

Makor UV Drying Oven model ULTRADRY 2/SCR

Flexible production, less available space, and the necessity to respect environmental rules require the use of fast-drying coatings. The ideal solution for this is the drying technology that uses Ultraviolet lamps (UV) at direct radiation.

The ULTRADRY oven system instantly dries mono and bi-component UV paints, clear and pigmented, matte or glossy. Its modularity allows obtaining different configurations, guaranteeing perfect drying of flat and shaped panels, including edges.

Transport System

- panels are moved by a series of idle rollers motorized by a double row of parallel chains
- the painted steel bars are made of material resistant to high temperatures
- inverter-controlled speed is infinitely variable
- a 2-meter extension is located at the exit for manual off-loading

UV Lamps

- the **two (2) upper lamps** are positioned obliquely in respect to the transport system and can be adjusted on the lamp axis in order to aim the UV rays on the upper side of the panels and on their edges, guaranteeing total curing
- each lamp is placed inside its own structure and has an independent ventilation device that keeps the bulbs at an ideal temperature, providing longer life and better performance
- lamp power is variable from 0 to 120 Watt/cm
- it is possible to install two different types of lamps:
- Ga Gallium, with high penetration capacity suited for pigmented paints
- Hg Mercury, the proper wave length for clear paints
- in case the line stops, a shield rotation system avoids radiating the workpieces, and an energy-saving system automatically reduces lamp power to a stand-by setting

Control System

- PLC logic manages various working phases of each lamp: stand-by, radiation intensity, and safety systems
- also displays production and maintenance parameters

Technical Specifications

workpiece length min 300 mm (11-3/4")
max unlimited
workpiece width min 25 mm (1")
max 1300 mm (51")
workpiece height min 5 mm (3/16")
max 50 mm (2")
feed speed 1.9 to 11 m/min (6.2 to 36 ft/min)
working height \pm 50 mm 900 mm (35-1/2")
bulb working length 1600 mm (63")
number of upper lamps 2

lamp specific power 0 to 120 W/cm
lamp power 13 kW
feed motor power 0.55 kW
suction motor power 2 x 1.5 kW

Utility Requirements

Electrical

operating voltage 480 V / 3-phase/ 60 Hz
total connected load 32 kW*

Air

exhaust air volume 4,800 m³/hr (2,825 cfm)
air make up required 4,800 m³/hr (2,825 cfm)
connection diameter 200 mm (7-7/8")

Compressed Air

pressure required 87 psi
consumption / volume (0.18 cfm)

*considering mono-phase lamps

Electrical equipment installed according to UL regulations. Voltage supplied must not fluctuate in excess of +/- 5% of its stated value.

Control side: Right-hand

Illustration only- not actual machine

