

Performance Qualified Disinfection

PERFORMANCE QUALIFIED

- Disinfection performance Independently tested and validated.
- Complete peace of mind.
- Independently tested for CE compliance.
- Independently tested and materials approved to NSF61 for potable water.
- Independently tested materials and approved for UL compliance
- Factory calibrated, in field verifiable, absolute UV sensor.

TOTAL TREATMENT CHAMBER

- Simple to replace UV lamps without draining chamber.
- Designed and manufactured with consideration to ASME BPE and cGMP requirements.
- High efficiency chamber design.



How PharmaLine PQ works

Engineering excellence for Pharma

SMART CONTROLS

- Continuous monitoring.
- Password protected control panel for security.
- Real-time data display with event logging.
- Continuous display of validated UV dose.
- Dose optimization.
- Modbus and Hard-Wired interface to SCADA systems.

HANOVIA UVLUX LAMP TECHNOLOGY

- Latest electronic ballast for extended lamp life.
- Latest generation high efficiency, long life amalgam lamp technology.



Hanovia



PHARMACEUTICALS



COSMETICS+TOILETRIES



MEDICAL+ OPHTHALMIC



NUTRACEUTICALS



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Hanovia

the power in UV technology

The next level of Pharma disinfection –
guaranteed by Hanovia

PharmaLine

Performance Qualified Disinfection



PharmaLine PQ - disinfection has evolved, and we can prove it

Designed by Hanovia - world leaders in UV technology - using the most advanced CFD computing. Tested to the limit. Validated and Performance Qualified - it's no wonder PharmaLine PQ is guaranteed to give you the ultimate process security.

This is Pharma process water disinfection taken to the next level: in fact, our most rigorously developed and tested products ever created for Pharma. And because PQ means 'Performance Qualified', you don't have to take our word for it.

We meet the standards that the best demand. Standards enforced/applied by external experts determined to ensure Pharma enjoys the most reliable, effective, complete disinfection. So, if they say you can rely on us, you really can be sure of total peace of mind.

Unique UV sensor with transmittance compensation

With Hanovia, rigorous quality comes as standard. But Hanovia has always believed in developing newer, better solutions. PharmaLine PQ is no exception.

The system provides accurate dose delivery, without the need for an external UV transmittance input. Performance qualified to deliver the disinfection security you need – guaranteed.

Patented Dry UV sensor housing

The factory-calibrated dry UV sensor is simply a cut above. It provides absolute UV intensity monitoring in real-time, and because it remains outside the water flow it can be removed and inspected without interrupting your processes. The patented design allows verification using a portable reference UV sensor with no risk of harmful UV exposure or need to wear safety equipment.

3rd Party Validation

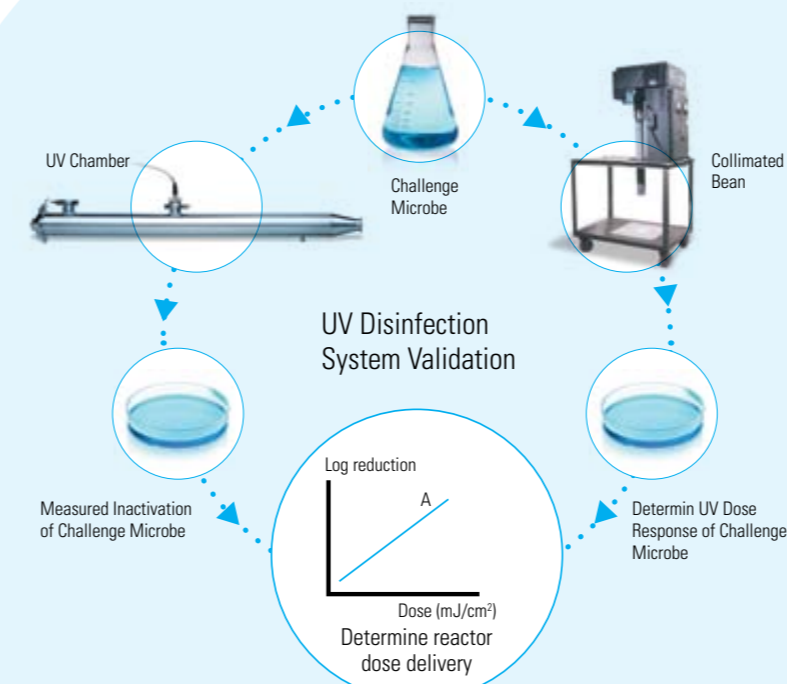
Proven, complete disinfection - for every Pharma need

With a product as powerful as PharmaLine PQ, we don't expect you to take our word for it.

Guaranteed Disinfection Performance

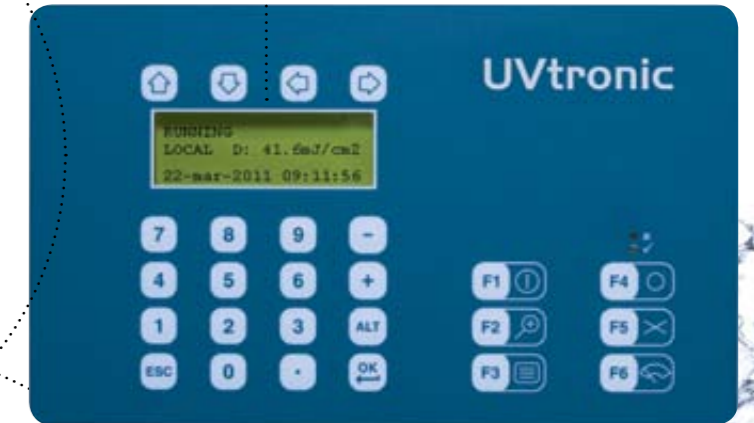
Not only has the PLPQ been designed to the exacting industry standards using the latest design techniques to maximise performance, the disinfection performance has also been independently tested and validated by Carollo Engineers to the exacting 2006 USEPA protocol following the UV Disinfection Guidance Manual (UVDGM) guidelines.

- Actual microbes are used and their inactivation measured in both the PharmaLine PQ chambers and in a laboratory.
- Comparison of the log inactivation in the chamber with the laboratory collimated beam determines the UV system dose delivery.



The PharmaLine PQ display panel (UVtronic)

RUNNING
LOCAL D: 41.6mJ/cm2
22-mar-2011 09:11:56



PharmaLine PQ Absolute monitoring and intelligent display

PharmaLine PQ precision dry UV sensor



Patented UV light protection shutter: the dry UV sensor can be removed without system shutdown for field verification. The automatic shutter protects operators from harmful UV exposure during removal of the UV sensor.

PharmaLine PQ from Hanovia

The ultimate disinfection barrier – proven to perform



Performance Qualified Disinfection

PharmaLine PQ certified by WQA to NSF/ANSI 61 for materials safety only, as verified and substantiated by test data



Performance Qualified by independent experts

In Pharma safety comes first. That's why PharmaLine PQ provides complete peace of mind.

- Hanovia Systems certificates and testing records.
- Material certificates for all wetted parts (FDA compliant materials).
- Company certificates.
- Statement from Carollo Engineers covering performance validation.
- Designed and manufactured with consideration to ASME BPE and cGMP requirements.
- Approved to international standards including UL, NSF61 and IEC.
- Certification of lamp output.