Advanced process instrumentation and control

Smart instrumentation for optimized spray drying
Advancing process operation

GEA’s range of instrumentation, process control and monitoring systems are designed to optimize your spray drying process, giving you the best possible return at the lowest cost of ownership.

With a range of sophisticated features to increase output efficiency, save energy and monitor product quality, each system offers significant advantages and ways to improve your production – and your profitability.

GEA OptiPartner

GEA OptiPartner offers precise advanced control and the optimization of both residual moisture in the final powder and the drying conditions in the chamber.

• Capacity utilization is maximised, while avoiding chamber fouling
• Customized process models for the specific dryer and product based on GEA process know-how
• Disturbance rejection before the powder properties are affected
• Fully compatible with all major PLC and SCADA system brands

KEY BENEFITS

• Increased process stability
• Increased utilization of the spray dryer’s capacity
• Increased yield with higher moisture content in the final powder
• Less variation in product quality
• Less energy consumption/kg powder
• Fewer deposits by controlling powder stickiness
• Fail-safe operation by less trained staff
• A GEA Service, no CAPEX needed

![Graph showing the comparison between Conventional control and GEA OptiPartner turned on with Maximum allowed powder moisture, Set point moved closer to quality constraint, and Less product variation.](image)
Advanced instrumentation

SPRAYEYE® Visual
Continuous visual quality control.
- Quick identification of product build up
- Visual monitoring of spray pattern
- Instant check for leaks
- Surveillance of fines return flow

SPRAYEYE® IR (patented)
Increased safety through the thermal surveillance of possible spray nozzle deposits.
- Alarm to highlight a temperature increase
- Early detection of deposits
- Ability to identify exact position, temperature and size of deposit

POWDEREYE® (Patent pending)
Inline platform to measure the relevant properties of the final powder, including residual moisture and density.
- Continuous moisture measurement allows the plant operator to optimize the moisture content of the final powder
- Dark particle detection identifies dark scorched particles before a dangerous situation arises
- Possibility for scheduled reference sampling and sampling on demand

VISIOCOVER® (patented)
The VISIOCOVER® cover is designed specifically for the food and dairy industries. Benefits and features include
- Direct inspection
- Sanitary and safe operation through hygienic design
- Excellent view of the interior
- Built-in camera for remote monitoring (option)
- Diagnostic tools
- Easily retro-fitted on any SANICOVER® flange
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is one of the largest technology suppliers for food processing and a wide range of other industries. The global group specializes in machinery, plants, as well as process technology and components. GEA provides sustainable solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio.

The company is listed on the German MDAX (G1A, WKN 660 200), the STOXX® Europe 600 Index and selected MSCI Global Sustainability Indexes.