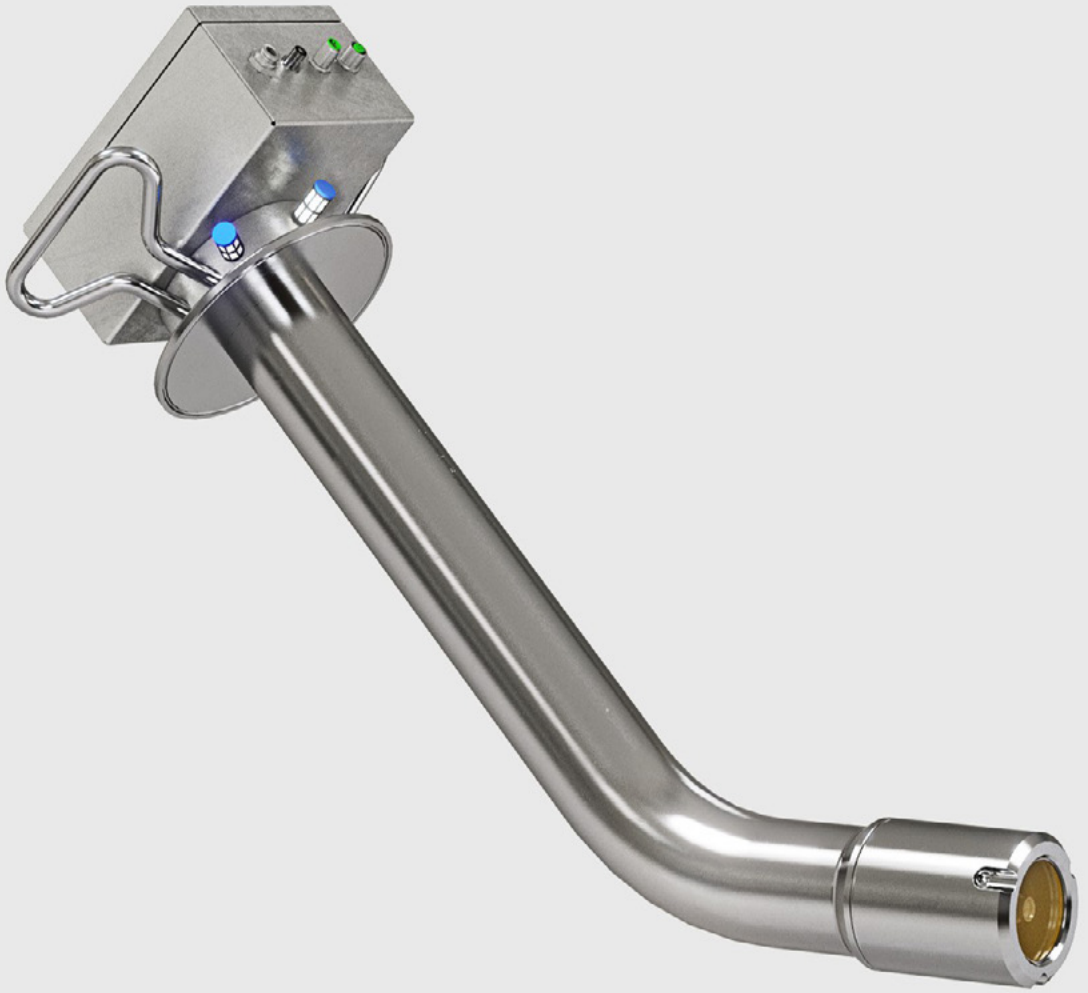
GEA SPRAYEYE® VISUAL DIGITAL CAMERA

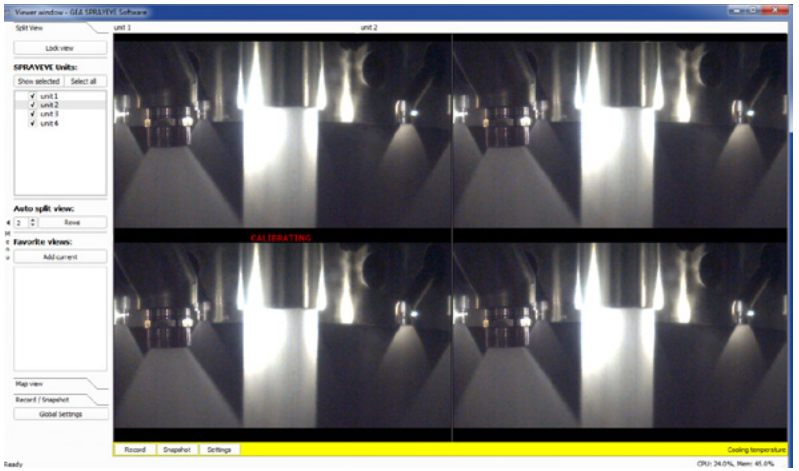
Spray nozzle monitoring system for powder processing



Engineering for a better world.

