



Blue M 146 Series Class A Mechanical Convection Oven

Blue M DCSA Class A Ovens are designed according to NFPA 86 requirements for the processing of alcohol, solvent mixes or other volatiles. These ovens employ open-air heater elements whose temperatures operate well above the auto ignition point of some flammable materials. This condition is mitigated by maintaining a very high exhaust rate with the introduction of fresh ambient air at a rate that makes process air nonexplosive. A negative pressure is maintained in the work chamber, ensuring that all hazardous vapors will be expelled through the exhaust duct and not through the oven door, blower shaft seal or apertures. These ovens are complete systems. No additional equipment or customized procedures are required to meet the recommendations of NFPA 86 for processing hazardous workloads.



► General Mechanical Convection Industrial Oven Specifications

- Temperature range: 15°C above ambient to 350°C (662°F)
- Control Accuracy: +/-1.0°C (+/- 1.8°F)
- Resolution: +/-0.1°C (+/- 0.2°F)
- Workspace capacity: 4.2 to 24.0 cubic feet
- Heat up time to 350°C (662°F) (empty chamber): 90 min. (or less depending on model, voltage, and exhaust rate)
- Uniformity: Blue M can provide varying levels of uniformity; if you have a specific tolerance or specification which must be met, please contact us with your requirements so we can ensure the equipment is designed, tested, and adjusted to meet those requirements

► Uniform, Accurate and Reliable Temperature Control

- Available with profiling or single set point temperature controls
- Horizontal air flow assures uniform thermal performance under most loading conditions
- Exclusive Blue M Eterna heating elements – the most reliable available, with heavy-gauge high temperature nickel chromium wire and low-watt density for longer service life
- Direct drive, multi-blade, centrifugal blower with high-volume air delivery and dynamically balanced for minimum noise

► Oven Features

- Fully welded and sealed inner chamber
- Circulation and exhaust blowers using stainless steel blower wheels are rendered spark resistant through the use of aluminum blower housings and aluminum inlet rings. Each are equipped with a differential air pressure type switch
- Automatic initial timed purge air cycle
- Exhaust blower system maintains a safe air ventilation rate through the oven with a constant exchange of fresh ambient air with process air
- Pressure relief (blowout) panel installed in the chamber rear wall is guarded and retained by a steel safety retaining cage
- Door switch disables heat and circulation blower upon door opening and initiates the purge cycle
- Emergency shutdown pushbutton switch
- Safety placard warning is installed on the front of the oven
- Adjustable shelf levels
- Fiberglass insulation to ensure safe cabinet skin temperature
- Heavy-duty door - double-wall, insulated construction
- Independent, over-temperature protection (high limit controller) included
- Corrosion resistant, stainless steel (type 304) interior
- All-welded, heavy-duty exterior with heavy-gauge, reinforced, cold-rolled steel
- Baked on white powder-coated enamel finish on exterior for long-lasting corrosion protection
- Every oven is fully assembled and individually factory tested
- Circuit breaker provided for ground fault protection as standard
- Three phase operation available in 50 Hz or 60 Hz

Condensed Specifications					
Model	206 (Bench model)	256 (Bench model)	296 (Floor model)	336 (Floor model)	1406 (Floor model)
Interior Volume	4.2 cu. ft.	5.8 cu. ft.	9 cu. ft.	11.0 cu. ft.	24.0 cu. ft.
Interior Dimensions WxDxH in(mm)	20 x 18 x 20 (508 x 457 x 508)	25 x 20 x 20 (635 x 508 x 508)	25 x 25 x 25 (635 x 635 x 635)	25 x 20 x 38 (635 x 508 x 965)	48 x 24 x 36 (1219 x 610 x 914)
Exterior Dimensions WxDxH in(mm)	40 x 34 x 49 (1016 x 864 x 1295)	38 x 37 x 68 (966 x 940 x 1702)	43 x 47 x 75 (1092 x 1194 x 1905)	43 x 42 x 88 (1092 x 1194 x 2235)	66 x 46 x 86 (1677 x 1169 x 2184)
Machine Footprint	9.4 sq. ft.	9.8 sq. ft.	14.0 sq. ft.	12.5 sq. ft.	21.1 sq. ft.
Electrical Service					
208 VAC 3 Ph 60 Hz Line current	6.8 kW 20	9.0 kW 27	13.5 kW 40	13.5 kW 40	18.0 kW 53
240 VAC 3 Ph 60 Hz Line current	9.0 kW 23	12.0 kW 31	18.0 kW 46	18.0 kW 46	24.0 kW 61
480 VAC 3 Ph 60 Hz Line current	9.0 kW 12	12.0 kW 16	18.0 kW 23	18.0 kW 23	24.0 kW 31

Please contact the factory to inquire on other available or engineered to order options.

► Exclusive Two-Year Warranty

Blue M warrants the equipment will be free from defects in material and workmanship for a period of two (2) years from the date of shipment (or from the installation date if this service is provided by TPS or a TPS approved partner and the date is approved by TPS). If a TPS Preventive Maintenance Plan is purchased before the end of the standard warranty period, these limited warranties shall be extended by one (1) additional year. If within the warranty period the original purchaser notifies Blue M in writing of an alleged non-conformity, and Blue M determines to its reasonable satisfaction that the product or service is in fact non-conforming, and Blue M shall, at its option and expense, repair or replace the non-conforming product or correct the non-conforming service, either at the original purchaser's facility, or Blue M's. Labor is only included for domestically installed units. Equipment installed outside of the United States (USA) will be one year parts only from date of shipment. For full details, exclusions, and other information on our warranty please go to: <https://www.thermalproductsolutions.com/support/blue-m>

► Available Oven Options

- Nickel-plated wire rod or stainless steel slotted shelves
- 24-hour, 7-day digital process timer
- Temperature recorders (paper or paperless)
- Reverse door hinge
- Floor stands (bench models only)
- Swivel casters with leveling feet
- Programmable controller, Ethernet and USB communications
- Data logging and trending
- Nine-point thermocouple monitoring system
- Variable frequency drive on circulation blower
- Exclusive, adjustable, semi-pierced duct walls for tuning of air flow
- Lead-in ports (various locations available)
- Electro-mechanical or pneumatic door lock
- Light tower assembly with audible alarm
- Maintenance lock-out system
- Main power fused disconnect switch
- Redundant over-temperature protection (high limit controller)
- UL508A labeled control panel
- Alternative exterior finishes
- CE Mark
- If inert purge is required, please contact the factory for a quote on LOC (Limited Oxygen Concentration) Class A Ovens



**Baker Furnace, Blue M, Gruenberg, Lindberg/MPH,
Lunaire, Tenney, Wisconsin Oven**

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Specifications and Product Information are subject to change without notice.