

**TYPICAL USES FOR BLASDEL
OVENS AND CONVEYORS**

PRODUCT	APPLICATION							
	POWDER COATING	LIQUID COATING	WOOD FINISHING	PLASTIC FINISHING	METAL FINISHING	MOISTURE DRY-OFF	THERMOFORMING	SHRINK WRAPPING
High Watt Density Ceramic Panel	•	•			•	•	•	•
Medium Watt Density COR Emitters	•		•	•	•	•	•	•
Medium to Low Watt Density Ceramic Emitters		•	•	•				
Quartz Tube Emitters	•	•		•	•		•	•
High Velocity Air Oven		•	•	•	•	•	•	
High Velocity Air Cooling Chamber (not heated)	•	•	•	•	•			
Electric Convection Oven		•	•	•	•	•		
Conveyors	•	•	•	•	•	•	•	•

Metals

- Degreasing
- Drying foundry molds and sand cores
- Moisture dry-off
- Expansion parts fitting

Electrical

- Drying motors
- Drying electrical varnishes
- Soldering

Foundries

- Preheating molds

Plastics

- Softening plastics for pressure and vacuum forming
- Drying and curing sheets
- Heat sealing
- Prosthetics
- Compression molding

Adhesives

- Drying

Packaging

- Heat shrink

Wood

- Curing catalyzed materials
- Drying fillers, lacquers, toners, varnishes, sealers
- Drying printed finishes
- Setting adhesives

Textiles

- Setting flock
- Silk screening

Paper and Printing

- Drying inks
- Silk screening

Glass

- Silk screening
- Drying mirrors
- Preheating plate glass

Rubber

- Curing
- Curing latex
- Heating rubber adhesives

Space Heaters

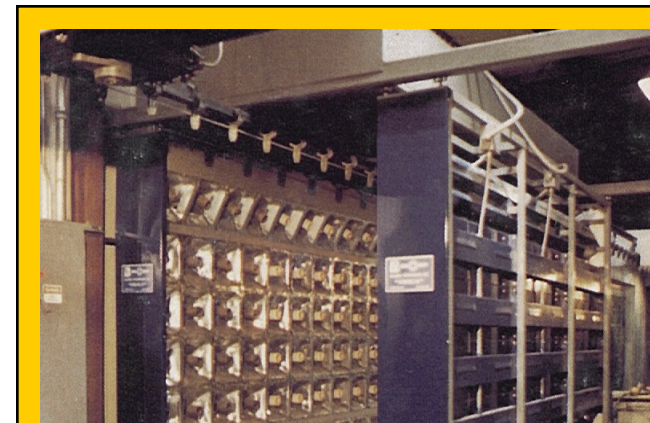
BLASDEL ENTERPRISES, INC. THE LEADER IN CUSTOM HEAT AND MOTION TECHNOLOGY

EXPERIENCE WORKING FOR YOU

With customers in a variety of markets including automotive, construction, furniture, and appliances utilizing diverse substrates such as plastics, metal, wood, and glass, Blasdel Enterprises has the experience to design equipment for your application.

PUT THE APPLICATION TO THE TEST

In order to guarantee the right equipment for your needs, Blasdel tests the application in a full-scale/production lab facility. Cure times and temperatures can be altered for best results. Various control levels can be employed. Several types of infrared emitters can be used. Material handling options can be explored. All of this can be seen and tried first hand before the system is designed based on theory or someone else's parts. Customers are invited and encouraged to participate in this critical design process.



ADJUSTABLE WIDTH OVEN

- Flexible set-up parameters
- Ideal for job shops or as a booster oven
- Designed for varying part sizes and shapes
- Zoned in height and length
- Zones can be turned on/off as needed
- Maximum thermal efficiency



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CUSTOM HEAT AND MOTION
TECHNOLOGIES

**FOR MORE INFORMATION,
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www.blasdel.net**



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CONVEYORIZED OVEN SYSTEM WITH CERAMIC PANEL HEATERS AND CUSTOM FIXTURES

Is electric infrared (IR) more expensive to operate than gas IR or convection?

