



# COMPATIBILITY TESTING: THE EFFECTS OF UV BASED LIGHT ON ENT SCOPES

UV DISINFECTION EXPERT



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Daan Hoek | Co-Founder UV Smart

*Beyond Clean UV Disinfection Expert™:*

## COMPATIBILITY TESTING THE EFFECT OF UV BASED LIGHT ON ENT SCOPES

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Flexible, channel-less ENT scopes and TEE probes are fragile and expensive, and therefore must be carefully maintained. It's just as important that disinfection equipment does not affect the functioning of an ENT scope. Material compatibility testing ensures the safety and longevity of almost every medical device on the market. Disinfection based on UV light for scopes is no exception.

### Who performs a compatibility test?

In order to prevent cleaning agents and disinfectants from damaging or impairing endoscopes, the manufacturers of these agents and endoscopes work closely together. The endoscopes are often disinfected thousands of times to analyze and monitor the long-term effects. Products are deemed safe after testing and establishing material compatibility and may then be used together. The ENT scope manufacturer guarantees that the product can be safely disinfected with the cleaner, disinfectant or other equipment.

### What's checked and measured in a compatibility test?

During a compatibility test, visual and functional aspects are measured after 200 disinfection cycles. Manufacturers will check many elements to ensure compatibility. If the results are good, the information is documented, and the endoscope will be tested another 200 times. This continues until 1000 to 3000 cycles have been completed, depending on the manufacturer's protocol.

### Compatibility testing and UV-C light

UV Smart has conducted compatibility tests on endoscopes with several manufacturers, such as Pentax Medical, XION and Karl Storz. After the tests, it was found that UV based light from the UV Smart D60 has no effect on the operation of the endoscopes. Therefore, the UV Smart D60 has received compatibility statements from the manufacturer.

Have more UV disinfection questions? Contact Daan at: [daan.hoek@uvsmart.nl](mailto:daan.hoek@uvsmart.nl)



*Beyond Clean UV Disinfection Expert™ Biography:*

## DAAN HOEK CO-FOUNDER UV SMART



Daan Hoek is the Co-Founder of UV Smart and very passionate about UV-C light as a disinfecting agent in the medical field. UV Smart is an innovative company based in the Netherlands with an established US office in New York. The UV Smart devices can disinfect medical equipment quickly, efficiently, and consistently by using UV-C light. By refining this ancient technology, UV Smart made it possible to disinfect medical equipment in a rapid and effective way. UV-C light also eliminates the use of chemical disinfectants that are harmful to medical equipment, operators, and our planet, while saving a substantial amount of turnaround time. UV Smart is the front-runner in applying UV-C technology to medical devices. UV Smart is currently active in over 20 countries worldwide.

Daan is also the chairman of the Taskforce UV-C light of the Dutch Normalization Committee. Along with the taskforce, he developed the first European guideline for UV-C disinfection devices in the medical field. He is also in charge of all the clinical (multi-center) studies of UV Smart, three of which are running in the US and in Europe.

If you have any questions regarding UV-C light, feel free to reach out to him!

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