

◆ Qmax High Performance Benchtop Oven

Meets your testing requirements



The Qmax High Performance Benchtop oven is specifically designed to meet the frequent air changes and tight temperature uniformity required of the ASTM 5423 Type I & Type II oven specification. A high-volume fan circulates air through perforated, stainless steel walls to create a constant horizontal airflow across all sections of the oven. The result is highly uniform airflow to easily meet ASTM 5423 Type I and II specification while tested according to ASTM 5374.

The Qmax oven exceeds the ASTM 5423 Type II performance requirement with a temperature variation of less than 6°C at 300°C while maintaining 100-200 air changes per hour. In addition, the brass bar thermal lag time showed superior oven temperature recovery. These ovens can be used for applications such as thermal evaluation of electrical insulating materials, testing, aging, curing, drying, sterilizing and other thermal applications where tight temperature uniformity is required.



FEATURES AT A GLANCE

- ◆ Temperatures up to 343°C (650°F)
- ◆ Meets ASTM 5423 Type I and II specification while tested according to ASTM 5374
- ◆ Tight temperature uniformity even with increased air changes
- ◆ Horizontal airflow for uniform thermal performance
- ◆ Protocol 3TM control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export
- ◆ Multiple temperature operations are controlled by up to eight programs, with eight ramp and soak segments in each program
- ◆ 304 Stainless steel interior
- ◆ Sliding shelf design for easy load and unload
- ◆ Access port in rear of oven for test connections
- ◆ 5-year heater warranty
- ◆ End of cycle and high-limit indicators
- ◆ UL and C-UL listed open industrial control panel

RQD

1-42 BENCH

PHYSICAL SPECIFICATIONS

Chamber size (width x depth x height)	20 x 18 x 20 in. 51 x 46 x 51 cm	
Capacity in cubic feet (liters)	4.2 (119)	
Overall size (width x depth x height)	47.2 x 31.5 x 39.8 in. 120 x 80 x 101 cm	
Electrical: single phase, 50/60 Hz	220-240V	30 amps Heater: 6kW
	208V	34 amps Heater: 6kW
Number of shelves provided	2	
Maximum number of shelves	8 on 2 in (5.1 cm) centers	
Shelf dimensions (width x depth)	19.6 x 17.75 in. 50 x 45 cm	
Exhaust outlet diameter	2.5 in. (6.4 cm)	
Insulation Thickness	4 in (10.2 cm)	
Approximate net weight	350 lbs (159 kg)	
Approximate domestic shipping weight (export adds weight)	480 lbs (218 kg)	

FUNCTIONAL SPECIFICATIONS

Time to temp with no load (40°C to 177°C)	14 minutes
Time to temp with no load (40°C to 260°C)	23 minutes
Time to temp with no load (40°C to 343°C)	45 minutes
Temperature Uniformity	±1°C at 177°C ±1.5°C at 260°C ±2.5°C at 343°C
Temperature Uniformity - Type II oven	Exceeds specification of temperature variation 6°C at 300°C with 100 to 200 air changes per hour
Minimum operating temp above ambient	25°C (45°F)
Control stability	±0.5°C / 5°C Δ
Repeatability	±0.5°C
Maximum load capacity	200 lbs (91 kg)
Maximum shelf capacity	30 lbs (13.6 kg)
Recirculating fan	1.5 HP / 800 CFM (377.6 LPS)

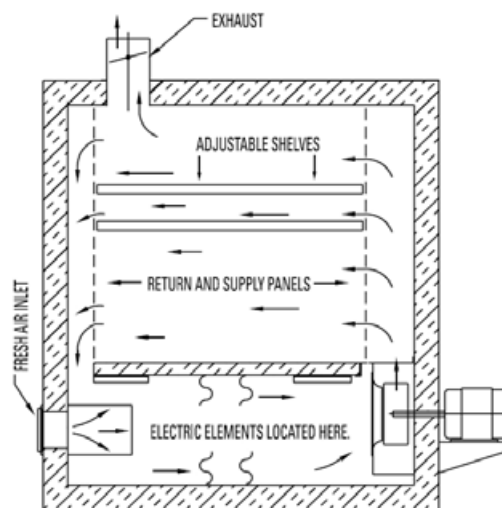
Notes: Uniformity figures are based on a nine-point test conducted in an empty oven (no product, 2 standard weight shelves included with the oven) after stabilization period. Uniformity can vary slightly depending on unit and operating conditions.

Minimum operating temperature and cooling times are based on a 20°C ambient temperature measured at the fresh air inlet with the fresh air and exhaust dampers fully open. Δ represents the change in ambient temperature.

Specifications are subject to change without notice. If the existing specifications differ from yours, ask about our customizing capabilities.

OPTIONS

- ◆ PC interface for remote input, monitoring and recording (RS485/422/232)
- ◆ Extra shelves
- ◆ Door interlock switch turns off heater when door is opened
- ◆ Chart recorder
- ◆ Hi-limit over-temperature audible and visual alarm
- ◆ Hardware for stacking ovens
- ◆ Stand
- ◆ CE compliance



AIRFLOW: RQD front view cross section showing airflow pattern.

Warning: Despatch Qmax ovens are not to be used with flammable solvents, materials or enclosed containers.

SERVICE AND TECHNICAL SUPPORT

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