



# INDUSTRIAL DRYING ENCLOSURE

*Building your booth the right way for all the right reasons*

**Increased productivity** Accelerate your drying time of water borne and solvent-based coatings by using a Spray Systems Industrial Drying Enclosure. Add the Spray Systems Turbulator Fan System (TFS) to your Industrial Drying Enclosure. The turbulent air flow decreases your drying time even further, while lowering overall operating costs and raising your productivity. Drying Enclosures can be equipped with infrared and/or convection curing systems in conjunction with the Spray Systems TFS.

**High Quality and Durable Finish** When it is critical for you to produce a high quality finish, the Industrial Drying Enclosure with the optional TFS System is key to your success. It speeds the drying time which results in optimum curing, and provides the best quality and most durable finish for you.

**Environmentally Safe** Each Industrial Drying Enclosure meets safety and code requirements – NFPA-33, and IFC to protect those that work in any industrial spray environment.



## Standard Design Features

### DIMENSIONS:

Drying enclosures can be adapted to your specific size and heating requirements

### DRYING ENCLOSURE/DOOR CONSTRUCTION:

18 gauge G90 galvanized prime steel  
Pre punched holes on 6" centers  
Easy nut and bolt assembly  
Heavy duty safety latches

### LIGHTING:

High efficiency fluorescent light fixtures to accommodate the size of the enclosure  
UL Approved, 48", 4-tube (T-8) 120 Volt  
Positive dust tight seals

### EXHAUST FAN/MOTOR:

High efficiency Tubeaxial fan with TEFC Motor – 208/230/460V-60hz-3PH – to exhaust 20% of enclosure's volume as required by NFPA-86  
Non sparking blade, enclosed belts and bearings

### INTAKE FILTERS:

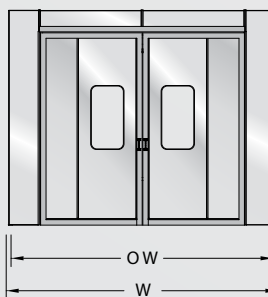
Viledon intake filters, Type R-I  
20" x 25" with built in reinforcement frames

### MISCELLANEOUS:

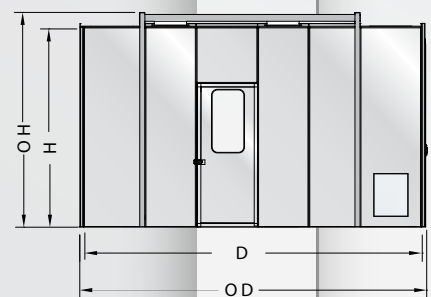
All necessary hardware and caulking is included

### OPTIONS:

Turbulence Fan System (TFS)  
Additional lighting / Additional length  
Convection Curing System  
2" thick insulated panels



FRONT VIEW



SIDE VIEW

Specifications are subject to change without notice

## Recirculating Convection Type Heating System



Recirculating heaters are designed utilizing an indirect gas-fired heater with a greater than 80% thermal efficiency. They are certified to use with natural or propane gas, in sizes ranging from 75,000 to 400,000 BTU/HR input.

### Recirculation Heater Unit

Horizontal Heating Unit with 75,000 to 400,000 BTU/HR, 60 degree F temperature rise, indirect natural gas fired heat exchanger including all gas controls, electric ignition pre-wired, AGA/CGA certified.

- Duct Thermostat, and recirculation duct work designed for the drying enclosure
- Purge Timer Control Panel NEMA-12 with necessary switches
- Assembly hardware for the heater and ductwork
- Rail mounted unit for easy installation
- Inlet register with filter frame and discharge register
- The above heater unit is designed to be mounted on top of your drying enclosure

The heater is designed to maintain the enclosure to approximately 120-140 degrees F, accelerating drying time and thus increasing production. After the heater is shut off, the blowers will continue to run while purging the enclosure.

### Turbulence Fan System (TFS)

An adaptable kit for your Drying Enclosure requirements

- 20" diameter, Spray Systems Turbulator Fans
- Direct drive fan and mounting system
- VFD-controlled drive motor allows for adjustable fan RPM and turbulent flow
- Turbulent Timer NEMA-12 Control Panel
- OSHA approved safety guard
- Kits are available for retrofitting to an existing booth

