

Process optimization as
a GEA Service.

CONSTANTLY
IMPROVING

GEA OptiPartner for instant coffee plants

Increased process stability and optimum performance
from your instant coffee production line

Advanced process optimization with GEA OptiPartner

Increased process stability and optimum performance from your instant coffee production line

Process optimization concept

GEA expertise, combined with digital technology, can enable your production line to reach optimum performance.

GEA OptiPartner is a software that combines GEA's process design and operational know-how to achieve continuous improvement of plant productivity. Using advanced technologies, such as machine learning algorithms and digital twin models, the real-time optimizers continually maintain the process at its best operation point, while GEA remote support provides full lifetime optimization services to ensure sustainable benefits.

GEA OptiPartner Customers feedback at a glance

- Process stability improvement
- Increasing plant availability
- Improving key performance indicators
- Reducing the impact of variable operator skills
- Fail-safe operation even with semi-skilled staff

Get fast results

- Increase stability by up to 80%.
- Increase capacity by up to 7%
- Consistent quality, 24/7
- A GEA Service: no CAPEX needed
- GEA has end-to-end maintenance responsibility

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Optimizing granulation

Challenge

The process is subject to many disturbances such as:

- Frozen slab width and flow
- Frozen slab temperature
- Fluctuation in feed solid content / composition

Solution

We reduce the impact of disturbances by controlling the speed of the granulators while respecting operational constraints.

Gain

Reduce blockages and reduce fines flow with respect to operational constraints. Providing an early warning for blockages to minimize product losses.



Optimizing freeze drying

Challenge

The process is subject to many disturbances such as:

- Fluctuation in feed solid content / composition
- Granulate temperature
- Tray filling and vacuum pressure

Solution

We reduce the impact of disturbances by controlling the heater temperatures while respecting operational constraints.

Gain

More consistent operation, with moisture content closer to quality target and increased throughput.



Optimizing performance insight

Challenge

- Need to know how the plant is performing
- Lack of plant performance insight for management
- Production reports subject to inaccuracy and heavy manual work

Solution

We provide specific performance reports with KPIs calculated from exact numbers from process measurements.

Gain

An insight that provides a baseline for solid decision-making on how the plant can achieve its improvement goals.

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Focusing on Process Stability

We focus on improving your productivity by providing digital optimization modules for evaporation, foaming, CAB freezing, granulation and freeze-drying process units. For example, in freeze drying, our customized analytic algorithms provide real-time optimization of residual moisture content on the final product.

Similarly, the granulation module enables real-time reduction of fines flow and prediction of blocking conditions in the freezing process.

The various GEA OptiPartner modules are delivered all the way from development and implementation to support and maintenance, for a yearly subscription.



Simplicity and operator-friendly user interface

Simplicity and operator-friendliness have been key within the new design with self-explanatory, intuitive features. GEA OptiPartner cuts through all the additional, non-vital information to highlight the statistics that are important such as: production flow rate, end product quality and energy consumption. The home screen also shows a visual representation of the sweet spot compared with the actual performance and its historical development towards the optimum position.



Strengthening staff resources

GEA OptiPartner optimizes processes and strengthens staff resources. The system contains software-based optimizers running on site on a 24/7 basis and ensures consistent and stable operation with the best possible parameters. This makes sure production staff have more time to focus on the overall production conditions and other important value-added operational tasks.

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Building partnership

Unlike many general-purpose optimization software packages in the market, GEA OptiPartner relies on decades of process design and operational know-how in many industries. Moreover, with GEA OptiPartner you not only have a reliable optimization software running on site, but also access to unrivalled GEA expertise to support your optimization goals.



Technology

Using GEA process models and advanced data-driven modelling 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.



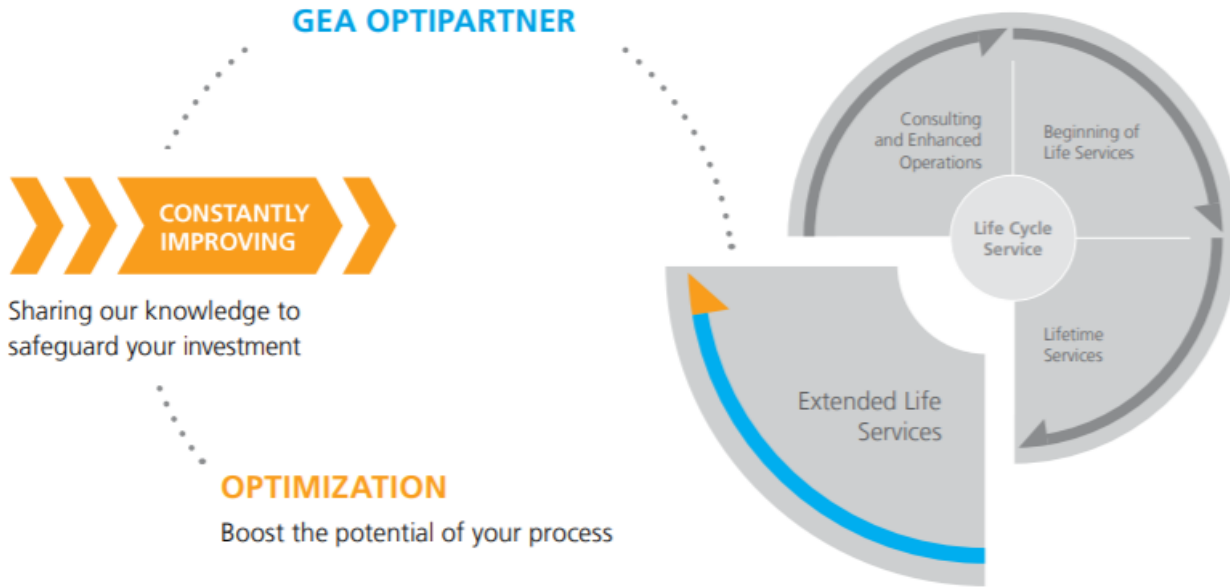
Data security

GEA uses the highest standards of data governance in relation to remote access process data, ensuring data ownership by customers and working in close co-operation with customers' IT teams to maintain the highest level of data security. Furthermore, data involved in remote support are typically none-IP related process measurements and are always fully transparent for plant IT and management.

GEA OptiPartner

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GEA Service – For your continued success





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.

GEA Service

Gladsaxevej 305
DK-2860 Soeborg
Denmark

gea.com/contact
gea.com/service