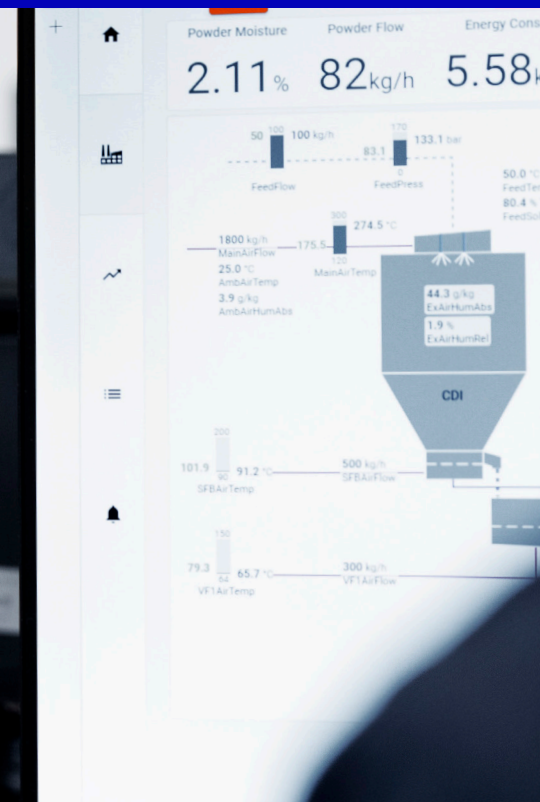


GEA OptiPartner

Increased process stability and optimum performance for spray drying



Optimize your spray drying production lines

GEA OptiPartner combines GEA's process know-how with operational expertise to optimize the productivity of spray drying plants for powder production. Our highly efficient digital technologies empower you to optimize throughput and reduce energy consumption.

Operating on top of your existing control system, GEA OptiPartner uses advanced process models to control and adjust your process parameters in real time. This helps to ensure the highest levels of stability and efficiency with complete visibility for the operator throughout the process.

Reach optimum performance:

- Increase production line stability by up to 80%
- Increase capacity by up to 7%
- Obtain consistent product quality 24/7

Allow GEA OptiPartner to take care of process optimization so you can focus on higher-level KPIs. The system is designed to reduce variations to operate closer to the limits. It works like an autopilot, ensuring consistent stable production 24/7 while leaving the operators more time to focus on other issues in production.

And you can forget about maintenance of our systems. That is fully included and handled by GEA specialists to help ensure continuous high performance. The team can implement changes to the process or suggest some new ideas for further improvements to process control.

You can look forward to:

- Improved process stability
- Reduced downtime and process bottlenecks
- Energy savings
- Higher productivity
- Better use of operators' time for other key tasks in the plant
- Full control of the whole system from a single user interface



Tailor GEA OptiPartner to your needs

Choose a solution which is configured to match your production requirements and setup. GEA OptiPartner is a flexible yet robust, modular system which allows the fine tuning and adjustment of the system to fit your requirements.

GEA OptiPartner covers the entire milk powder production line, from standardization to the final powder. Our system supports most dryers, evaporators, and standardization process units in milk powder plants.

Deliver on spray drying targets:

- Reduce the impact of variations and automatically optimize the operation by controlling several inputs — while still respecting operational constraints
- Get significantly more consistent operations, closer to quality targets, and increased capacity

Control evaporation:

- Control the inlet flow and power supply to the evaporator simultaneously to stabilize and ease the process
- Ensure variations in inlet solids are handled automatically
- Benefit from more consistent operations
- Maximize outlet solids content to reduce in-line energy consumption

Secure standardization:

- Reduce the variation by advanced control algorithms, taking process interactions and long process delays into account
- Gain full use of all available in-line measurements
- Minimize protein/fat giveaway in the final powder



Complicated....

Many advanced process control systems use only mathematical input/output modeling to establish what is happening and to predict trends. But at GEA, process designers, process simulation experts, and optimization teams all work together in a collaborative environment to create a more holistic view of the optimization challenge. Our engineers speak the same language as plant operators. They have used their many years of process engineering knowledge to build a robust solution that is easy to implement and maintain — and performs throughout the whole line.



... yet simple!

The GEA OptiPartner faceplate is designed to give operators an intuitive, user-friendly experience. Skip over non-vital information to highlight the statistics that are important to your business, such as:

- production flow rate
- end product quality
- energy consumption

Get a simple graphical overview of how the system has planned adjustments in the process, such as the feed flow rate, the temperatures, pressures, etc., and track how these compare with optimum levels.

Usability benefits

Get key data at a glance

On the faceplate, classical advanced process control status is transformed into a simple set of graphics that are easy for production staff to interpret.

Map the optimum vs. actual operation point

A graphical representation of the operation window (e.g., a stickiness curve for a spray dryer) maps the optimum vs. actual operation point, thereby adding new insight into how the plant is running.

Improve operator / management communication

Operators get a clear, concise view of process KPIs, which helps to take any ambiguity out of understanding performance levels and improve internal communication about efficiency.

Add new product recipes easily

GEA OptiPartner is set up to hold a preset portfolio of recipes. New plant recipes can then easily be incorporated to increase utilization of optimization features for producing new products.

Empower staff resources

Operators are motivated when they get accurate and effective control of the processes for which they are responsible. This can support better job satisfaction, lower staff turnover, and improved efficiency.



Subscription model means no capex

Everything is included in a yearly subscription to GEA OptiPartner. And we happily take responsibility for end-to-end maintenance while keeping management informed on how the process is performing against given targets.

Fit or retrofit

Achieving and maintaining process optimization can be an expensive business. As technology develops, manufacturers can fall behind quickly as their plant ages. But GEA OptiPartner can easily be integrated to fit a plant's existing control system – or a retrofit of an outdated control system can be considered – to maximize the potential of the plant and to extend its productive life.



**Building a partnership**

Unlike many general-purpose optimization software packages, GEA OptiPartner is built on decades of process design and operational know-how in many industries. So, with GEA OptiPartner, you don't just have reliable optimization software running on-site, you also have access to unrivaled GEA expertise to support your optimization goals.

Updates included

Using GEA process models and advanced data-driven modeling technologies such as machine learning, GEA has engineered process optimization solutions that automatically stabilize and control the process closer to the optimum point of operation in real-time. As part of the GEA service, these models are monitored and updated to adapt to the surrounding changes in the plant.

Prioritized data security

GEA adheres to the highest standards of governance concerning remote access to process data. We work in close cooperation with the customer's IT team to maintain the highest level of data security, and of course, all data is owned by the customer. Remote support typically covers non-IP related process measurements, which are always fully transparent for plant IT and management.

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