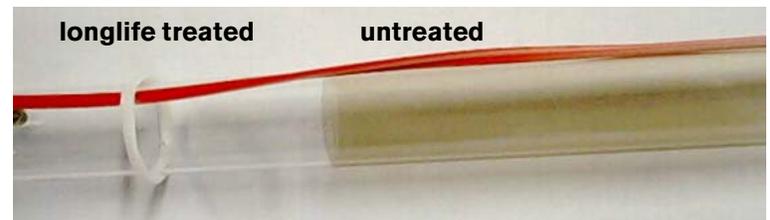


Longlife Technology Doubles the Efficiency of High Power Amalgam Lamps

For Disinfection, Oxidation and Photochemical Processes

UVC radiation has an intense bactericidal action. Micro-organisms such as viruses, bacteria, yeasts and spores are effectively destroyed without the addition of chemicals. The energy of UVC radiation is sufficient to break down chemical compounds or to achieve molecular restructuring. In addition, oxidation processes and decomposition reactions of organic compounds are initiated.

High Power Amalgam Lamps With Longlife Technology

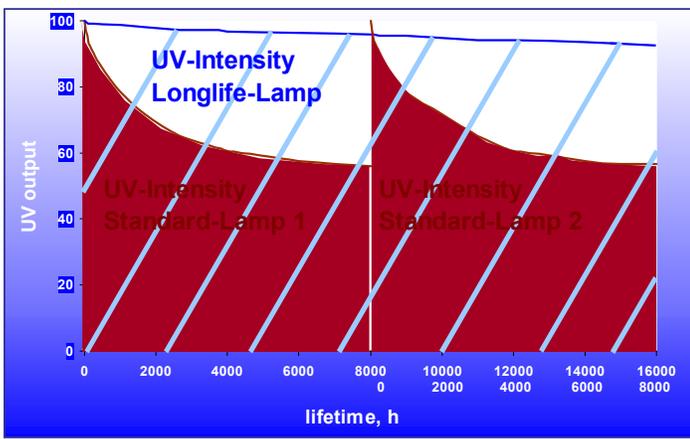


Goldspot® Amalgam UVC lamps with Longlife Technology offer a disinfection action which is virtually constant over the lamp operating life. While the UVC output of conventional lamps drops by around 40% after 8,000 hours, the Goldspot® Amalgam UVC lamps with Longlife Technology have a reduction in UVC output of less than 20% at up to 16,000 hours.

Because of the higher UVC output and the extended operating life, the new lamps offer disinfection systems a significant potential for savings in the quantity of lamps needed, in system consumables, in energy consumption and in maintenance costs. Compared with standard low pressure mercury lamps, the amalgam lamps offer the extremely good UVC efficiency, which is typical of mercury low pressure lamps, but with a significantly higher UVC output. With Longlife Technology, lamps can be produced which have no discoloration and even after 16,000 hours still provide a UVC output greater than 80% of the original output.

Applications of Goldspot® Amalgam Lamps

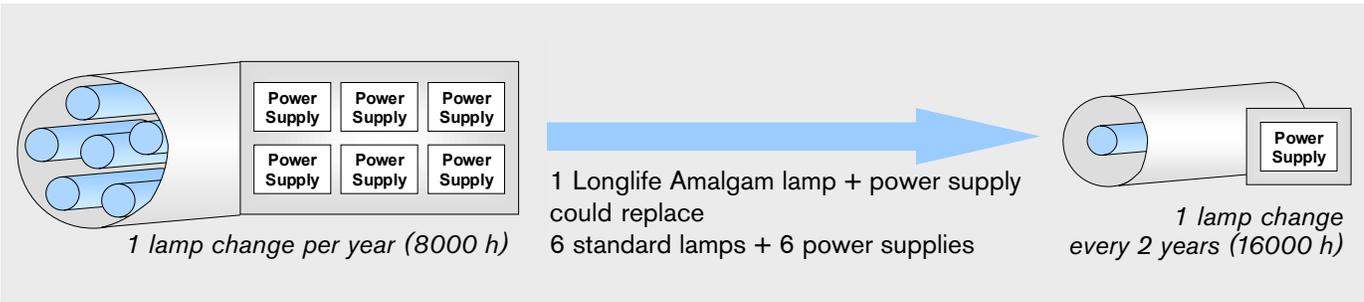
- Drinking water disinfection plants
- Waste water disinfection
- Production of ultra-pure water
- Disinfection of food packaging materials
- Air disinfection
- Oxidation of harmful materials in water and air
- Ozone generation



Examples of different lamps, socket and connections. Tailor-made solutions are available.

Comparison of lamp life

UV-System Standard-Lamp compared to UV-System Longlife Amalgam Lamp



An efficient disinfection action of the system can be achieved with significantly fewer lamps per UV reactor. Savings made in number of lamps quartz sleeves and power supplies required. Reduced cost of wipers and similar equipment significantly lessens reactor costs.

Technical Data for Standard Types LongLife Amalgam Lamps

Lamp Type	Spectra (nm)	Wattage (W)	Quartz diameter (mm)	Base/socket diameter (mm)	Total length (without pins) (mm)	Arc length (mm)	Power Supply ²⁾
NNI 125/84 XL	254	125	15	19,5	878	796	EPS1
NNI 201/107 XL	254	205	19	23	1145	1045	EPS1
NNI 300/147 XL	254	300	19	23	1552	1465	EVG 300W
NNI 350/147 XL	254	350	22	28	1552	1465	EPS4
NNI 400/147 XL	254	400	28	30	1536	1470	EPS4
NIQ 201/107 XL ¹⁾	185+254	205	19	23	1145	1045	EPS1
NIQ 300/147 XL ¹⁾	185+254	300	19	23	1552	1465	EVG 300W

¹⁾NIQ types are generating ozone. ²⁾Power supplies available also as twin ballast version. Please contact us for tailor-made solutions.

Lamp life in hours and UVC-output in Watts were measured with lamps operated under laboratory conditions. For references purposes only. Actual life heavily depends on operating conditions.

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