# Blue F

A Comprehensive Line of Laboratory Ovens, Inert Atmosphere Ovens, Gravity and Mechanical Convection Ovens





Blue M is recognized as an industry leader in the engineering, manufacturing, testing and aftermarket support of industrial and laboratory ovens. Known for their rugged reliability and value pricing, Blue M brand ovens are available in standard or engineered to order (ETO) configurations. These include inert gas, Class A / solvent-venting and explosion proof (XP) ovens. Blue M ovens are commonly used for ASTM testing, annealing, curing and drying. Blue M ovens are available in bench top, floor and stacked models to accommodate a variety of ergonomics and footprints.



### Mechanical Convection Oven (ESP400 Series)

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 260°C (500°F)	2.8 cu.ft.	RKC RF100 Optional: Watlow PM or F4T	Standard air chamber, welded/ sealed chamber



## **Mechanical Convection Oven (146 Series)**

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 350°C (662°F)	4.2 to 24.0 cu.ft.	Watlow PM Optional: Watlow F4T or Yokogawa UP55A	Standard air chamber, welded/ sealed chamber, inert gas, cleanroom, pass-through front/ rear doors, Class A safety or ASTM



#### Stacked Mechanical Convection Oven (STK/STL Series)

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 350°C (662°F)	5.8 cu.ft. Each Chamber	Watlow PM Optional: Watlow F4T or Yokogawa UP55A	Standard air chamber, welded/sealed chamber, inert gas, cleanroom (STK only), conditioning plenum mounted in the rear or top and bottom



#### Mechanical Convection Oven (Batch Series)

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 316°C (600°F)	16.0 to 96.0 cu.ft.	Watlow PM Optional: Watlow F4T or Yokogawa UP55A	Standard air chamber, Welded/ sealed chamber, Class A safety, roll-in rack, pass- through front/rear doors, inert gas, high temp 399°C (750°F)



## **Ultra-Temp Oven (IGF/CW Series)**

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 704°C (1,299°F)	1.6 to 24.0 cu.ft.	Watlow PM Optional: Watlow F4T or Yokogawa UP55A	Standard air chamber, inert gas (reduces temp to 593°C [1,099°F])



# Friction-Aire® (HS Series)

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
20°C (36°F) above ambient to 150°C (302°F)	1.7 to 38.0 cu.ft.	Power-O-Matic 90 (POM-90) bellows-	Standard air chamber, UL and non-UL models available
or 20°C (36°F) above		activated inlet	
ambient to 260°C (500°F)		vent control	



## **Mechanical Safety Oven (CSP Series)**

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
15°C (27°F) above ambient to 343°C (649°F)	3.0 cu.ft.	Watlow PM Optional: Watlow F4T or Yokogawa UP55A	Standard air chamber, single unit available in horizontal and vertical airflow; stacked configuration with vertical airflow only



#### **Burn-In Oven (BI Series)**

	TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
_	5°C (27°F) above ambient to 300°C (572°F)	9.0 to 33.3 cu.ft.	Watlow F4T Optional: Yokogawa UP55A	Standard air chamber, horizontal or vertical airflow



#### Lab Oven (LO Series)

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
10°C (18°F) above ambient to 260°C	0.95 to 30 cu.ft.	Shanghai Yatai Instrumentation Model	Standard air chamber, available with programmable
(500°F)		YLD-2000	controller



#### **Gravity Oven (GO Series)**

TEMPERATURE	INTERIOR VOLUME	CONTROLLER	AVAILABLE CONFIGURATIONS
10°C (18°F) above ambient to 260°C (500°F)	0.95 to 7.9 cu.ft.	Shanghai Yatai Instrumentation Model YLD-2000	Standard air chamber, only available with single setpoint controller



#### Watlow PM Controller:

The Watlow PM panel mount controller offers control options that reduce system complexity and thermal loop ownership cost. The Watlow PM is available as an over/under limit controller, PID controller, or Integrated limit controller. An option to integrate a high amperage power controller output with a high-performance PID controller and an over/under limit controller in one space-saving, panel mount package is also available. Many communications options are offered to support connectivity needs.



#### Watlow F4T Controller:

The F4T with INTUITION® temperature process controller from Watlow® offers a wide range of field removable I/O modules for maximum design flexibility. Configurations can be custom tailored to meet the scaling needs of a tremendous range of equipment and applications while providing exactly the hardware types required for compatibility. The F4T controller also features a 4.3-inch, color, graphical touch panel. Combining power, flexibility and functionality, this new controller offers unmatched versatility, and its best-in-class ease of use could very well make user manuals a thing of the past.





# Yokogowa UP55A Controller:

The Yokogawa UP55A Profile Controller employs an easy-to read, 14-segment large color LCD display, along with navigation keys, thus greatly increasing the monitoring and operating capabilities. A ladder sequence function is included as standard. The short depth of the controller helps save instrument panel space. The UP55A also support open networks such as Ethernet communication.

\* Yokogowa UP55A is not an available option for the Friction-Aire, Lab Oven, and Gravity Oven units.





# Blue M 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 nonconformity, and Blue M determines to its reasonable satisfaction that the product or service is in fact nonconforming, then Blue M shall, at its option and expense, repair or replace the non-conforming product or correct the nonconforming 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



# International Support

- All models available in 50 & 60 Hertz configurations
- CE. cUL. & UL-508A available
- Authorized reps / servicers in most countries



# Aftermarket Services

#### Optimize, Revitalize, Maximize.

From installation, parts and global support to servicing, testing and yearly maintenance, • Preventative Maintenance we are here to ensure your TPS product achieves maximum performance.

**GAMP Documentation** may include FRS, HDS, SDS, FAT, SAT, and IQ/OQ

#### Services Include:

- Installation Supervision
- Start-up & Training
- Turnkey Installation
- Temperature Uniformity
- Instrument Calibration
- GAMP Documentation



# **TPS MAX Program**

The TPS MAX Program allows the customer to purchase future service and/or parts without the need to have a purchase order approved and released when parts or service are needed. These funds are available to be used on parts or service in the future, saving you and your company costly down-time. Enrollment also entitles you to the many advantages listed below. Enrollment in the TPS MAX Program requires a minimum purchase of \$5,000.00. Amounts above \$5,000.00 will be accepted. Funds do not expire.

#### 10% Off:

- Service Labor (including: training, installation, preventive paintenance)
- Travel Time
- Calibration Services
- Parts

#### Also included:

- Free ground shipping on parts
- No overtime charges billed for work or travel performed Monday - Friday
- Mileage is free





≫Blue M >> Gruenberg >>> Lindberg/MPH **»**Lunaire ≫Wisconsin Oven ≫Tennev