IR Smart Oven

ITW BGK

Electric Infrared Curing Solutions

For Curing...
Water-base
Solvent-base
Powder

For Drying...
Chromates
Luburicants
Phosphates
Anti-fingerprint

The IR Smart lab oven was designed to test your coatings and processes in your own facility. This oven will demonstrate the many benefits of electric infrared for drying and curing.

ITW BGK created the IR Smart lab oven to provide valuable data to aid in the process development and support of your infrared curing customers. The oven is designed to provide an accurate and repeatable testing environment.

The IR Smart Difference
- Control
- Repeatability
- ± 2% Temperature Accuracy
- High Efficiency

ITW BGK Electric Infrared Benefits:
- Direct Heat Transfer
- High-Efficiency (short ovens and operating costs)
- Instant Heat Output Control
- 0-100% Temperature Control
- Separate Zones (flexibility and energy savings)
- Self-Cleaning Interior
- No Pre-Heat

Primary Features:
- Independently Controllable Infrared Heat Zones
- Closed Loop Temperature Controls (PLC with operator interface screen)
- Built-in Pyrometer Temperature Sensor (calibration panels included)
- Four Modes of Operational Control
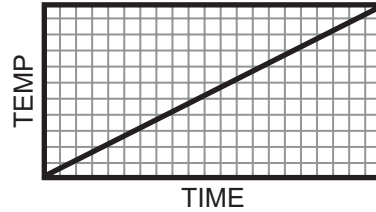- Pre-Mounted Exhaust Blower

Optional Feature:
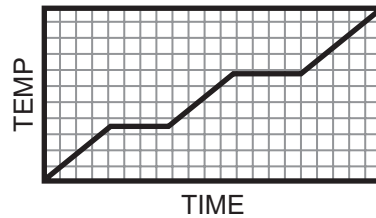- Smart Logger – allows creation of data files to store or print test data

Patent #6642486
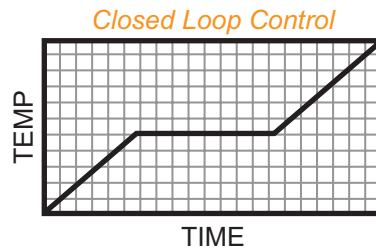
IR Smart Oven

Operating Modes

Manual

Enter desired % power output for the heaters. The start and stop buttons turn the heaters on and off.
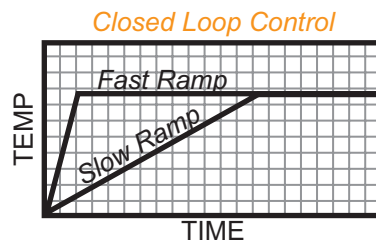
Time/ Power

Enter desired % power output and the desired amount of time. The temperature the panel achieves is the variable (up to 20 steps possible).

Power/ Temp

Closed Loop Control

Enter desired % power output and the desired panel temperature. The time it takes the panel to reach temperature is the variable (up to 20 steps possible).

Time/ Temp

Closed Loop Control

A PID control algorithm ramps the part temperature to set-point via operator defined maximum power output rate (slow or fast). The power output required to maintain part temperature is the variable (up to 20 steps possible).

Size	43.25" W × 54.81" H × 33.0" D (1099mm×1392mm×838mm)
Weight	425 pounds (193 Kg)
Test Panel Size	10" × 14" (254mm × 356mm) Maximum
Heat Zones	Top and Bottom (controlled independently)
Operating Modes	Manual • Time/Power • Power/Temp • Time/Temp
Power	480 / 3ø / 60 Hz • 44 amps • 28 kW (alternate voltages available)
Lamps	(24) 1550 T3 Short-Wave • 290 volt
Product Temperature	500°F (high temperature options available)

IR Smart Oven
Specifications

Curing Paint... It's What We Do.

ITW BGK