



## 146 Series ASTM Testing Mechanical Convection Ovens

The Blue M ASTM Mechanical Convection Oven meets type 5374 and 5423 types I and II along with E145 type IA and IIA testing requirements.



### ► General Mechanical Convection Industrial Oven Specifications

- Temperature range: 15°C (27°F) above ambient to 350°C (662°F)
- Control Accuracy: +/- 1.0°C (+/- 1.8°F)
- Resolution: +/- 0.1°C (+/- 0.1°F)
- Workspace capacity: 4.2 to 24.0 cubic feet
- Heat up time to 350°C (662°F) 60 minutes or less depending on model and voltage, empty chamber
- Uniformity: Designed to meet ASTM 5423 Type I and/or Type II uniformity, ASTM E-145 Type IIA or Type IIB Uniformity

### ► 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, adjustable, semi-pierced duct walls for tuning of air flow
- Variable frequency drive on circulation blower
- 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
- Air flow switch provided as standard to protect oven and product
- Direct drive, multi-blade, centrifugal blower with high-volume air delivery and dynamically balanced for noise reduction

### ► Oven Features

- 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
- Welded and sealed inner chamber
- 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
- Single or 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)	45 x 36 x 49 (1143 x 914 x 1245)	45 x 40 x 63 (1143 x 1016 x 1600)	45 x 36 x 75 (1143 x 914 x 1905)	68 x 40 x 73 (1727 x 1016 x 1854)
Machine Footprint	9.4 sq. ft.	11.3 sq. ft.	12.5 sq. ft.	11.3 sq. ft.	19.0 sq. ft.
Electrical Service					
208 VAC 1 Ph 60 Hz Line current	3.0 kW 17	4.5 kW 26	6.0 kW 35	6.0 kW 35	6.8 kW 38
240 VAC 1 Ph 60 Hz Line current	4.0 kW 20	6.0 kW 29	8.0 kW 40	8.0 kW 40	9.0 kW 44
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

### ► 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, then 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
- Door switch (disables heat and circulation blower upon door opening)
- 24-hour, 7-day digital process timer
- Temperature recorders (paper or paperless)
- Reverse door hinge
- Glass observation panel(s) in door(s)
- 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

- Lead-in ports (various locations available)
- Electro-mechanical or pneumatic door lock
- Emergency Power Off Pushbutton
- Emergency stop
- Light tower assembly with audible alarm
- Maintenance lock-out system
- Interior light
- Rear access door(s)
- Main power fused disconnect switch
- Redundant over-temperature protection (high limit controller)
- UL508A labeled control panel
- Alternative exterior finishes
- CE Mark



**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.