FG Process Atmospheres
- Dual gas option (N2 & Forming Gas) for Low O2
- BRAND NEW Digital Control System



### **THE LA-306 FURNACE**

A compact 3-zone furnace, this furnace is small enough to be used in a laboratory setting and robust enough to often be used for production applications. This model is approximately 10 feet (3070 mm) long and 2 feet (500 mm) wide. The LA-306 has a 6-inch (150 mm) wide belt and 2-inch (50 mm) high product opening. The small chamber offers excellent temperature control and rapid rise to 1000°C. The newly designed control system is easy to use and provides sophisticated zone temperature control. Upper and lower lamps can be independently enabled to operate the furnace in radiant mode, radiant convection mode, or convection mode.

*IR color.* Depending on supply voltage, the furnace will operate in the IR wavelength of 1900-2600 kelvin. Voltage compensation assures the lamps operate consistently at the design color temperature.

### **WHERE IT IS USED (ENVIRONMENT)**

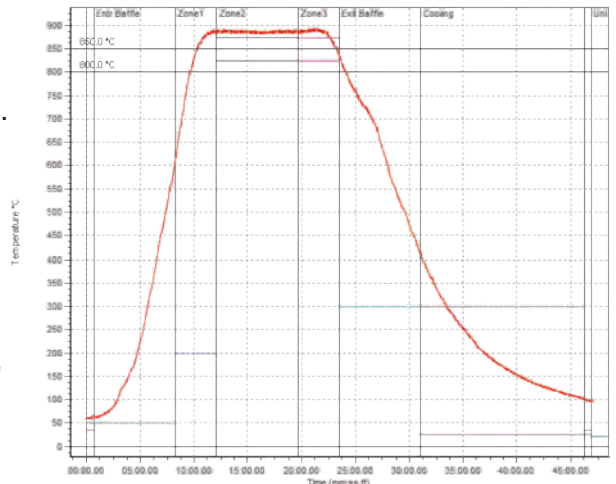
It is used in production and laboratory environments for thermally controlled continuous processes in a controlled atmosphere of nitrogen, forming gas or air. The furnace can heat to 1000C or ~1800F and typically reaches stable process ready in 30 minutes. It is available in a dual gas configuration, a second gas such as forming gas composed of nitrogen and up to 4% hydrogen can be introduced into the furnace chamber while pure nitrogen is used in the rest of the furnace. It runs on single phase 208-240 volt (50/60 Hz) power. It is efficient: when operated at 800°C it draws only 40 amps of current.

### **HOW IT IS USED (TYPICAL APPLICATIONS)**

The LA-306 is used thermal processing of substrates, wafers, PCBs, metal ingots and manufactured parts, ceramic, glass, optical coatings and polycarbonate products. Specific applications include:

- ✘ Precise Curing of Coatings on Optical Lenses
- ✘ General Curing and Drying
- ✘ Semiconductor processing, Package sealing, Epoxy Die Attach, Polymer Curing
- ✘ Copper and Hybrid Thick Film firing
- ✘ Advanced thin film, crystalline silicone, cadmium telluride (CdTe alloys) and certain copper indium diselenide (CIS-alloys) solar cell processing

The LA-306 furnace is popular for dental labs and dental production applications.



**Typical LA-306 880°C Temperature Profile**