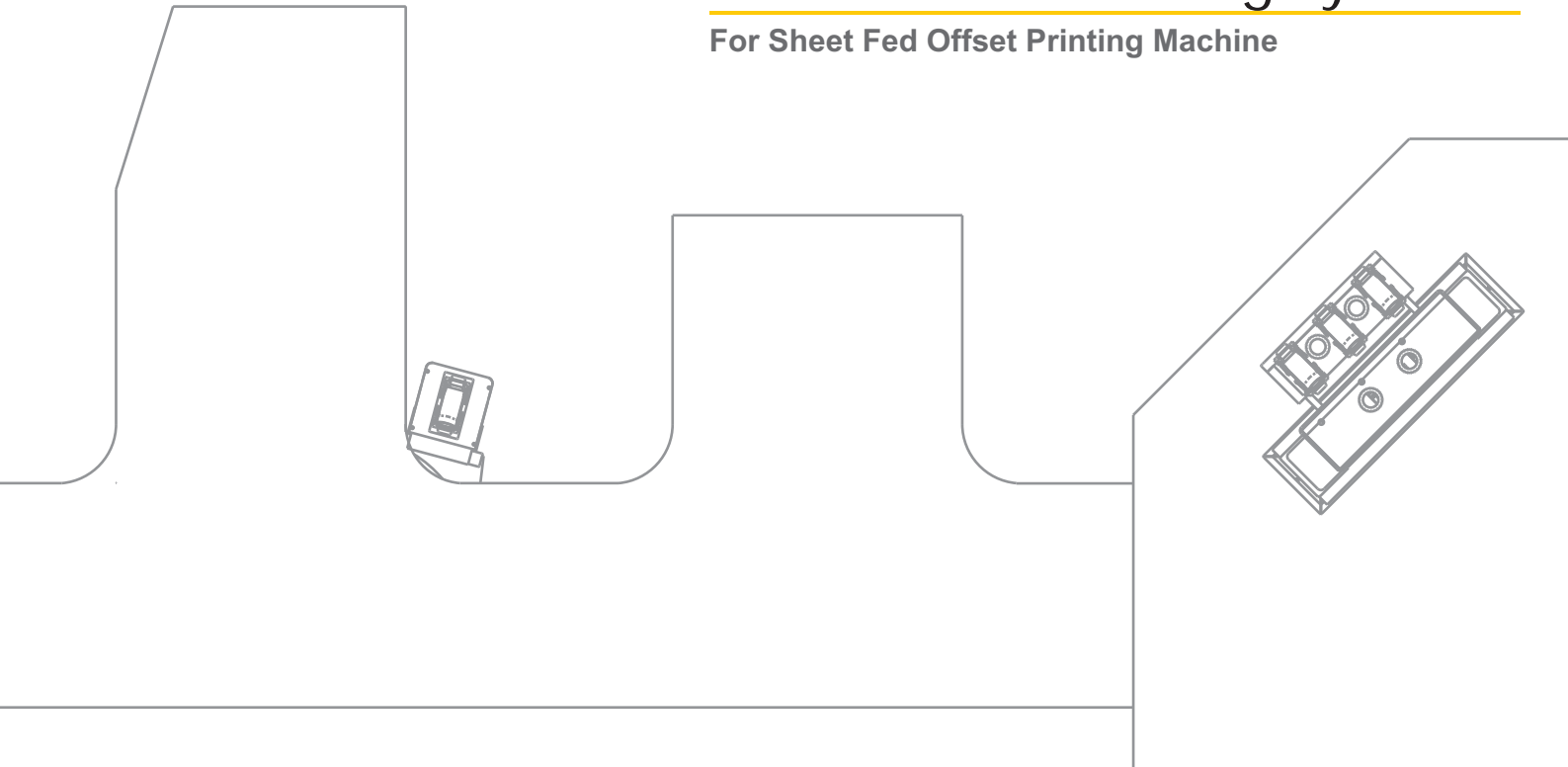


# Inter-deck UV Curing Systems

For Sheet Fed Offset Printing Machine



ELMAG ITALY, STATE OF THE ART TECHNOLOGY



## Technological Innovation for installation of Air-Cooled UV systems in printing machines

*The new range of UV reflectors has been achieved by combining high specific power to small size while ensuring maximum curing capacity at high-speed production*

### Advantages

- UV hoods can be easily installed in any type of printing machine
- The reflectors are made with extruded aluminium, extremely compact and light.
- The geometry of the optics allows optimizing the radiation parameters increasing the exposure time on the substrate with considerable energy saving.

