



**TPS**  
Thermal Product Solutions

## »» Blue M

146 Series Standard Oven

### Mechanical Convection Standard Ovens

The Blue M Standard Mechanical Convection Oven is ideal for a number of industrial oven applications, including ASTM testing, epoxy curing, moisture drying, UL testing, aging of electronic components and devices, and other processes and testing requirements.

#### ► General Mechanical Convection Industrial Oven Specifications

- Temperature range: 15°C above ambient to 343°C (650°F)
- Uniformity: +/-1% of setpoint
- Control Accuracy: +0.5°C
- Resolution: +/-0.1°C
- Performance data (typical): Run-up to 300°C 60 min. (or less)

#### ► Uniform, Accurate and Reliable Temperature Control

- Available with profiling or single setpoint temperature controls.
- Horizontal air flow assures uniform thermal performance under all loading conditions.
- Double plenum design with removable doors for thorough inner chamber cleaning.
- Exclusive Blue M Eterna heating elements - the most reliable available, with heavy-gauge high temperature nickel chromium wire, low-watt density for longer service life, standard air flow switch on three-phase models to protect oven and product, and premium alumina ceramic element insulators.
- Blue M one-pass air flow controls your profile, including cool down with infinitely variable control from full recirculation to full one pass, and optional motorized damper for automatic operation.
- Direct drive blower multi-blade centrifugal blower with high-volume air delivery, dynamically balanced for minimum noise.



| Condensed Specifications               |                                    |                                     |                                     |                                      |                                     |                                     |                                      |                                      |
|--|------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| Model                                  | 146<br>(Bench model)               | 206<br>(Bench model)                | 256<br>(Bench model)                | 296<br>(Floor model)                 | 136<br>(Floor model)                | 336<br>(Floor model)                | 1406<br>(Floor model)                | 1506<br>(Floor model)                |
| Interior Volume                        | 1.6 cu. ft.                        | 4.2 cu. ft.                         | 5.8 cu. ft.                         | 9 cu. ft.                            | 11.0 cu. ft.                        | 11.0 cu. ft.                        | 24.0 cu. ft.                         | 20.0 cu. ft.                         |
| Interior Dimensions<br>WxDxH in(mm)    | 14 x 14 x 14<br>(356 x 356 x 356)  | 20 x 18 x 20<br>(508 x 457 x 508)   | 25 x 20 x 20<br>(635 x 508 x 508)   | 25 x 25 x 25<br>(635 x 635 x 635)    | 38 x 20 x 25<br>(965 x 508 x 635)   | 25 x 20 x 38<br>(635 x 508 x 965)   | 48 x 24 x 36<br>(1219 x 610 x 914)   | 37 x 25 x 37<br>(940 x 635 x 940)    |
| Exterior<br>Dimensions<br>WxDxH in(mm) | 34 x 30 x 43<br>(864 x 762 x 1092) | 40 x 34 x 49<br>(1016 x 864 x 1295) | 45 x 36 x 49<br>(1143 x 914 x 1245) | 45 x 40 x 63<br>(1143 x 1016 x 1600) | 58 x 36 x 62<br>(1473 x 914 x 1575) | 45 x 36 x 75<br>(1143 x 914 x 1905) | 68 x 40 x 73<br>(1727 x 1016 x 1854) | 58 x 42 x 75<br>(1473 x 1067 x 1905) |
| Machine Footprint                      | 7.1 sq. ft.                        | 9.4 sq. ft.                         | 11.0 sq. ft.                        | 11.0 sq. ft.                         | 15.0 sq. ft.                        | 11.0 sq. ft.                        | 19.0 sq. ft.                         | 17.0 sq. ft.                         |
| Electrical Service                     |                                    |                                     |                                     |                                      |                                     |                                     |                                      |                                      |
| 208 VAC 1 Ph<br>60 Hz Line current     | 2.2 kW<br>14                       | 3.0 kW<br>17                        | 4.5 kW<br>25                        | 6.0 kW<br>33                         | 6.0 kW<br>33                        | 6.0 kW<br>33                        | 6.8 kW<br>38                         | 6.8 kW<br>38                         |
| 240 VAC 1 Ph<br>60 Hz Line current     | 3.0 kW<br>16                       | 4.0 kW<br>20                        | 6.0 kW<br>29                        | 8.0 kW<br>35                         | 8.0 kW<br>35                        | 8.0 kW<br>35                        | 9.0 kW<br>44                         | 9.0 kW<br>44                         |
| 208 VAC 3 Ph<br>60 Hz Line current     | N/A                                | 6.8 kW<br>20                        | 9.0 kW<br>27                        | 13.5 kW<br>40                        | 13.5 kW<br>40                       | 13.5 kW<br>40                       | 18.0 kW<br>53                        | 18.0 kW<br>53                        |
| 240 VAC 3 Ph<br>60 Hz Line current     | N/A                                | 9.0 kW<br>23                        | 12.0 kW<br>31                       | 18.0 kW<br>46                        | 18.0 kW<br>46                       | 18.0 kW<br>46                       | 24.0 kW<br>61                        | 24.0 kW<br>61                        |
| 480 VAC 3 Ph<br>60 Hz Line current     | N/A                                | 9.0 kW<br>12                        | 12.0 kW<br>16                       | 18.0 kW<br>23                        | 18.0 kW<br>23                       | 18.0 kW<br>23                       | 24.0 kW<br>31                        | 24.0 kW<br>31                        |

All specifications are subject to change without notice.

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- Empty chamber performance with exhaust closed and at rated voltage*

### ► Standard Oven Options

- Nickel-plated wire rod or stainless steel slotted shelves
- Door switch
- Motorized intake damper (two-position or proportional)
- Welded and sealed inner chamber
- 24-hour, 7-day digital process timer
- Circular chart recorder
- Reverse door hinge
- Glass observation panel(s)
- Floorstands
- Casters
- Comm-Link RS-485 to RS-232 converter

### ► Engineered Oven Options

- Additional lead-in ports
- Interior light
- Oversized one-pass air flow system for faster cool down
- Redundant over-temperature protection
- Rear access door(s)
- All stainless steel exterior construction
- Special control systems
- Vertical air flow
- Space-saving stack oven design
- Trace solvent safety package
- N2 gas systems



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*Specifications and Product Information are subject to change without notice.*

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