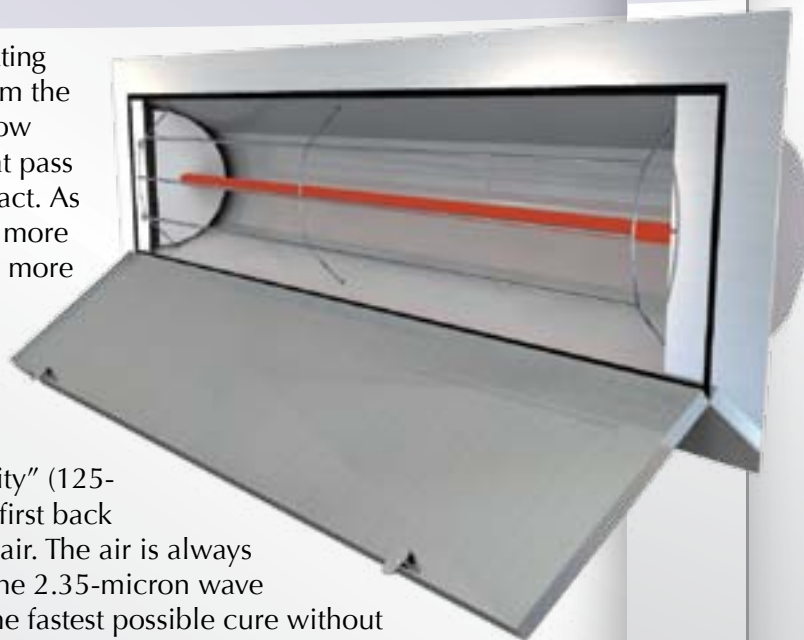
# Infrared Curing

Cure from the inside out. Unlike heated recirculating systems that depend on hot air to dry paint from the top layers down, the Infrared system uses narrow energy waves emitted from the quartz tube that pass through the air with minimum molecular contact. As the waves continue into the liquid coating the more dense molecular structure of the paint absorbs more of the energy. When the energy waves contact the solid substrate, all of the remaining energy is absorbed and conducted evenly throughout the substrate.

When the panel reaches its "point of emissivity" (125-175 degrees F) the energy is conducted away, first back through the liquid coating and finally into the air. The air is always cooler than the liquid coating and substrate. The 2.35-micron wave length (high intensity medium wave) insures the fastest possible cure without the danger of damaging heat sensitive parts of the product.

This technology offers the user many advantages, including far superior curing speed, improved gloss, reduced orange peel, superior adhesion, as well as a considerable reduction in energy costs. Since infrared does not depend on heating the air, production and quality are not challenged by cold and wet weather. Infrared high intensity quartz curing systems are UL listed for use in a hazardous location. The Infrared systems are specifically designed for the use with the Spray Systems Industrial Drying Enclosures. The heater frames are mounted in the enclosure panels ready to accept the infrared heaters.

The Infrared heaters are designed specifically to meet your drying enclosure requirements. These heaters are strategically located within the enclosure in order to ensure the product surface area is exposed to the intensive quartz curing effects in supplying you the highest quality finish.



## Controls

The control panel provides for:

- NEMA-12 rated enclosure
- Main disconnect
- Heater zone control
- Heat intensity control
- Heater cycle timer
- Cure timer
- Motor starter for the enclosure exhaust fan(s)
- Start-stop push button station/pilot lights
- Control transformer
- All control systems are UL listed.







## Custom Designs Are Standard For Us

### Booth Designs

- Open Face Booths
- Enclosed Booths
  - Cross Draft
  - Down Draft
  - Side Down Draft
  - Semi-Down Draft
  - Spray Bake

### Booth Types

- Bench Booths
- Blasting Enclosures
- Booth Extensions
- Conveyorized Spray Booths
- Customized Duct Designs
- Dry Filter/Industrial Booths
- Dust Collectors
- Grinding Booths
- Powder Booths
  - Recovery type
  - Non-Recovery type
- Truck and Large Equipment Booths
- Water Wash Spray Booths
  - Centrifuge Sludge Systems
  - Pump Type
  - Pumpless Type

### Additional Options

- Air Make-up Units
- Booth Extensions
- Electrical Control Panels
- Flash Tunnels
- Ovens
  - Drying Enclosures
  - Convection (gas or electric)
  - Infrared (catalytic and electric)
- Turnkey and Custom Systems
- VOC Abatement Systems

## An American Tradition of Excellence

**The Spray Systems Advantage** Located in Pomona, California since 1978, our 45,000 square foot facility houses state-of-the-art machinery operated by dedicated and highly skilled team members. With more than 35 years of experience in the design, fabrication and installation of spray booths, we can deliver to you the custom products, precision engineering, and responsive service to ensure your complete satisfaction – whatever your company size, finished product specifications, production rates, or coating needs.

**Enjoy Our Wide Selection And Flexible Design** We feature more than 300 booth design options for a wide variety of uses, and specialize in custom designs for the most unique of applications. To ensure full integration, our spray booth design will take into account all of your specific finishing requirements, including filtration, lighting, temperature, humidity and air flow.

**Discover Precise, Custom Tailored Engineering Solutions** All booths are custom designed using the latest version of AutoCAD to ensure precision and prevent against interference fit – early detection in the design stage prevents costly field modifications for you. We feature easy-to-read and easy-to-follow isometric assembly drawings. Each panel and component part is identified with a computer-generated label that precisely matches the CAD-produced, exploded-view assembly drawing – all making installation efficient and trouble-free.

**Receive Unparalleled Personal Attention** Spray Systems is committed to providing you dedicated service and support that place a high value on accountability and quality control. That means walking you through every phase of the design and installation process and tailoring our manufacturing to your specific requirements. We want to ensure the on-going success of your spray booth training, service, and operations. For us, quality of service doesn't end with the installation.

### Call For A Free Consultation

### Discuss Your Spray Booth Needs With Your Spray Systems Advisor **800 736-6944**

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