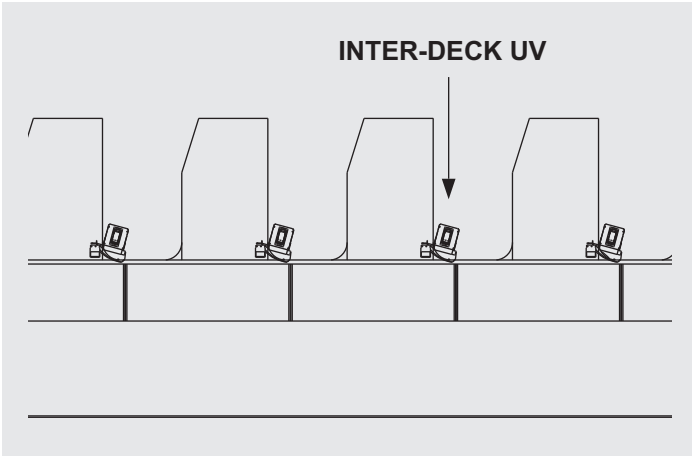
### Technical Features

- Air cooling made possible by special heat exchanging surfaces.
- Easy extraction of the lamp unit for maintenance operations.
- Instantaneous shutter with 90° / 180° pneumatic rotation on the lamp axis.
- Plug-in connectors for electric and pneumatic connections.
- Ray shields at the infeed and outfeed of the UV housing
- COLDRURE reflecting dichroic mirror for heat-sensitive materials, coated with special resins, able to reflect almost the totality of the UV energy and drastically reduce the unwanted infrared radiation.
- Heat sink set against the UV hoods to prevent any possible ray leakage.
- Automatic power reduction device for instantaneous machine downtime without increase in temperature.

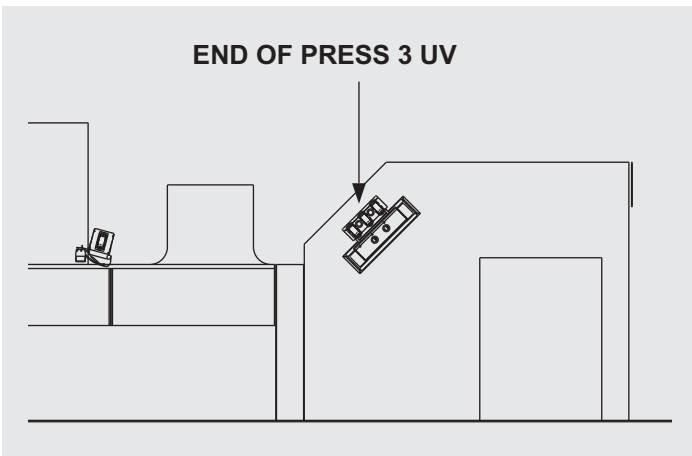
*In case of printing machines with limited space we use air/water mixed cooling system to reduce the size of the curing units. The chiller capacity allows the cooling fluid to keep temperature lower than 30° C. This prevents solid parts from building up inside the circuits and the Dew point, thus guaranteeing an optimum cooling of the UV system with reduced times and cost saving for maintenance operations.*



