High Temperature Inert Atmosphere Ovens

Inert atmosphere ovens for operation at up to 1250°F. Protect parts from oxidation using any non-flammable gas such as Nitrogen, Argon or Carbon Dioxide. Front-to-back horizontal air flow completely surrounds work on shelves or large parts placed directly on the optional reinforced work space bottom. Includes cooling jacket which can be equipped with optional cooling blower and automatic dampers. Installation of optional atmosphere purge solenoid, cooling blower and programming temperature controller provides completely automatic sequencing.

STANDARD FEATURES

- UL LISTED CONTROL PANEL
- Standard Inert Atmosphere Ovens from Grieve meet the requirements of National Fire Protection Association Standard 86, Industrial Risk Insurers, Factory Mutual and OSHA standards. For some applications, such as those involving hazardous locations, the above organizations require additional safety devices.

- Controls
  - Digital, microprocessor based, thermocouple actuated, indicating temperature controller
  - Motor control push buttons
  - On-off heat switch
  - LED pilot lights
- Safety Equipment
  - Adjustable, thermocouple actuated, manual reset excess temperature interlock
  - Separate heating element control contactors
  - Recirculating blower air flow safety switch
- Construction
  - All interior seams welded gas-tight
  - All wall penetrations welded at inside and fitted with compression fitting at outside of oven
  - Silicone rubber atmosphere seal at outside perimeter of oven door
  - High temperature inner door gasket with stainless steel spring insert to seal heat in oven and protect atmosphere seal
  - 2-point cam action positive latching door hardware
  - Adjustable offset door hinges to guarantee tight closure of door seal
  - Exterior blower shaft seal
  - Inert atmosphere inlet with pressure regulator to maintain positive pressure within oven
  - 0-200 CFH atmosphere flow meter
  - Pressure gauge to indicate interior oven pressure
  - Inert atmosphere outlet with pressure relief
  - Air jacket on inner oven for cooling
  - Front-to-back horizontal air flow
  - 16 gauge 304 stainless steel interior
  - Aluminized steel exterior with enamel finish
  - Brushed stainless steel control panel face
  - Insulated with 2" thick 1900°F insulating block, backed up with 10 lbs/cf density industrial rockwool
  - Built-in baffles prevent radiant heat
  - Two (2) stainless steel wire shelves
  - Channel shelf supports prevent shelves tipping
  - 1 year limited warranty
- Every oven fully assembled and individually factory tested
NOT FOR USE WITH FLAMMABLE SOLVENTS, VAPORS OR GASES.

SPECIFICATIONS

- 208 volts, 3-phase, 60 Hz
- 230 volts, 3-phase, 60 Hz
- 460 volts, 3-phase, 60 Hz
- 5kA short circuit current rating (SCCR)
- Other electrical characteristics available

Each features completely wired, side access terminals for incoming power, temperature controls, push buttons and pilot lights. Motor starter and heating element controllers electrically interlocked to shut off heaters if power to blower is interrupted and to permit operation of blower without heat for cooling. Incoloy sheathed tubular heating elements. The 1250°F models have a heat chamber limit controller.

Two (2) reinforced 100 lbs uniformly distributed load capacity, stainless steel wire shelves. Models IA and IB will hold seven (7) shelves on 3” centers; models IC and ID five (5) shelves on 6” centers.

ADDITIONAL EQUIPMENT AVAILABLE*

- Additional Shelves, 100 lbs distributed load per shelf, 400 lbs maximum oven load, specify oven model when ordering.
- Programmable Temperature Controller, microprocessor based, digital indicating, thermocouple actuated, in lieu of standard controller
- Recording Thermometer, thermocouple actuated, 24-hour, 10° diameter circular chart used in conjunction with standard controller (side mounted)
- Digital Timing Temperature Controller, microprocessor based, digital indicating, incorporates 99 hour 59 minute timer, starts timing when temperature reaches set point and shuts down oven at end of set time
- Digital Shut Down Timer, with continuous "hold" feature
- Digital Batch Timer, for uniformly timing batch operations. Continuous alarm with door interlock; alarm at end of preset time period until door is opened or timer reset
- Automatic Door Switch, turns off blower and heat when door is opened.
- Integral Oven Legs, with 1/4” steel plate shelf. 24” high on IA & IB series, 16” high on IC & ID series
- Removable Oven Stand, with 1/4” steel plate shelf. 24” high on IA & IB series, 16” high on IC & ID series
- 500 lbs Capacity Stainless Steel Subway Grating, oven work space bottom. Reduces work space height by 1”.
- Automatic Purge, opens oven outlet automatically to purge air from oven, requires installation of optional programmable temperature controller.
- Cooling Blower, with air flow safety switch, connected to air jacket to provide accelerated cooling, includes two position motorized dampers, requires installation of optional programmable temperature controller.
- Modulating Dampers to regulate cool down rate, replaces 2-position dampers included with cooling blower. Includes heating/cooling programmable temperature controller in lieu of optional programmable temperature controller required with cooling blower.

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- Integral Oven Legs
- Removable Oven Stand
- 500 lbs Capacity Stainless Steel Subway Grating
- Automatic Purge
- Cooling Blower
- Modulating Dampers

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Ovens and Furnaces For Industry Since 1949
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