

UV reflector replacement saves energy

The installation of EFSEN UV & EB TECHNOLOGY designed cassettes in an old Hymmen/Hackemack oven at one of our customer's enhanced production while saving cost as a bonus. The curing properties improved the number of UV lamps needed in the production decreased and the heat issues were solved.

A furniture manufacturer was experiencing problems in their UV production line. The customer had a lot of heat on the substrate and had to lower the speed to get it through cured.

The cassettes in the existing Hymmen/Hackemack ovens were replaced with new cassettes produced by EFSEN UV & EB TECHNOLOGY in Denmark.

The replacement solved the curing problem and gave some other benefits.



Hymmen/Hackemack UV system

Better efficiency

The existing UV line consisted of four lamps, two gallium and two mercury lamps. Our customer installed three EFSEN cassettes in the four-unit lamp house and turned one of the gallium lamps off.

The intensity on the remaining gallium lamp more than doubled with the new cassette, keeping the same curing result but with only one lamp.

The two old gallium lamps each produced 200-300 mW/cm²^{EIT} whereas the new single lamp produces 900-1100 mW/cm²^{EIT}. The mercury lamps increased with more than 150% from 100-300 mW/cm²^{EIT} to 500-600 mW/cm²^{EIT} each.

Less spare parts needed

With the new lamp house unit, the customer saves approximately 18 kW. Turning the lamp off also reduced the need for reflector and bulb spare parts significantly, because lamps last longer and only 3 lamps instead of 4 were needed.

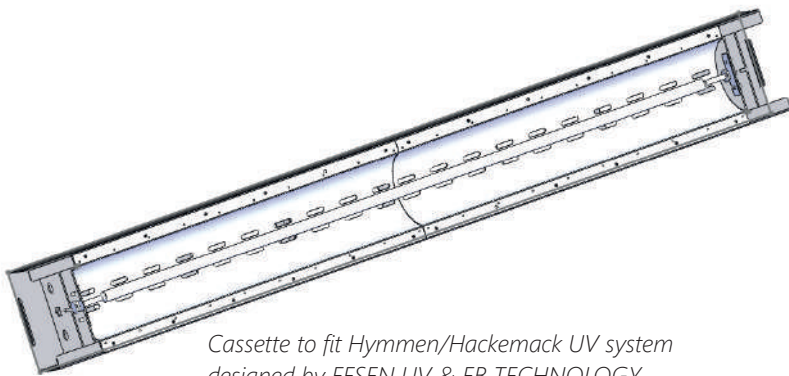
Designed to fit Hymmen/Hackemack

The EFSEN cassettes fit UV ovens from Hymmen/Hackemack and can be replaced without any further technical assistance from specialists. The design of the reflector and cassette enables higher intensity of the lamps and results in better curing using less energy. For maintenance the cassette can be pulled all the way out of the oven enabling easy bulb and reflector replacement.

The EFSEN cassettes for Hymmen/Hackemack are an economical solution and they are an excellent solution when you want to improve the cure of the UV lacquer, decrease heat, improve production speed and save energy cost.

Benefits with EFSEN Cassettes

- | | | |
|-----------------------|----------------------------|--|
| ✓ Higher reflectivity | ✓ Less spare parts needed | ✓ Easy maintenance |
| ✓ Higher intensity | ✓ Better curing properties | ✓ Less heat - because fewer lamps are needed |
| ✓ Simple installation | ✓ Low cost solution | |



Cassette to fit Hymmen/Hackemack UV system
designed by EFSEN UV & EB TECHNOLOGY

Savings at customer

- Energy saving 25%
- Reduced expenses for UV bulbs and reflectors (only 3 lamps instead of 4)