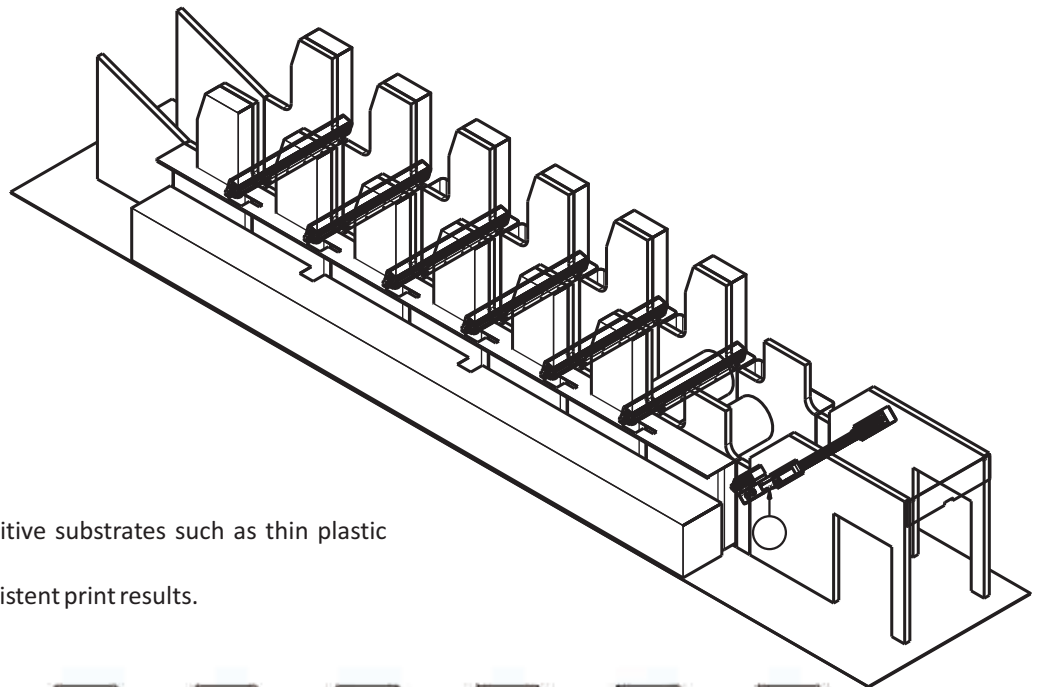
**Inter-deck UV**



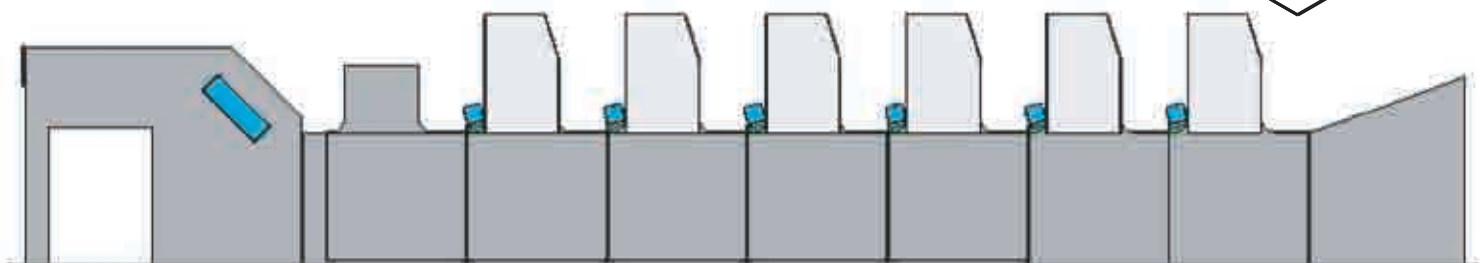
**End of Press 3 UV**



The UV system needs to have dimensional and planning characteristics dedicated as regards the thickness of the printed piece and the work to perform. The Superfici UV system is based on this concept and proposes UV units specifically developed for the type of piece and the processing that the customer will use allowing to eliminate completely the problems which can rise using the UV technology.

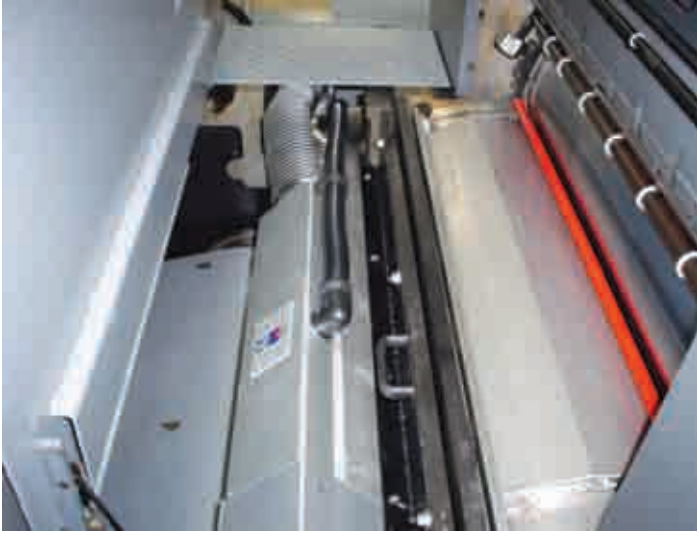


- Ease of printing on thermally sensitive substrates such as thin plastic sheets, lenticular sheets.
- No UV light leakage on blanket, consistent print results.





