

optaMAC Oven

(with extra extended heated section)

Conserves energy, provides proper and uniform plate drying



(Available in gas or electric options)

The **optaMAC Oven with an extended heated section** features 100% convection heat with a 304" (7722 mm) heated section and an overall length of 342" (8691mm). This oven is designed for customers using high speed continuous lines.

The specially designed upper and lower ducts with forced convection heat properly dries the top and bottom surfaces of the pasted plate without closing the surface pores or over drying the plate's center. An 11,500 CFM re-circulating fan achieves consistent quality through the entire length of the oven by evenly directing airflow.

Customer results have shown a 20%-25% savings in energy over other ovens.

Precise sensors read the oven's

temperature and signals the burner to modulate intensity based on the operating set point.

The oven has an hourly rating of 20,000 to 1,200,000 BTU's per hour for 60Hz and 20,000 to 1,000,000 BTU's per hour for 50Hz.

The electric oven is outfitted with a 315kw duct heater regulated with SCR controls.

The oven belt is driven on exit end by a hollow-shaft reducer and motor. The belt is kept taught by a weighted belt take-up on the exit end. This allows the belt to be kept taught using less force which results in longer belt life.

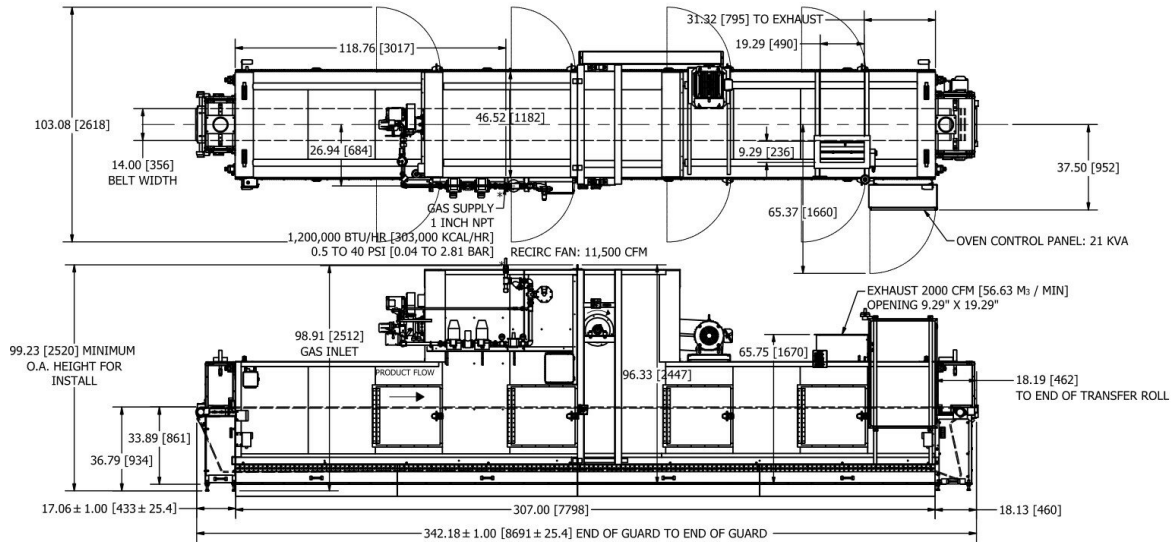
A power assisted exhaust rated at 1725 CFM is used to increase

drying efficiency and to maintain the negative pressure inside the oven. This allows a cooler ambient temperature in the area surrounding the oven and keeps the lead away from the factory air.

Optional off-bearing conveyor:

As the surface-dried plates exit the optaMAC Oven, they are either conveyed to our Hi Speed Stacker or any of MAC's stacker options for automatic stacking and processing or shingled in a horizontal position allowing easy manual collection of the plates on a 3.0 m (10 foot) off-bearing conveyor attached to and driven by the optaMAC Oven.

TECHNICAL SPECIFICATIONS



Required User Data:		Foundation:	
<ul style="list-style-type: none"> Specify gas type and supply pressure (with gas oven) Specify right or left hand operator control location (when standing behind feeder looking toward oven) Specify electrical requirements 		Standard 4-inch (102 mm) thick reinforced concrete floor or pad. Holes for lag bolting to floor are provided.	
Operational Requirements:			
Personnel:	Three, semi-skilled	Electrical Consumption:	20.3 kVA
Standard Electrical:	220-480V, 3-phase, 50-60 Hz., Special electrical available upon request	Hydraulics:	None
Electric Motors:	15 HP - Recirculation Blower 2 HP - Conveyor Drive 2 HP - Exhaust Blower	Ventilation:	Slight negative pressure in oven from 1,725 CFM exhaust blower. Customer provides exhaust to roof or baghouse.
Oven rated heat capacity:	20,000 BTU's to 1,200,000 BTU's per hour for 60 Hz and 20,000 to 1,000.00 BTU's per hour for 50 Hz	Water:	None for operation, cleaning only.
Oven turn-down ratio:	60-1 with modulation gas valve built in.	Compressed Air:	2 CFM @ 10 psi for optional panel sensor cooling, 1/2 inch NPT
Oven temperature range:	120° to 480° C (250° to 900° F) depending upon plate thickness and rate	Oven chamber:	Heavy frame with reinforced steel skin. Oven walls and duct work of aluminized steel. Combustion box of stainless steel. 152 mm (6-inch), semi-rigid insulation on oven chamber's top, sides, ends, floor and doors.
Oven fuel: <i>(The optaMAC oven is available with Gas or Electric Heating)</i>	Gas oven: Natural, LP, Propane or Butane gas on a gas supply pressure range of .04 to 8.9 Kg/cm ² (0.5 to 25 PSI.) Electric oven: 315kw duct heater.	Air recirculation system:	14 gauge steel ducts with air circulation above and below conveyor from 11,500 CFM blower.
Internal oven conveyor:	356 mm (14-inch) wide 12.7 x 12.7mm (1/2 x 1/2 inch) carbon steel	Access doors:	Eight total, three insulated side-hinged doors on each side, with safety door catches.