GEA.com

INCREASE PLANT AVAILABILITY WITH REAL-TIME VISUAL QUALITY CONTROL



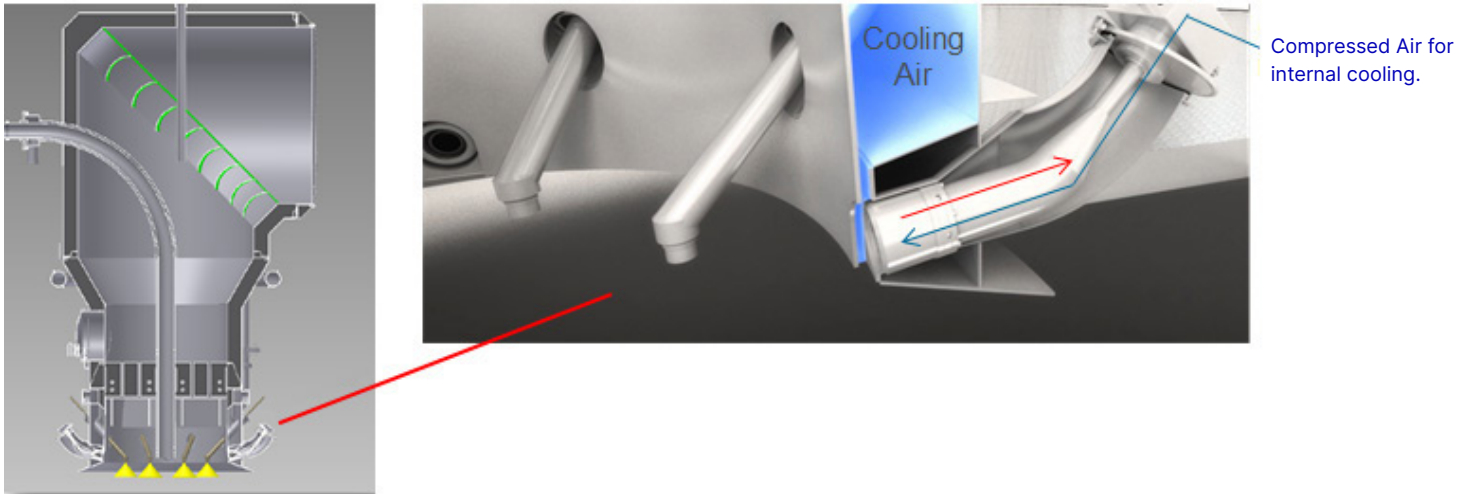
Spray nozzles seen through SPRAYEYE® Visual Digital Camera

Visual spray nozzle monitoring
The robust and hygienically designed SPRAYEYE® Visual Digital Camera is a highly specialized visual spray nozzle monitoring system for food and dairy powder production. It provides a convenient way to look inside the drying chamber during production, and after changing spray nozzles.

Common process conditions
- Spray patterns
- Fines return flow
- Leaks and blocks
- Product build-ups

Reliable surveillance with low maintenance
Digital technology, combined with many years of spray drying experience, makes the SPRAYEYE® Visual Digital Cameras the perfect match for modern powder production. The cameras come with a shatterproof, non-glass, CIP-resistant window, built-in adjustable light for clear images and integrated cooling with internal temperatur monitoring to ensure continuous high performace. The unique design makes SPRAYEYE® Visual Digital Cameras virtually maintenance-free, requiring only simple parts replacement every three years.

User friendly software for Industry 4.0
The new SPRAYEYE® vision software provides modern functionality such as access to video feeds, configuration of camera features, schedueled recording and much more.



Installation of SPRAYEYE® Visual Digital Camera

Installation
The SPRAYEYE® Visual Digital Camera is available for DDD and DPS air dispersers. For DAR please contact GEA for individual assessment. Typically, one camera per two spray nozzles will be suitable and give a full view around all the nozzles. Communication from the cameras use standard Ethernet equipment and protocols. The cameras can either be installed in a separate or an existing network (bandwidth management may be required).

Smart visualization
The accompanying SPRAYEYE® Viewer software is simple and intuitive for operators 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 cooling. It also allows automatic, time-scheduled snap-shots, and on-demand recording from each of the connected cameras.

Top features at a glance
- Robust hygienic design
- Non-glass CIP resistant window
- Built-in light
- Integrated cooling
- Modern digital camera
- Automatic scheduled recording

Directives and standards (the product complies with):
- EMC Directives: 2014/30/EC
- FCM: EU 10/2011, FDA CFR 21, EC 1935/2004
- Food Hygiene Standard EN1672-2
- Technical Design Standard EN 292-2

CIP-compatible
The camera is IP64 approved (dust and water splash tested) and supplied with a protective window made from a non-glass material that is highly resistant to common CIP fluids and does not have to be removed during the cleaning process.

Specifications CIP-compatible
- 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
- Normal air consumption 2–5 L/min.
- Max. air consumption 150 L/min.

Engineering for a better world.

GEA.com

GEA Process Engineering A/S
Gladsaxevej 305
2860 Soeborg, Denmark

Tel +45 39 54 54 54
gea.com/contact