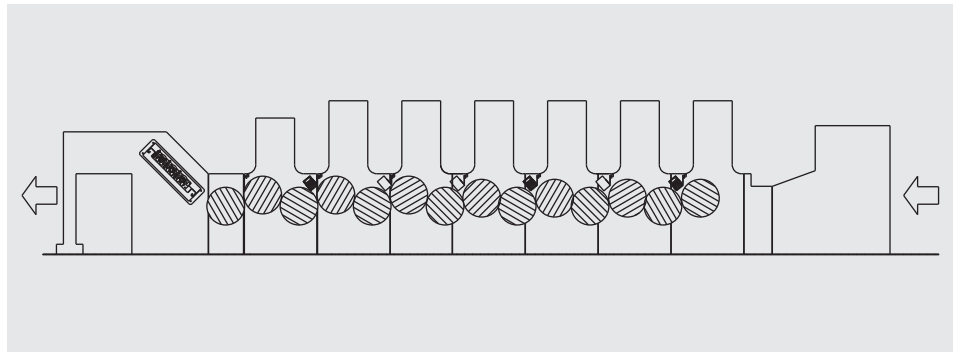
## Heidelberg CD 74



## Heidelberg CD 102



**Komori 640**



**Roland 700**





## Planeta Super Variet



## Ryobi 524 HXX



## Electronic Power Supply Unit

*The extremely reduced size and the modular design of the electronic power supply make it the ideal solution for the switching on of UV systems with power up to 20 kW.*

### Advantages

- Fast power change; the lamp, from the stand-by power, reaches the maximum power in 2-3 ms.
- Power Supply can range from 360 to 520 V 50/60 Hz three phase.
- Balanced Load on Three-Phases.
- Special stepless power adjustment 10 % to 100 %, equipped with automatic feedback, allowing to keep the pre-set power value constant, even when the network voltage varies.
- UV lamp square wave current / tension making the bulb stable and less sensitive to cooling.
- Improved lamp performance, thanks to square wave UV emission at a rate that varies between 250 and 400 Hz, depending on length.
- Standby power equal to 20% of the maximum power with appreciable energy saving and without substrate overheating.
- Three phase network eliminating, almost totally, any issue related to the load offset, thus enabling a consistent energy saving.
- Short warm-up period.
- Short cooling period between restart.
- Power Factor > 0.96.
- Efficiency > 98%.

*The power supply is equipped with an intuitive and easy to use TCU remote control panel, allowing instantaneous monitoring of the machine status.*

### Power Supply Functions

- Self-diagnostics.
- Detection of working power.
- Automatic manual adjustment of the working power to match with production speed.
- Shutter opening / closing control.
- UV cooling suction control.
- Lamp working hours display
- System equipped with an earth leakage control giving the possibility to work in absolute safety Power Supply units linked and connected to the printing machine through an easy management RS485 connection, which can be adopted to any used logic.

