Despatch

Thermal Processing Technology

ITW EAE

PN Inert Atmosphere Ovens

Ideal for Wide Variety of Inert Atmosphere Applications

The PN Series Inert Atmosphere Ovens are designed to accommodate a wide variety of processes where an inert atmosphere is required to prevent product oxidation. Typical applications include curing, bonding and heat treating.

The PN Series contains a digital PID controller that is easy to use and configure saving the operator time. It comes with two temperature ranges to meet your process needs. The stainless steel, continuously welded interior is ideal for highly corrosive conditions or where interior cleanliness is critical. It has adjustable recirculating air louvers that allow "fine tuning" to assure uniform airflow, even with varying load configurations and consistent product heating. It also has a heat exchanger for providing rapid cool-down or the ability to operate at low temperatures within a sealed chamber – Air-to-water is used on 343°C models, air-to-air for 538°C models.

Despatch provides the design integrity, manufacturing experience and emphasis on quality necessary for dependable operation and excellent process control.





FEATURES AT A GLANCE

- Horizontal airflow for superior temperature uniformity
- ◆ Two maximum temperature ratings: 343°C (650°F) and 538°C (1000°F)
- 9 cubic feet (255 liters)
- Inert atmosphere capability
- Heat exchanger for rapid cool down
- Digital, easy to use, PID control
- Stainless Steel interior
- Adjustable recirculating air louvers assure uniform airflow
- ◆ Chamber pressure gauge
- Positive sealing door for atmosphere integrity
- UL and C-UL listed open industrial control panel

OPTIONS

- Programmable controls for controlling rate of temperature rise and process timing functions.
- ◆ Recorders 10 inch diameter round chart. Strip charts also available.
- Oxygen concentration management system to guarantee low oxygen concentrations and prevent heating until desired oxygen level is achieved, assuring optimal product results.
- Process timers to automatically shut down oven at end of process.
- ◆ Alarms, audible and visual to signal end of process or other events.

- Disconnect switch in control panel to completely disconnect power to equipment. Disconnect switch must be opened before control cabinet door can be opened.
- Door switch to shut down the heater and/or blower when door is open.
- Door lock to prevent opening door during cycle to assure process is not interrupted.
- Capped access ports for pass through of wires and piping required for process.

PN INERT ATMOSPHERE OVEN	PN 1-90	
D = 343°C (650°F) F = 538°C (1000°F)	D	F
PHYSICAL SPECIFICATIONS		
Chamber Size (width x depth x height) *Clear opening width is reduced by 1.75 in (4.45 cm) due to 7/8 in (2.2 cm) shelf supports on each side	25* x 25 x 25 in 63.5* x 63.5 x 63.5 cm	
Capacity	9 cu ft (255 liters)	
Overall Size (width x depth x height)	69 x 41 x 60 in 175 x 104 x 152 cm	73 x 43 x 76 in 185 x 109 x 193 cm
Distance from Floor to Work Opening	30 in (76 cm)	
Insulation Thickness	5 in (12.7 cm)	6 in (15.2 cm)
Number of shelves provided	2	
Maximum number of shelves	7 on 3 in (7.6 cm) centers	
Shelf dimensions (width x depth)	24.5 x 24.5 in (62.2 x 62.2 cm)	
Approx. Weight	950 lbs. (431 kg)	2100 lbs. (952 kg)
FUNCTIONAL SPECIFICATIONS		
Heater Capacity	9 KW	20 KW
Recirculating System		
Motor HP	1/3	1
CFM (LPS)	575 CFM (271 LPS)	1000 CFM (472 LPS)
Time from Ambient to Maximum Temperature	60 Minutes (empty oven)	
Cool-Down Time from Maximum Temperature	45 Minutes to 100°C (212°F)	105 Minutes to 125°C (257°F)
Maximum Shelf Load	75 lbs. (34 kg)	
Maximum Load Capacity	225 lbs. (102 kg)	

Notes: PND ovens are not to be used with flammable solvents, combustible materials or enclosed containers. If your process involves flammable solvents, consult the factory.

SERVICE AND TECHNICAL SUPPORT

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