

LED UV LAMPS



Understanding the benefits



As end-users become more aware of the impact of environmental issues, whilst striving to reduce operating costs, a fuller understanding of the use of LED UV lamps in today's printers can be highly beneficial.

Customers need to be aware of the significant differences between LED UV 'cold' lamps and Metal Halide (MH) 'hot' lamps, in order to make an informed choice.

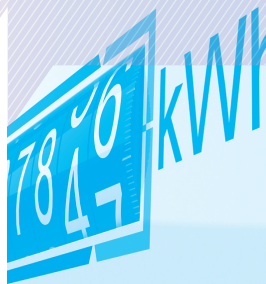
The majority of UV cure printer manufacturers currently employ short life 'hot' Metal Halide (MH) lamps. Mimaki however, has been pioneering more technologically and ecologically advanced long life 'cold' LED UV lamps for some years now, and has thousands of Mimaki produced LED UV printers operating worldwide, to the benefit of their users and their users customers. As LED technology has progressed and become more effective and affordable than the short life 'hot' metal halide lamps, the benefits have become ever clearer.

This guide aims to help you understand the facts, and appreciate the genuine advantages of LED technology.



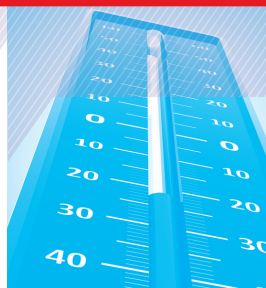
75% LESS ELECTRICITY!

- LED UV lamps can be switched on and off at will, greatly reducing power requirements. MH 'hot' lamps potentially run continuously (as they require 'heat up and cool down' cycles) thus consuming more power due to 'on time'
- To produce approximately 10w of UV light output, LED UV lamps use about 80w of power compared to about 1200w by MH 'hot' lamps ... that's 15 times less power consumption.
- A combination of LED reduced 'on time' and lower power requirement leads to an overall lower consumption



MINIMAL HEAT PRODUCED!

- LED UV lamps effectively run 'cold' (room temperature), allowing printing to sensitive media and avoiding any potential distortion or discolouration of media.
- LED UV lamps allow maintenance to be carried out immediately, thereby increasing productivity.
- MH 'hot' lamps can exceed 70°C and are limited accordingly.



5000 HOUR LAMP WARRANTY!

- 5000 hour warranty equates to over 5 years of typical daily use.
- LED UV lamps expected life is between 10,000 to 15,000 hours.
- MH 'hot' lamps expected life is only typically 500 - 1,000 hours (*requiring change every 3 - 6 months)
- MH 'hot' lamps run constantly, so need changing more frequently.
- It could cost approximately £2-4k extra per year running costs for MH 'hot' lamps, as well as the consequent machine 'down-time' and loss of productivity.
- The UV intensity of MH 'hot' lamps deteriorates over a relevantly short period, whereas LED UV lamps have a much longer life, providing more consistent curing.



OZONE FREE!

- MH 'hot' lamps operate at shorter UV-C wavelengths (>280nm), generating ozone gas emission.
- Ozone production requires ventilation to avoid odour and also raises health & safety issues.
- Ozone production has environmental consequences.



- LED UV lamps produce significantly less CO² than MH 'hot' lamps.
- CO² production requires ventilation to avoid odour and also raises health & safety issues.
- CO² production has environmental consequences.

FULLY ADJUSTABLE LAMP INTENSITY!

- MH 'hot' lamps have a restricted light intensity control.
- This restriction can cause inconsistent cure rates when print speeds are varied.

MORE COMPACT DESIGN!

- LED UV cure lamps are physically smaller than MH 'hot' lamps, allowing for a more compact printer design

UV LED LAMPS - THE BENEFITS IN SUMMARY

The continual development generically of new technology provides consistent and measurable benefits for everyone, and the case for LED UV cure lamps becomes very clear as they are;

- Cheaper to run
- More productive, flexible and cost effective for your business
- Cheaper and easier to maintain, with better longevity
- Safer for you, and your staff
- Safer & better for the environment



The Mimaki LED UV printer range

Flat Bed Printers



(A3 x 50mm)
(A3 x 150mm)
(A2 x 150mm)



(8'x4' - 50mm)

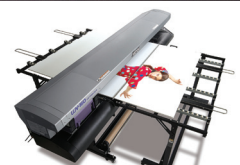


(2.1mx3.1m - 50mm)

Roll / sheet Fed Printers



(1600mm - Hi Speed)



(1600mm - 10mm)
(1600mm)

UJF-6042
UJF-3042HG
UJF-3042FX

JFX200

JFX500-2131

UJV500-160

UJV-160

Call now for more information
or to book a demonstration

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