

WARRANTY CONDITIONS FOR IST UV LAMPS

The output of a UV system is essentially determined by the optical components in the system, the UV lamp and the reflectors. IST Metz has always been aware of the key role of these components, and therefore focusses on consequent in-house development and production. Only by doing so can we meet the high demands of our customers.

In the case of IST UV lamps the high technical standard of the products is achieved by craftsmanship in connection with extensive quality controls. Therefore IST Metz is able to offer outstanding warranties on these product.

- IST UV lamps for operation with ELC® (I-Lamps), doped and non-doped standard UV lamps: Up to 500 operating hours full replacement, from 501 up to 2500 operating hours pro-rata credit
- All other standard IST UV lamps (M-, T-, and others) for operation with conventional ballast:
 - non-doped IST UV lamps up to a length of 1500 mm: Up to 100 operating hours full replacement, from 101 up to 2000 operating hours pro-rata credit.
 - non-doped IST UV lamps longer than 1500 mm, and all doped IST UV lamps (length-independent)
 for operation with conventional ballast: Up to 100 operating hours full replacement, from 101 up to 1000 operating hours pro-rata credit.
- UV lamps in special design: according to individual specifications

General conditions for all IST UV lamps: The warranty period is a maximum of 24 months from the date of delivery for a maximum of 4 on/off cycles per 8-hour day.

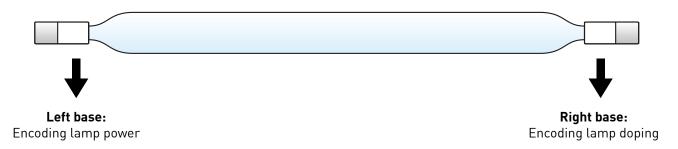
THESE WARRANTY CONDITIONS APPLY ON CONDITION THAT THE FOLLOWING REQUIREMENTS/DUTIES OF THE CUSTOMER ARE MET:

- Proper storage of the IST UV lamps
- Correct installation and commissioning of the IST UV unit
- Regular maintenance of the IST UV unit in accordance with the operating manual
- Regular cleaning of the IST UV lamps in accordance with the operating manual
- A reduction in drying power caused by external dirt accumulation is not recognised as a reason for rejection
- A reduction in the UV radiant power to 75% of the original value in the UV range in question during the warranty period is not recognised as a reason for rejection
- Before installation of a new UV lamp, the FLC® contacts must be examined and must be in good condition

IDENTIFICATION MARKING OF IST UV LAMPS

Increasingly, the opportunity to use different lamp dopants in one UV system is used to optimally adapt it to the particular production process and its requirements. In order to identify the type of lamp used at a glance, the lamps from IST Metz are marked with an easily to understand coding system.

Information about lamp performance, doping and ozone can be easily read using a respective indication on the lamp bases:



Encoding lamp power Lamp types I-, T-		Lamp type M-	Encoding	Encoding lamp doping	
IST	>80 to ≤120 W/cm	>80 to ≤150 W/cm	IST	Mercury vapour lamp without doping	
IST	>120 to ≤160 W/cm	>150 to ≤200 W/cm	ISTA	Mercury vapour lamp, gallium-doped	
IST	>160 to ≤200 W/cm		IST _B	Mercury vapour lamp, iron-doped	
ISTIV	>200 to ≤250 W/cm		ISTC	Mercury vapour lamp, lead-doped	
ISTV	>250 to ≤300 W/cm		IST	Mercury vapour lamp without doping, ozone free	
			IST A.	Mercury vapour lamp, gallium-doped, ozone free	
			IST BOE	Mercury vapour lamp, iron-doped, ozone free	
			IST C.	Mercury vapour lamp, lead-doped, ozone free	

WARRANTY CONDITIONS FOR URS® REFLECTORS

In the case of IST URS® reflectors we succeeded in bringing the maximum yield of UV light - which is important for the process - to the substrate, regardless of the required reflector geometry while undesired heat is reliably discharged. This provides a maximum UV output, achieved with very high service life of the reflectors. This allows a saving of valuable energy, while increasing the efficiency of the production process. The layer systems of reflectors are optimally matched to the overall product.

Note: Colour differences of juxtaposed reflector pieces arise from production-related fluctuating process parameters. Therefore deviations of a few nanometers are possible in the visible range only, which is not relevant for the production process. This effect manifests itself in slightly different shades of blue of the reflector rods and does not constitute a reason for complaint

- The warranty for all available URS® reflectors shall be **10.000 working hours** or **36 months** after date of delivery. Up to 2000 operating hours full replacement, from 2.001 up to 10.000 operating hours pro-rata credit.
- The warranty does not cover damages caused by mechanical or chemical influences as well as themal overload
- The IST-UV unit and reflectors must be maintained and cleaned on a regular basis by the operator according to the IST operating instructions.
- A decrease of curing performance caused by external contamination of the lamps or reflectors is no reason for rejection