



SMARTCURE UV CURING PROCESSES WITH AI

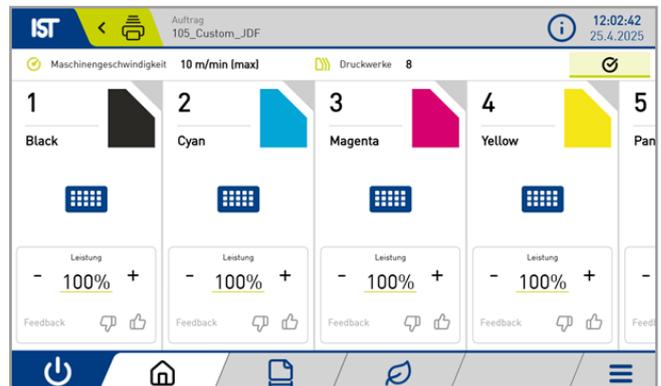
SMARTCURE - UV CURING PROCESSES WITH AI FOR MAXIMUM EFFICIENCY AND PRECISION

SMARTCure is the AI-supported control system from IST METZ for UV and LED curing processes. The smart UV technology supports users in optimizing processes and promotes energy-efficient work. SMARTCure specifies a recommended UV output based on the current production conditions. Thanks to modern interfaces and the option of predictive maintenance, SMARTCure is ideally suited for use in future-oriented production environments.

HOW SMARTCURE WORKS

The SMARTCure technology from IST METZ optimizes the drying process through the intelligent use of artificial intelligence (AI) and cloud connectivity. Once the print data has been retrieved and stored locally, SMARTCure automatically connects to the IST cloud. All relevant color data for the job is transferred to the cloud.

An AI-based model analyzes the ink data there and calculates the exact UV dose required for each ink. The dryer regulates its output as required and reduces energy consumption to the necessary level without manual intervention. SMARTCure also offers users the opportunity to provide feedback on the drying result. This feedback is used by the system to continuously develop the AI model and make future drying processes even more precise and efficient.



SMARTCure user interface

MAIN FUNCTIONS AND BENEFITS

- > Energy saving through AI: SMARTcure continuously analyzes process data such as substrate, ink, varnish and format. Based on this, it automatically adjusts the performance of the curing system to minimize energy consumption and extend LED service life.
- > Format-dependent LED zone control: The system automatically recognizes the format to be printed and only switches on the required LED segments. This significantly reduces energy consumption. In addition, the low heat generation and optimized operating conditions increase the service life of the LEDs.
- > Compatibility: SMARTcure can be easily integrated into existing production lines.
- > Cloud-based data processing: SMARTcure uses an SSL-encrypted cloud connection to store and analyze operating data. This enables predictive maintenance, process optimization and continuous learning of the system. The servers of IST METZ GmbH & Co. KG are located in a data center in Frankfurt, Germany.
- > Sustainable production: Reduced CO₂ emissions and lower resource consumption thanks to more efficient processes.
- > Adaptive LED curing: Variable zone control and timing of the LED segments for maximum efficiency
- > Warranty: Up to 10 years possible.

AVAILABLE FOR THE FOLLOWING SYSTEMS: MODULUX, MODULUX TURBO AND LEDCURE NX



With SMARTcure to efficiency class A: The AI-based technology maximizes the energy efficiency of LEDcure systems and thus ensures lower power consumption and significant cost savings.



WARRANTY

IST METZ offers a warranty of up to 10 years or 35,000 operating hours, subject to the following conditions:

- > Constant Internet connection & update capability of the system
- > Remote access for IST customer service
- > Maintenance contract with regular maintenance intervals
- > Online error analysis and system optimization
- > Active use of SMARTcure to extend service life

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