



## LEC

### Low Energy Curing

#### System Characteristics

- For use with highly reactive UV inks and coatings
- Reduced dryer power requirement
- Ozone-free lamp capable

#### Advantages

- Reduced system investment
- Substantial energy savings
- Optimized for commercial printing
- Allows immediate post-processing

## Low Energy Curing

LEC is a unique UV module system with specially designed components for Low Energy Curing (LEC). The low energy curing process is characterized by a combination of highly reactive UV inks and coatings, a specific dryer unit configuration, and a UV lamp developed for LEC inks and coatings. This system has been certified by the independent and neutral German Berufsgenossenschaft (BG) for energy-minimized drying.

### Features

LEC is optimized for what are known as „high-reactivity UV inks“. These inks are distinct in their chemical formulation and contain a higher amount of photoinitiators compared to conventional UV inks.

Consequently, these inks can be cured with significantly less UV-power input and still achieve comparable curing results. The reduced energy consumption therefore leads to significant cost savings; UV lamps require no more than 120 W/cm to cure high reactivity inks. The number of dryer modules required is also subsequently reduced. A straight-printing press requires just one UV module while a perfecting-press requires only two. The reduced spatial demand of the module components offers considerable advantages in print system design and contributes to overall energy savings through optimized cooling efficiency.

### Handling

LEC modules are easy to handle thanks to their lightweight, compact design and Plug & Play connections. Complete lamp replacement can be achieved within a matter of minutes.

### Special Features

LEC systems come standard with DiCure reflectors. In order to achieve optimum compatibility with LEC ink formulations while simultaneously maximizing energy efficiency, the lamps themselves are doped to achieve their highest UV output in the UV-A range. As a result, the use of environmentally-friendly ozone-free lamps is possible.



### Application

LEC systems are almost exclusively used for commercial printing processes. To alleviate concerns regarding specific ink colors or coatings, the manufacturers and/or suppliers of these inks and coatings are directly contacted to ensure complete compatibility. Highly reactive food-grade inks and coatings are currently not on the market.

### Main Features

- High-performance UV module for highly reactive UV inks.
- Certified by the German Berufsgenossenschaft for energy-minimized UV curing
- Compact and lightweight construction
- Plug & Play connections
- Quick, easy lamp and reflector replacement
- Ozone-free lamp capable
- Standardized DiCure reflectors