Walk In Oven Model #ST4566  120 Cubic Ft.

This oven is designed to operate at 500°F maximum temperature and includes the following special features:

**Batch Oven Specifications:**

- Effective Work Area: 48" W x 72" H x 60" L
- External Dimensions: 80" W x 108" H x 93" L
- BTU: Recirculation 400,000 BTU
- Fan: 3500 CFM; 5 HP
- Electric: TBD
- 4.5 inch thick insulated walls, ceiling and a 3/16" plate floor
- 1" Circulation fan
- CRS exterior painted machine gray
- Aluminized interior
- UL listed Control Panel
- Single set point electronic temperature controller
- High limit
- Exhaust 600CFM
- 400,000 BTU Burner
- Batch Timer (shuts heat off at the end of timed cycle)
- Door switch
- Differential pressure switches on circulation & exhaust
- Purge timer
- Solvent rated for .2 gallons per batch or 25 oz per batch

**Oven Construction:**

**Outside:**

The oven exterior will be constructed of heavy gauge carbon steel and structural members painted a machine gray. Other colors are available upon request. If another color is chosen there will be additional cost.

**Inside:**

The oven interior will be constructed of aluminized steel. Other materials such as stainless steel can be selected at additional cost.

**Insulation and Isolation:**

The unit will have 4.5" of 8lb density fiberglass/mineral wool non settling insulation isolating the interior from the exterior. The seams of the layers are offset to stop any direct paths for heat to the exterior of the cabinet.
Circulation System:

One 30 inch Dia fan will be driven direct by a 5HP 1725 rpm TEFC motor, TEFC motors are used standard for harsh environments. The airflow pattern will be horizontal from right to left. Other airflow patterns are available such as Combination horizontal/vertical or compound horizontal. All pressure and return walls are louvered for adjustability. Changing the airflow pattern will affect the overall dimensions. There will be a pressure differential switch located on the circulation fan, in the event of the loss of circulation air the heating system will shut down. Once the problem is resolved the system can be turned back on.

Heating System:

The oven will utilize a 400,000 BTU modulating dual fuel (propane or natural) burner and gas train. The gas train is a NFPA 86 with a \( \frac{3}{4} \)" NPT inlet. The gas pressure required to operate is 5" WC minimum to 14" WC maximum. If the supplied gas pressure is higher than 14" WC then a regulator will be required to lower the gas pressure to the specified operating pressure. The burner will heat the air to the desired temperature and will fire into the plenum located in the top of the unit.

Doors:

The unit will have two doors held closed by FM approved slam latches. These doors will also act as the relief per NFPA 86.

Control Console:

The control panel for the oven will be on the right hand side of the chamber. The panel will house the electrical components and be NEMA 1 and UL rated.

Exhaust Blower:

A \( \frac{3}{4} \) hp 1725 rpm motor will drive an 8" dia x 4" thick single inlet wheel producing 600 CFM of exhaust air. The blower will be mounted on the top right of the unit. The blower will be on at all times. A 6" dia transition will be supplied. There will be a pressure differential switch located on the exhaust, in the event of the loss of exhaust air the heating system will be shut down. Once the problem is resolved the system can be turned back on.

Solvent Rating:

The unit will be rated for a maximum solvent load per batch of 25 oz or .2 gallons. The capacity was calculated using the NFPA 86 guidelines.

Purge Timer:

The unit will have a purge timer mounted on the relay pan of the control enclosure. The timer will be set for 4 minutes. The heating circuit will not be energized until the purge time has expired.