## Control Panel - Electronic Power Supply



## Control Panel - Electric Transformer

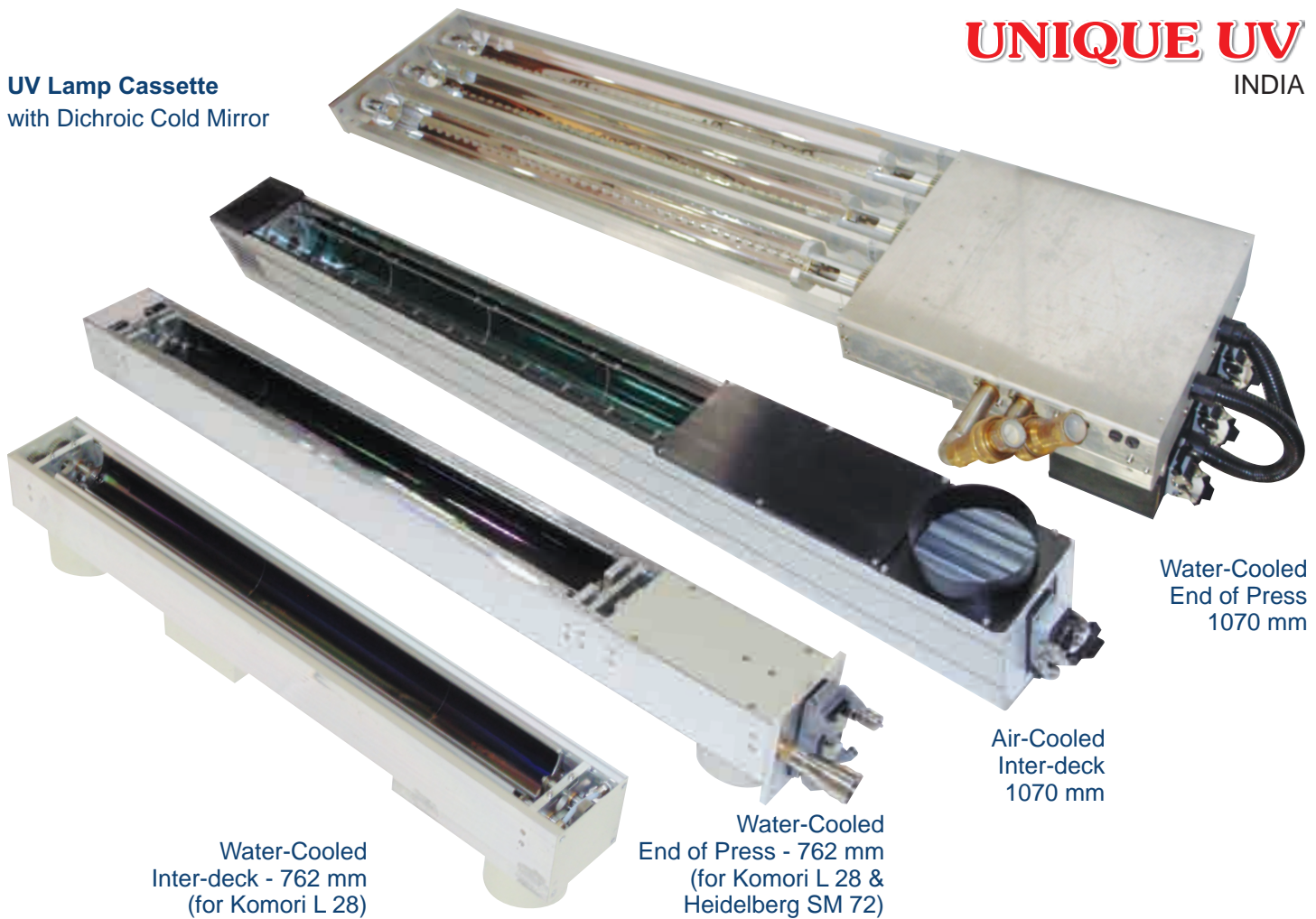


## Control Panel - Electronic Power Supply





**UV Lamp Cassette**  
with Dichroic Cold Mirror



Water-Cooled  
End of Press  
1070 mm

Air-Cooled  
Inter-deck  
1070 mm

Water-Cooled  
Inter-deck - 762 mm  
(for Komori L 28)

Water-Cooled  
End of Press - 762 mm  
(for Komori L 28 &  
Heidelberg SM 72)



**superfici**  
ELMAG S.p.A., ITALY

## Inter-deck UV Curing Systems

**Note:** **UNIQUE UV** is continually developing better designs and therefore reserves the right to change or amend product or Technical Details without prior notice.

Factory & Registered Office



Manufactured and Marketed by :

**UNIQUE UV AND LIGHT PVT. LTD.**

Plot. No. 6, Opp. Dattani Industrial Estate,  
Off. Western Express Highway, Near Prakash Dal Mill,  
Vasai Phata, Vasai (E), Maharashtra - 401210, INDIA.

Ph. : +91 250 6450655, +91 250 6450656  
email : info@uniqueuv.com  
website: www.uniqueuv.com

