GEA SPRAYEYE®
Dual Camera

Spray nozzle monitoring system with
automatic temperature surveillance

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Increase plant availability with real-time visual nozzle monitoring

The innovative SPRAYEYE® Dual camera system combines clear digital images with IR temperature profiles allowing operators to visually inspect spray shapes and monitor nozzle temperatures at a glance.

The system provides the same benefits as the SPRAYEYE® Digital, plus thermal vision. This lets operators check for common problems such as:

- Streaks in the spray shape
- Uneven fines return flow
- Leaks and blocks
- Visual product build-ups
- Smoldering build-ups (thermal)

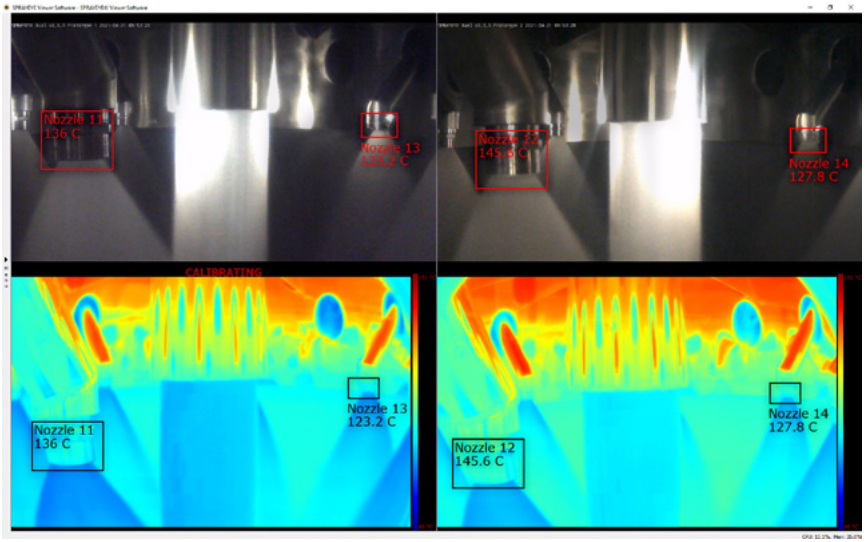
Improve dryer safety with automatic nozzle temperature surveillance

The accompanying SPRAYEYE® Software provides a simple user-friendly viewer for the video streams, with the ability to record videos on-demand and on-schedule.

The automatic temperature surveillance system continuously tracks the temperature and heat variation of each spray nozzle to detect and highlight product build-ups. This built-in early warning system helps to prevent fires and explosions in the dryer by detecting hot spots before they become a problem.

The warning system indicates high temperatures in several ways:

- High temperature nozzles are highlighted on the visual display
- An alarm is triggered when a defined temperature limit is exceeded
- The system automatically logs the event and starts recording visual images and temperature data



The new SPRAYEYE® Dual spray nozzle monitoring system provides both visual and thermal insight at a glance

Directives and standards

The product complies with:	
EMC Directive	2014/30/EC
FCM	EU 10/2011, FDA CFR 21, EC 1935/2004
Food Hygiene Standard	EN1672-2
Technical Design Standard	ISO 12100

Specifications

Ambient temp. (at back)	15–40 °C
Process temp. (at front)	max. 120 °C
Power supply	24 V, 2–10 W
Cooling air	6 bar, max. 35 °C

Installation

The SPRAYEYE® Dual camera is available for DDD® and DPS air dispersers. For DAR please contact GEA for individual assessment. Typically, one camera for two spray nozzles gives a good view around all nozzles.

Communication uses standard Ethernet equipment and protocols. The cameras can be installed in a separate or existing network (depending on bandwidth).

Despite having two camera technologies, the device has the same outer physical dimensions as the previous SPRAYEYE® V13 so it fits most existing camera inlets and can replace older technology with just a new network cable. No change to the dryer is needed.

Smart software visualization

The accompanying SPRAYEYE® Viewer software is simple and intuitive to use. Video streams from multiple cameras can be viewed together from any computer in the control room, and different setups can be configured according to need.

The software provides supervision of the internal camera conditions and configuration of parameters such as light intensity and image contrast. It also allows for automatic, time-scheduled and on-demand snapshots from each of the connected cameras.

Temperatures and warning alarms may be provided via OPC UA for visualization and tracking on the main process control system.

Top features and benefits at a glance

Most fires result from unnoticed temperature changes in the drying chamber. SPRAYEYE® Dual temperature scanning technology (patented) delivers the following benefits:

- Robust hygienic design with built-in light and cooling
- Modern digital technology with ability to schedule recording
- High reliability and minimum maintenance
- Improves nozzle monitoring when operating at higher temperatures
- Frees up operator time with automatic surveillance
- Presents a warning before problems can be visually observed
- Increases time available for operators to solve problems before they escalate

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