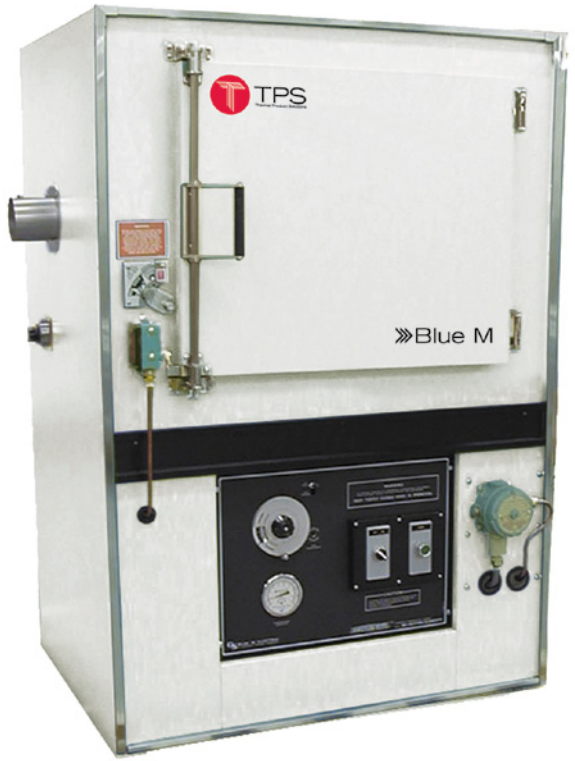
TPS
Thermal Product Solutions

»Blue M Friction Aire Safety Ovens

Friction Aire Safety Ovens

Blue M Friction Aire® ovens provide a controlled heat source without heating elements, which eliminates atmospheric explosions and ignitions when working with hazardous Class 1, Group D materials. Class 1 atmospheres contain flammable vapors, and Group D materials include many solvents commonly used in finishing applications, such as lacquers and paints.

Underwriter's Laboratories (UL) lists three models of the Friction-Aire family.



Features:

- 100% straight-line proportional temperature performance
- High-velocity air flow system
- Blower-generated heat
- No hot spots, no points that exceed the indicated air temperature
- Setpoint control
- Over-temperature protection system
- Temperature-sensitive bellows
- By-pass damper vane
- Sensing bulb
- Fast cool-down

Model	Inside Dimensions inches (cm) W x D x H	Overall Dimensions inches (cm) W x D x H	HP	[1]Approx Heating Power (Watts)	Cubic Feet Capacity	Shipping Weight Lbs. (Kg)
HS-1002	14 x 17 x 12 (35 x 43 x 31)	37 x 33 x 48 (93 x 84 x 120)	1	500	1.3	465 (211)
HS-1202	25 x 20 x 20 (63 x 51 x 51)	42 x 39 x 63 (106 x 98 x 159)	2	1300	5.2	800 (363)
HS-3802	38 x 25 x 25 (95 x 63 x 63)	57 x 44 x 68 (144 x 111 x 172)	3	2000	13.7	1300 (590)

1 Voltage - all models: 208/240/480 V 3-Phase / 60Hz. AC Chambers will operate satisfactorily on 208 V 3-Phase / 60Hz. AC when motor is connected for 240 V 3-Phase /60Hz AC

Model	Inside Dimensions inches (cm) W x D x H	Overall Dimensions inches (cm) W x D x H	HP	[1]Approx Heating Power (Watts)	Cubic Feet Capacity	Shipping Weight Lbs. (Kg)
HS-362-1[2]	37 x 37 x 48 (93 x 93 x 120)	66 x 58 x 91 (167 x 147 x 231)	10	6500	36	2200 (1000)

1 Voltage -all models: 208/240/480 V 3- Phase/ 60Hz. AC Chambers will operate satisfactorily on 208 V 3-Phase / 60Hz. AC when motor is connected for 240 V3-Phase /60Hz. AC
2 Bench Model

Model	Inside Dimensions inches (cm) W x D x H	Overall Dimensions inches (cm) W x D x H	HP	[1]Approx Heating Power (Watts)	Cubic Feet Capacity	Shipping Weight Lbs. (Kg)
HS-1004-1	14 x 17 x 12 (35 x 43 x 31)	37 x 33 x 48 (93 x 84 x 120)	1	600	1.3	465 (211)
HS-1204-1	25 x 20 x 20 (63 x 51 x 51)	42 x 39 x 63 (106 x 98 x 159)	3	2000	5.2	800 (363)
HS-3804-1	38 x 25 x 25 (95 x 63 x 63)	57 x 44 x 68 (144 x 111 x 172)	5	3000	13.7	1300 (590)

1 Voltage -all models: 208/240/480 V 3-Phase/ 60Hz AC Chambers will operate satisfactorily on 208 V 3-Phase / 60Hz AC when motor is connected for 240 V 3-Phase /60Hz AC

Typical Industrial Safety Oven Operating Characteristics Models HS-1002, HS-1202 and HS-3802

Temperature range: +20°C above ambient to +150°C (302°F)
Typical air temperature uniformity at +100°C: 0.5°C
Run-up time: (no load) to +150°C: 120 minutes
Cool-down time: (no load) to +50°C: 30 minutes
Control accuracy: 0.5°C

Drift: (over 24-hour period)
at +50°C: 1.0°C
at +100°C: 0.75°C
at +150°C: 0.50°C

UL Listed

Average velocity: (adjustable)
Maximum: 400/FPM
Minimum: 100/FPM

Model HS-362

Temperature range: +20°C above ambient to +150°C (302°F)
Typical air temperature uniformity at +100°C: 0.5°C
Typical air temperature uniformity at +150°C: 1.0°C
Run-up time: (no load) to +150°C: 60 minutes
Cool-down time: (no load) to +50°C: 30 minutes
Control accuracy: 0.5°C

Not UL Listed

Drift: (over 24-hour period)
at +50°C: 1.0°C
at +100°C: 0.75°C
at +150°C: 0.50°C

Average velocity: (adjustable)
Maximum: 500/FPM
Minimum: 200/FPM

Models HS-1004, HS-1204 and HS-3804

Temperature range: +20°C above ambient to +260°C (500°F)
Typical air temperature uniformity at +100°C: 0.5°C
Typical air temperature uniformity at +200°C: 1.0°C
Run-up time: (no load) to +260°C: 140 minutes
Cool-down time: (no load) to +50°C: 30 minutes

Control accuracy: 0.5°C

Not UL Listed

Drift: (over 24-hour period)
at +50°C: 1.0°C
at +100°C: 0.75°C
at +150°C: 0.50°C
at +200°C: 0.50°C

Average velocity: (adjustable)
Maximum: 500/FPM
Minimum: 250/FPM

Three models have been listed by Underwriter's Laboratories for operation in Class 1, Group D hazardous locations. They are ideally suited for the testing and processing of hazardous materials, paints, solvents and lacquers. There are no heating elements in the chamber and no inherent hot spots to create potential danger. Tests show that load temperature follows closely behind chamber temperature. If the application calls for the processing of hazardous materials over extended periods, the load temperature and chamber temperature will be practically equal all of the time. When chamber and load reach complete equilibrium they will remain so indefinitely until the temperature is deliberately changed. Even if spillage of flammables inside the chamber occurs, danger is minimized because any surface the liquid encounters is only as hot as the interior environment.

This industrial safety oven is UL listed for Class I Group D operation and is the first and only industrial safety oven to have this listing.

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