



## Ultra-Temp® Inert Gas Convection Ovens

The Blue M Ultra-Temp® Inert Gas High-Temperature Oven, pressure tested at operating temperatures, is suitable for all inert gases and non-flammable forming gases (maximum 4% hydrogen, balance nitrogen).



### ► General Ultra-Temp Oven Specifications

- Temperature range: 15°C (27°F) above ambient to 593°C (1100°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
- 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, adjustable, semi-pierced duct walls for tuning of air flow
- 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

- All welded and sealed construction assures continuously low oxygen levels
- Door switch (disables heat and circulation blower upon door opening)
- Adjustable inert gas purge system including two flowmeters, (2) two-way gas control valves, cycle start-up high flow purge, low flow adjustment, chamber pressure gauge and supply connection. This feature allows for consistently low oxygen PPM levels within the work chamber
- Multiple 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
- Exclusive Blue M, single pass, ambient air-cooled muffle surrounding the sealed, inner chamber provides controlled cool-down.
- 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	6680	7780	8880	9980
Interior Volume	4.2 cu. ft.	5.8 cu. ft.	11.0 cu. ft.	24.0 cu. ft.
Interior Dimensions WxDXH in. (cm)	20 x 18 x 20 (50.8 x 45.72 x 50.8)	25 x 20 x 20 (63.5 x 50.8 x 50.8)	38 x 20 x 25 (96.52 x 50.8 x 63.5)	48 x 24 x 36 (121.92 x 60.96 x 91.44)
Exterior Dimensions WxDXH in. (cm)	46 x 36 x 72 (116.84 x 91.44 x 182.9)	51 x 38 x 74 (129.5 x 96.52 x 188)	84 x 39 x 77 (213.4 x 99.1 x 195.6)	96 x 43 x 83 (243.84 x 109.22 x 210.8)
Machine Footprint	11.5 sq. ft.	13.5 sq. ft.	23.0 sq. ft.	28.7 sq. ft.
Electrical Service				
208 VAC 3 Ph 60 Hz Line current	12.0 kW 38	15.7 kW 47	18.8 kW 56	22.5 kW 72
240 VAC 3 Ph 60 Hz Line current	16.0 kW 43	21.0 kW 53	25.0 kW 64	30.0 kW 82
480 VAC 3 Ph 60 Hz Line current	16.0 kW 20	21.0 kW 27	25.0 kW 32	30.0 kW 40

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

### ► Exclusive One-Year Warranty

Blue M warrants the equipment will be free from defects in material and workmanship for a period of one (1) year 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

- Stainless steel slotted shelves
- 24-hour, 7-day digital process timer
- Trace oxygen analyzer
- Temperature recorders (paper or paperless)
- Reverse door hinge
- Swivel casters with leveling feet
- Programmable controller, Ethernet and USB communications
- Data logging and trending
- Variable frequency drive on circulation blower
- 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
- Main power fused disconnect switch
- Redundant over-temperature protection (high limit controller)
- UL508A labeled control panel
- CE Mark
- Motorized exhaust damper (two-position or proportional)
- Alternative exterior finishes



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

Address: 2821 Old Route 15 | New Columbia, PA 17856-9396 | USA  
Phone: (570) 538-7200 | Fax: (570) 538-7380  
[info@thermalproductsolutions.com](mailto:info@thermalproductsolutions.com)

Specifications and Product Information are subject to change without notice.