

WoodCure LAB

For development and testing of UV lacquers

High-performance UV system with two UV lamps for development and testing of UV lacquers or other types of UV chemistry. The operation of the lamps is operated on a panel, which is mounted on the side of the conveyor. The operator panel has an on/off function, a potentiometer for variable power level adjustment as well as a display showing the chosen power level. The system is specially designed with focus on high intensity, variable power 40-120W/cm², clean environment, detailed cooling control and long lifetime on bulbs and reflectors.

Specially designed with focus on

- High intensity
- Variable power 40-120W/cm²
- Clean environment
- Detailed cooling control and long lifetime on bulbs and reflectors



EFSEN UV & EB TECHNOLOGY has been designing high-end UV curing systems with the user in focus since 1986.

The lamp house

The cooling of the lamp module is done by a Push-Pull principle, where the cold air passes through the double walls of the lamp unit. A plenum spreads out the air, so uniformity is greatly improved. The air passes the bulb and is then sucked through the reflectors and out through the exhaust blower, which thereafter should be led to outdoor environment.

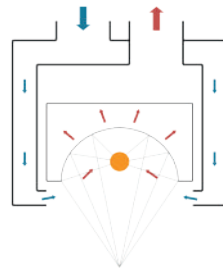
The cassette is fixed with the reflector and bulb, so none of these parts are moving. Furthermore, it is very easy to maintain reflector and bulbs by having extra reflectors. This minimizes downtime for maintenance and bulbs change. The WoodCure LAB does not have shutters installed.



Conveyor

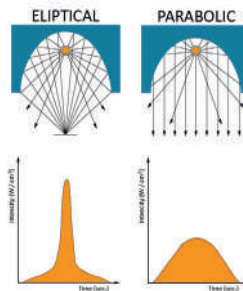
Conveyor is made of aluminum alloy rollers and a total conveyor length of approx. 1400mm. On top of the conveyor is mounted a light shield which holds two WoodCure LAB UV lamps of the above described.

A potentiometer is used for the regulation of the conveyor speed. Speed interval suggested 1-100m/min and an LED display shows the actual speed setting.



Cooling system secures clean air cooling along the bulb

Via an exhaust blower the air is pulled through the lamp/reflector zone and ventilated to the outside. This means that only clean air is passing the lamp and the reflector, and the lamp is being evenly cooled along its length. This gives you the most even cure along the width of the line and it prolongs the lifetime of the bulb's efficiency.



Better results with a correct optical design

Chose the elliptical reflector and you have the highest intensity (mW/cm) and Energy (mJ/cm). If you chose the parabolic reflector, you have high energy delivered over a distance of on a line.

The electrical cabinet

The cabinet has 2 stepwise 9kW electronic power supplies for power control of the lamps.

The electronic power supplies have variable adjustment from 40-120W/cm².

The cabinet and control are prepared for emergency stop, start, stop and error signals. On the front side of the conveyor the status can be monitored.

The electrical power must be connected to 3 x 400VAC. The wiring from the lamps to the electrical cabinet is included.

Technical specifications

Belt type and width: Kevlar belt 600mm width

Conveyor length: Approximately 1400mm

Power level: 40-120 W/cm² – 40Wcm² in standby 2 x 9kW solid state

Cassette for reflector: Included 1 per lamp system

Cooling fans: 2 fans per WoodCure (1 inlet – 1 exhaust)

Reflector: Elliptical for highest intensity parabolic for gloss control included

UV bulbs: 1 Mercury and 1 Gallium included

Get in touch

Skovlytoften 33 | DK-2840 Holte

efsen@efsen.dk | phone: +45 45650260