

Next Level of Automation

Fit for AI: GEA introduces new control system for centrifuges

Duesseldorf (Germany), January 16, 2024 – GEA introduces X Control, a new control system for centrifuges. This brings significant improvements in terms of integration, connectivity, data processing and safety. The new X Control lays the foundation for the integration of Artificial Intelligence (AI). This will make data collection and analysis faster and easier in the future, including self-optimization of the entire system. The increased computing power will also improve integration into SCADA (Supervisory Control and Data Acquisition) systems. Cloud computing also opens up new possibilities for extended services, such as the provision of customized software functions. The new X Control will initially be introduced for selected individual machines. Availability for other GEA centrifuge types will be continuously expanded during the course of the year.

Where the new automation is heading

With the new generation of control systems, GEA is taking an important step towards intelligent automation. "Machine controls have evolved rapidly in recent years. In the past, values were monitored and readjusted by hand or automated controllers. Today, we have reached a level where mass data is collected and analyzed with the utmost precision. The next step is self-learning systems," explains Dieter Hille, Head of Automation & Controls at the GEA Business Unit Separation. The new centrifuge control therefore provides the basis for the integration of AI algorithms. This means that the control system recognizes patterns, draws conclusions and automatically transfers them to the control system.

Manufacturer-independent plug & produce concept

Digitization is the driving force behind this development. The core elements, i.e. microcontrollers, and processors, are becoming ever faster and more powerful. The same applies to networks, bandwidths and transmission rates. Enormous amounts of data and information in a short period of time open up completely new possibilities for control systems. The new **GEA X Control** can use high computing power to implement new interfaces for integration into process line control systems. "This has an enormous impact on the 'plug & produce' capabilities of machines and components as well as their communication with each other and optimal interaction," says Hille.

With the new control concept, GEA is increasingly relying on **MTP (Module Type Package)**, i.e. manufacturer-independent communication between components and systems. This enables users to adapt their processes even faster and more efficiently to changing market requirements by integrating all process steps quickly and easily.

New opportunities in the area of cloud computing

The new GEA X Control also brings important improvements in terms of cloud computing: permanent connectivity allows both extensive process data storage outside the machine control system and linking with other relevant data for the machine and the process. "This makes calculations and evaluations more complex and precise. The knowledge gained here can then be transferred back to the machine control system as instructions for action," says Hille.

With the new GEA X Control, new customer requirements can be met faster and better in the future. High throughput and the best product quality are still priorities. "But resource conservation, such as water and energy savings, and a verifiable CO₂ footprint are also important issues. And with GEA X Control, we now have even more levers at our disposal to ensure and record this in detail," says Hille.

Improved services

With X Control, GEA can customize its services by connecting to the GEA cloud. Acute, planned and proactive services can be performed remotely as needed. Process analysis and optimization or the installation of new software functions can also be performed remotely.

In order to provide customers with the fastest possible service and to ensure the availability of skilled personnel, GEA is already deploying some of its automation and service technicians across all divisions worldwide. This will be expanded in the future. The new centrifuge control system will ensure consistent harmonization with other divisions, such as GEA Liquid & Powder Technologies (LPT). "The HMI is based on **GEA Codex®**, a scalable automation solution for process control levels and product control systems developed by GEA LPT, which in turn is based on ISA 101. This industry standard visualization ensures vendor-independent compatibility. Standardization also means speed gains in engineering. Customized applications can be implemented more quickly. In this way, the customer receives hardware and software from low cost to premium for the automation solution of his choice," explains Hille.

Compliant with cyber security requirements

The GEA X Control meets the growing requirements for **IT security**. The development process is TÜV-tested and certified according to IEC 62443-4-1. The new GEA X Control generation includes various optional cyber security levels – adapted to specific customer requirements. Regular updates – similar to a computer operating system – ensure continuous security of the plant IT.

Launch for individual machines - expansion by the end of 2024

The new GEA X Control will initially be introduced for selected separator and decanter types for the dairy and renewables industry from the first quarter of 2024. During the year, other centrifuge types will follow, and by the end of the year, all new machines will be equipped with the new control system.

Link to download high-resolution images



Image 1: GEA introduces the new X Control system for centrifuges in 2024. (Source: GEA)



Image 2: With the new GEA X Control, new customer requirements for resource efficiency with high throughput and maximum product quality can be met faster and better in the future. (Source: GEA).

Contact Media Relations

GEA Group Aktiengesellschaft

Lilian Schmalenstroer

Peter-Müller-Str. 12, 40468 Düsseldorf, Germany

Phone +49 211 9136-2090

lilian.schmalenstroer@gea.com

NOTES TO THE EDITORS

- Further **information** about GEA
- To the GEA **Media Library**
- Overview **press events**
- Follow GEA on [in](#) [t](#) [v](#)

About GEA

GEA is one of the world's largest suppliers of systems and components to the food, beverage, and pharmaceutical industries. The international technology group, founded in 1881, focuses on machinery and plants, as well as advanced process technology, components, and comprehensive services. With more than 18,000 employees working across five divisions and 62 countries, the group generated revenues of more than EUR 5.1 billion in fiscal year 2022. GEA plants, processes,

components, and services enhance the efficiency and sustainability of production processes across the globe. They contribute significantly to the reduction of CO₂ emissions, plastic usage, and food waste. In doing so, GEA makes a key contribution toward a sustainable future, in line with the company's purpose: "Engineering for a better world".

GEA is listed in the German MDAX and the STOXX® Europe 600 Index and is also among the companies comprising the DAX 50 ESG and MSCI Global Sustainability and the Dow Jones Sustainability Europe Indices.

More information can be found online at [gea.com](https://www.gea.com).

If you do not want to receive any further information from GEA, please send an e-mail to pr@gea.com.