Due to the power and thermal efficiencies of the equipment, electric IR can be very competitive. In fact, electric may appear to be three times higher per KW or BTU and still have competitive costs. For the most accurate answer, figure the costs per part estimate.



TWO SECTION CONVEYOR WITH SINGLE SHAFT DRIVE

How much maintenance is required for a Blasdel infrared oven?

Very little maintenance is required. Elements should be visually checked periodically to be sure that all are working. If the oven is placed in a location with extreme vibration, control panel connections should be tightened. Reflectors should be rebuffed or dusted when dirt accumulates, depending on the shop environment, if applicable.



VERTICAL CERAMIC PANEL HEATER OVEN

Is it true that I can only bake flat parts in an IR oven?

Absolutely not. Especially in the case of a Blasdel infrared oven, complex shapes can be evenly cured due to the reflector design and containment of convection heat in the oven. Much of the heat transfer is through conduction.



HIGH VELOCITY AIR CONVECTION OVEN WITH BUTYL BELT CONVEYOR

Can I only use IR as a preheat or booster for powder coating?

Infrared may be used as a booster prior to a convection oven or for a full cure on many parts. Process testing can determine how much time would be required for a full cure compared to the convection specifications listed on the powder technical sheets.

CUSTOMER LIST

- ADAC PLASTICS
- AEROQUIP
- A.O. SMITH
- AMCAST
- THE BUDD COMPANY
- CAMBRIDGE METAL AND PLASTICS
- COLLINS & AIKMAN
- DARLING STORE FIXTURES
- DELPHI
- DELTA FAUCET
- FAIRRITE
- FASCO MOTORS GROUP
- FEDERAL MOGUL
- FLAMBEAU PLASTICS
- GENCORP
- GOODYEAR TIRE & RUBBER
- HAYES LEMMERZ
- HAPPICO
- KUBOTA
- LEAR PLASTICS
- LESCOA
- McKECHNIE
- METAL PREP
- MILWAUKEE TOOL
- NORTH AMERICAN LIGHTING
- NISSAN
- SUMMIT POWDERS
- THOMPSON CONSUMER ELECTRONICS
- TOYOTA
- WABASH NATIONAL
- WAGNER BRAKE
- UFE

Can I put IR sections inside of my convection oven for a booster oven?

This is not recommended. IR sections should be placed outside the oven.

As a job shop, I never know what parts I will be coating. Is infrared flexible?

Blasdel's adjustable infrared ovens are the most flexible ovens you can buy. They have precise zoning controls and the sides of the oven move in and out for varying widths of parts or racks. Another option offered is adjustable rows, which can change the angle of the section horizontally.

What information will I need to provide to determine if my process is a good candidate for infrared?

By supplying part configurations, mass, type of substrate, temperature required, the type of process, voltage available, production rates, and line speed, Blasdel Enterprises can design an oven that is perfect for your application. Testing in our facility will fine-tune the design.

How long will it take to cure my part?

Generally cure cycles are 1/3 of the time or less than the recommended convection cycle.

What is the normal delivery of an infrared oven?

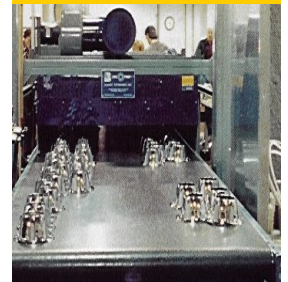
Generally delivery is quoted as six to eight weeks for "standard" ovens.

Other questions not listed?

Call 800-661-3213 and ask for a salesperson.



THERMOFORMING OVEN SYSTEM WITH PLC CONTROLLED PICK AND PLACE



HORIZONTAL OVEN WITH C-O-R ELEMENTS AND BUTYL BELT CONVEYOR



FINISHING CELL SYSTEM WITH VERTICAL OVEN CONTAINING C-O-R ELEMENTS, SPRAY BOOTH AND SPINDLE CONVEYOR