

Industrial supraMAC Oven

Gas or Electric for Efficient and Consistent Plate Drying Performance

Produced by the world's leading industrial pasting equipment manufacturer, the **gas Industrial supraMAC** and the **electric industrial supraMAC Ovens** will meet your commercial requirements. The large inside oven width allows processing of plates up to 711 mm (28 inches) tall - 762 mm (30 inches) over the lugs. The oven horizontally dries plates from 2 mm to 9.5 mm (0.080 inches to 0.375 inches) thick. Variable speed allows processing of up to 110 panels per minute. Thicker plates can be processed, but at lower speeds.

BROAD HEAT RANGE: The industrial supraMAC Oven has an output range of 37,000 to 1.5 million BTU's per hour for gas and 0 to 1.6 million BTU's per hour for electric models. This provides you with the proper heating power for a broad range of plate sizes and thicknesses.

RECIRCULATING HIGH-VELOCITY AIR SYSTEM: Using forced air from a 15,000 CFM blower, both the top and bottom surfaces of the plates are dried as they travel the full length of the oven. This forced air promotes improved battery performance by better preparation of your plates for curing.

EVEN HEATING WITH OUTSTANDING ENERGY EFFICIENCY: Using natural, propane, butane gas or electricity, the industrial supraMAC Ovens feature 100% convection drying. The convection heat sources from a stainless steel "heat box". The industrial supraMAC Oven uses a larger heating chamber, which maximizes energy efficiency for even drying. There is (152 mm) 6-inches of semi-rigid insulation on the oven chamber's top, sides, ends, floor, and doors.

PRECISION TEMPERATURE CONTROL: The automatic temperature control adjusts the burner/heater to maintain a constant temperature (using a modulating valve or a SCR controller). You can monitor the heat to prevent under-or over-drying.

PANEL TEMPERATURE SENSOR: The optional built-in panel temperature sensor senses the heat of the exiting plates. Two automatic temperature controllers maintain proper heat readings. One controller works with the panel temperature sensor and the other is activated when no panels are present. This double temperature control provides precise drying temperatures to reduce paste pull away from the grid wires. Exiting plates have consistent and proper moisture content for successful curing.

ADDED CORROSION AND RUST RESISTANCE: The oven's interior and exterior walls and ductwork are aluminized steel. This added durability means greater corrosion and rust protection for longer life and less maintenance. The exterior is coated with a safety blue, heat-resistant, industrial grade paint for additional protection.

STAINLESS STEEL CONVEYOR BELT: A 762 mm (30 inch) wide X 18,923 mm (745 inch) long, open weave belt with 25 mm (1 inch) square openings is standard on the supraMAC Oven. Running horizontally through the oven, the belt allows for even airflow to both surfaces of the plates and also provides greater support for transporting your plates. The stainless steel belt offers years of maintenance-free life.

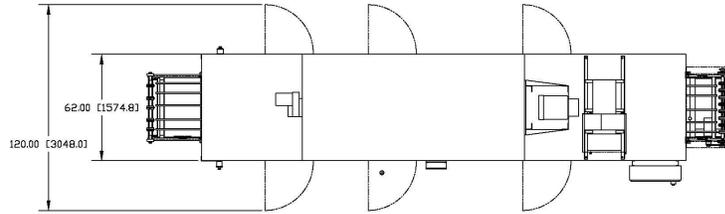
SAFER ENVIRONMENT:

All operator controls are positioned for easy access. Using a separate exhaust fan, the industrial supraMAC Oven maintains a slight negative pressure to keep exhaust fumes from leaking out into the workplace. Optional environmental flexible skirting can be placed around the base of the oven for added lead containment safety. On both of the Industrial supraMAC Ovens, safety features include a high temperature limit switch to turn off the heater/burner if it should begin to overheat; an exhaust fan pressure switch ensures that the exhaust fan is working properly, and a re-circulating fan pressure switch ensures proper air recirculation before the heater can be started.

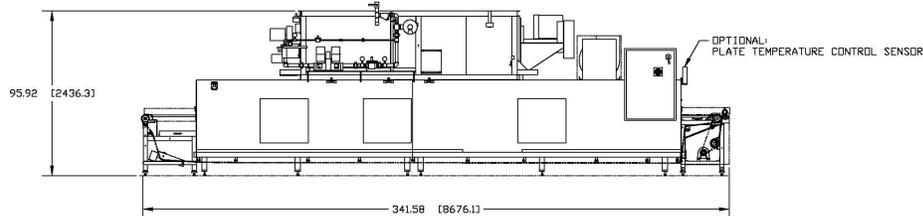


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TECHNICAL SPECIFICATIONS



INDUSTRIAL supraMAC OVEN



Required User Data:

- Specify gas type and supply pressure or electric with voltage.
- Specify right or left hand operator control location
- Specify electrical requirement

Foundation: Standard 102 mm (4-inch) thick reinforced concrete floor or pad.

Insulation: 152 mm (6-inch) semi-rigid insulation on oven chamber's top, sides, ends, floor, and in doors.

Air-recirculation system: 15,000 SCFM blower, 16-gauge aluminized steel ducts with nozzles above and below conveyor.

Operating Temperature Range: 121°C (250° F) to 482°C (900° F)
Typical performance data: (for 5.7 mm (0.227 inch) thick plate)
Oven speed: 110 panels/minute
Oven drying temperature: 343°C (650°F)
Plate exit temperature: 49°C (120°F)

Gas ovens typical BTU Usage: 1,080,000 (natural gas), about 60% of oven's rated capacity.

Electric ovens typical electrical consumption: 297kW (electric).
Electric heater rated at 470 kW.

Average Ambient Temperature: 24°C (75°F) one foot from oven at oven mid-point when room is at 21°C (70°F) and oven is at 343°C (650° F).

Operational Requirements:

Personnel: One or two at take-off

Standard Electrical: Gas: 230/380/460V, 3-Phase, 50/60Hz, 13 kVA
 Electric: 485 KW maximum

Compressed Air: .06 m³/min (2 CFM) @ 517 mm/Hg (10 PSI) for optional panel temperature sensor only

- Electric motors:**
- 1 - 1/2 HP (gas only)
 - 1 - 1-1/2 HP (conveyor drive)
 - 1 - 2 HP (exhaust blower)
 - 1 - 15 HP (recirculation blower)

Fuel : Natural , propane or butane gas supply with a pressure range of 0.5 PSI to 125 PSI

Ventilation: Customer provides exhaust to roof. Slight negative pressure in oven due to 2,000 SCFM exhaust blower.

Estimated shipping weights and dimensions (4 export crates):

- Total weight = 5932 kg (13,077 lbs)
- Inlet: 4318x1981x1524 mm (170x78x60 in) - 1481 kg (3264 lbs)
- Outlet: 4318x 2184x2261 mm (170x86x89 in) - 1869 kg (4121 lbs)
- Top: 4724x1880x1346 mm (186x84x53 in) - 1768 kg (3897 lbs)
- Off-bear and Misc.: 3581x1321x1397 mm (141x52x55 in) - 814 kg (1795 lbs)



Helping to make the best batteries...yours.
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