



Flexible Solutions for Modular UV Curing

Specialists in the development, supply and support of technically innovative equipment to the printing, converting and ultra violet (UV Curing) markets.

JENTON
GROUP



Innovation and capability in UV

Flexible Solutions for Modular UV Curing

With over 30 years experience in the specification, production and supply of UV curing equipment, Jenton International offers a wide range of components, systems and technical support and consultancy.

Whether for laboratory research or full scale production situations JentonUV can supply UV Curing components or a complete systems solution.

'JA' Range of Compact Curing UV Lamps

The Jenton 'JA' series is a robust and well engineered range of air-cooled modular UV curing lamp systems for industrial processes such as adhesive curing, screen, coating, pad and ink-jet printing applications.

The three 'Small Footprint' Units have been designed for installation where space is at a premium but high power UV outputs are still demanded.



Systems are available in three curing lengths; 70mm (2.75"), 115mm (4") and 150mm (6"). Their compact and regular dimensions make them easy to incorporate into light shields for mounting onto host machines.

The JA range is carefully engineered to ensure simple application, installation, operation and maintenance. The use of a fixed footprint and plug/socket connections virtually eradicates installation and set up complications.

Power supplies are designed to provide easy access whilst using limited space. Units may be controlled from either switchgear on the faceplate of the PSU or remotely from a central control.

Options include quartz plate for isolating airflow, various bulb spectra and flood output profile.

Features – designed to save time and costs

- Small footprint
- Quick bulb change
- Simple integration/operation
- Modular lamp head design
- Choice of bulb spectral outputs
- Flood or focussed output profile
- Local or remote control
- Simple installation
- Filtered positive air cooling
- Full range of control interlocks
- Optional for airflow isolation
- Fast start

Specifications for Jenton UV Lamp Heads

	JA70SF	JA115SF	JA150SF
Cure width	70mm (2.75")	115mm (4")	150mm (6")
Arc length	85mm (3.35")	135mm (5")	178mm (7")
Focal length	50mm (2") from face of lamp unit		
Output	140w/cm (350w/in)	170w/cm (430w/in)	120w/cm (300w/in)
Power consumption	1.2Kw	2.2Kw	2.2Kw
Extract rate (recommended)	2.1m ³ /min	3.1m ³ /min	3.1 m ³ /min
Bulb spectra	Mercury (standard) plus optional Iron, Gallium or Indium		

New 'JA' Range of Power Supplies

Jenton offers a range of power supplies which incorporate advanced engineering and which are all compatible with the 'JA' UV lamp systems.



JA 2000 VP

The JA 2000 VP units are compatible with the Jenton 70mm, 115mm and 150mm positive cooled small footprint lamp heads. These units are smaller and lighter than the fixed power system which they replace and contain the latest solid state variable power arc lamp power supplies. Their variable power range can be preset from the minimum power sustain level of the bulb being powered, to the maximum stable power for each bulb's specification.

Both min. and max. settings are variable and a proprietary control system allows a 0 to 10v

signal to vary output between the preset limits. Switching between power levels can be achieved in less than 100 milliseconds allowing a lamp to sit at 'standby' and then be activated by incoming product.

JA 2000 VP units also incorporate the Jenton High Speed Re-strike system that allows lamps to be turned off and on again in 30 seconds or less – a considerable saving in time over other arc lamps. In many cases this allows users to avoid the need for expensive and complicated shutter systems.

General

Power supply components can be supplied in kit form or fully finished in stainless steel housing with power meter and interlock connection for control. All electronics and software are generated in-house and some customisation is possible, as are options such as feedback control from UV sensing/speed sensing for constant dose.

Specifications for Jenton Power Supplies

	JA2000 VP
Wiring	230v/1ph/50Hz or 110v/1ph/60Hz
Max. power to lamp	2000w
External on/off	yes
External status connection	yes
Power settings	variable
Restrike delay (approx.)	30 secs
Control voltage	1-10v

Jenton UV Conveyors

Jenton Conveyors are robust, stainless steel UV curing conveyors specifically designed for laboratory and development applications and continuous production line use. Custom sizes can be manufactured to accommodate customer needs.



They provide an infinitely variable speed output from a minimum of c.0.2m/min to a max c. 150m/min. The light bridge is height adjustable to allow for differing products flood versus focus testing/applications.

The conveyor bed can be bench mounted or free standing and contains the air box with plenum for exhaust or vacuum hold down capability.

The conveyors can accommodate JentonUV's own JA range of curing lamps, or lamps from most major suppliers. In all cases the conveyor control system interface with control/safety interlocks, such as belt stop = lamp stop.

Standard Specifications for Conveyors

Electrical:	230v, 1ph, 50Hz
Speeds:	Max. 150m/min
Exhaust:	150mm plenum to suit external fan. Light shield incorporates louvers for makeup air
Belt:	Teflon coated open weave. 315mm wide
External Dims (approx):	L1400mm (1 or 2 lamps) x W470mm x H380mm + light shield/lamp
Options:	Lamp intensity monitor, Floor stand, RF detector

A brief note on UV Technology

UV light is emitted at wavelengths between 200 and 400 nanometres. Such emissions are generated most commonly by Mercury (Hg) based plasmas, as generated in conventional Mercury-Arc medium pressure quartz bulbs.

UV light is absorbed by photoinitiators in UV cure materials and these photoinitiators act as catalysts in a polymerisation reaction that turns the liquid UV curing material into a solid in seconds or less. This technology has been commonplace since the 1970's and is essential for the manufacture of medical devices, optical fibres and CDs for example and used in many printing applications from shampoo to magazine covers.

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