Title:
UV-LED Lamps for fluorescent Magnetic Particle and Penetrant Testing in practice: Enhanced Inspection, new possibilities and standardization of UV-LED lamps

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Abstract:
The LED-Technology is strongly substituting the conventional bulb based UV source (Mercury-Vapor, Xenon and Metal-Halide) in the fluorescent NDT methods in all industries.

This drastic change in technology rises big challenges for the users and standardization while it allows technical enhancements and flexibility in the design of the UV sources we never had before.

Adequate UV LED technology can drastically improve the inspection process while inadequate technology can dramatically violate process security as well as inspectors performance.

The presentation shows a comparison from a practical point of view on different UV LED lamps, introduces the relevant factors and parameters to select the right UV LED source for a specific application and gives an overview of the newest und upcoming standards.

Further the presentation will introduce the newest developments and possibilities of UV LED lamps that make these modern UV sources to helpful tools to enhance and secure the inspection process. It also enables the user to understand how the UV sources can influence the inspection performance and the process.