

UV CURING EQUIPMENT FOR ROTARY OFFSET



Rotary Offset WEB OFFSET

Features

- several UV modules can be integrated
- can be implemented through a quick-change system
- special reflector geometry provides low IR emission
- optional: ACM system for temperature-sensitive substrates
- optional: inertizing

Benefits

• highly efficient curing



Rotary Offset

Competence in UV



High-performance UV Dryers for Rotary Offset

On the basis of the proven UVAPRINT product series, UV dryers were developed specifically for the rotary offset. In this, several UV modules can be integrated between the printing units.

Quick-acting closures at the modules reduce the setting-up times when carrying out



print job-dependent refitting of the UV modules on the machine, and thus increase the flexibility of the cus-tomer. A high efficiency due to a special reflector geometry as well as low thermal loading with optional special coating of the ref-lectors make it possible to process a wide spectrum of materials right up to thin foils. The cooling of the radiators takes place either through an air-cooling sys-tem or an air/water cooling system.

Inertization increases productivity and opens new markets

The Hönle dryers for web offset can be equipped with a compact inert chamber. Due to the inert atmosphere, curing takes place with low oxygen inhibition. The result of this is that either less photo-initiators are required for the curing process or that, depending on the process, there can be a considerable sav-ing in energy together with a simultane-ous low inert gas consumption. High-quality UV prints which are cost-efficient are the outcome. Compared with stan-dard processes, the colors are better cured and the surface quality of the end products is enhanced.

subject to change without notice



Higher UV yield with EPS

The UV dryers are operated with the elec-tronic power supplies of the EPS-series. With their use, the efficiency of the drying process can be increased by more than 10% in comparison to conventional bal-lasts. That means that the EPS technology either reduces the energy expenditure for the operation of the UV drying system or allows a higher production speed. Hönle offers various power supplies for diverse applications. The EPS is available for selection with a power output of up to 7.2 kW, two cascaded EPS's with a power output of up to 12 kW, and the EPS 200 with a power output of up to 20 kW.

Other advantages of the EVG at a glance:

- longer lamp life
- stepless output regulation from 20-100%
- low space requirement for the switch cabinet



Effective Temperature Reduction on the Substrate

The UV cold radiation system Advanced Cold Mirror Technology (ACM) was spe-cially developed for use in manufacturing processes with temperature-sensitive substrates (e.g. mono films or shrink sleeves). The optional available ACM sys-tem disposes of a dichroic mirror, whose geometry and coating notably reduces the percentage of IR radiation that is fo-cused onto the substrate. If one compares UV dryers which dispose of an ACM sys-tem with directly radiating UV systems, then the IR radiation would be reduced by up to 85% for ACM systems. Depending on the material in question, this means that the substrate temperature can be lowered by up to 65%. The high UV inten-sity, which is equivalent to that of a di-rectly radiating device, allows for the simultaneous achievement of high production speeds.



Technology Comparison



Own Lamp Manufacturing

The Hönle Group has its own production facility for UV radiators, which are optimally customized to the requirements. Thanks to the direct cooperation during the radiator production and the development of UV dryers, new standards are set as regards the quality and engineering of the radiators. Apart from the radiators with the common standard spectra, we also develop application-specific special spectra for our customers, using which new processes can be developed and the traditional UV processes can be optimized.