14 June 2022

Press Release

**Digital Twin: more knowledge for more efficient use**

**Data-centered engineering makes work of operators and contractors easier**

Aucotec AG, a developer of engineering software since 1985, is presenting two new concepts at ACHEMA 22: one will make it much easier for plant operators and their contractors to communicate and transfer data and documents in the future. The second creates a new level of provision and use of data on all relevant assets. Both solutions are based on the cooperative platform Engineering Base (EB).

Operators thus achieve greater efficiency in building the digital twin while gaining more intelligence for its use. For example, the digital twin in EB, which is exceptionally comprehensive due to cross-discipline data centring, speeds up maintenance and rebuilds. ACHEMA visitors can already take a look at this future at the Aucotec stand.

**ET supports IT and OT**

The new "EB Alliance" for more efficient communication will include two topics: seamless data exchange between operators and suppliers who have each set up their own environments for "their" EB, and the outsourcing and consistent reintegration of the digital twin of rebuild projects of a running plant, no matter how complex.

"Sharing data from different parties using the same system is usually complicated by the fact that they use different versions and configurations. All that will change in the future," explains Aucotec's senior product manager, Dr. Pouria Bigvand. When importing data from a supplier using EB, EB Alliance will allow all data to be mapped to the configuration state of the recipient, so that errors or misunderstandings do not occur in the first place. And handing over the digital twin of a plant section to be rebuilt or extended, as well as integrating it consistently into the new as-built state once the work is done, will also significantly speed up rebuild projects. "The "Alliance" is intended to further strengthen EB's role in the user companies being, as the authoring system and data repository, THE hub for Engineering Technology (ET) and thus optimally supporting IT and OT," says Bigvand and emphasizes: "Our customers include large operators with over 100 contractors; the new approach also makes the exchange across a whole cascade of suppliers very efficient and clear."

**Cross-discipline plant knowledge speeds up maintenance**

The second concept includes a comprehensive navigation solution that shows operators all the interrelationships of an asset in an instant. The digital twin in EB is much more detailed and intelligent than any information that document-based systems can provide for plant maintenance. Where previously only the main assets with their properties were known, EB's digital plant model also knows all the subordinate objects down to every nozzle in the process area, every terminal connection in the electrical system and every signal in the automation system. Even more important, however, according to the product manager, is that the complete object dependencies for these objects are also modelled.

"The solution that Aucotec is currently developing on this comprehensive basis will make it possible in a unique way to have an overview of all interrelationships across all engineering disciplines in the shortest possible time during operation," he explains. For example, from an alarm signal via the automation system to the field to the sensor, from there via the pipeline to the affected valve, back to its control and so on. For the plant, this means that maintenance preparation can be significantly optimized and downtimes can be minimized or even completely avoided in the event of a malfunction. "This means that any investment in the digital twin pays off many times over," says Pouria Bigvand.

**Aucotec at ACHEMA 2022:** Hall 9.1, Stand No. B 4 and Hall 11.0, Stand C 51

**Links to images\*:**



With [EB Alliance](https://www.aucotec.com/fileadmin/user_upload/News_Press/Press_Releases/2022/AUC_Grafik_EB-Alliance.jpg) through the life of the plant: from the digital original to the always up-to-date digital twin with simple data transfers and consistent data integration after maintenance and retrofitting (Image: AUCOTEC AG)



[Data flow with EB Alliance](https://www.aucotec.com/fileadmin/user_upload/News_Press/Press_Releases/2022/Data_Flow_Engineering_Operation_Maintenance_EF.jpg): consistent exchange of operators and contractors from engineering to the digital twin in operation (Image: AUCOTEC AG)



[Dr. Pouria Bigvand](https://www.aucotec.com/fileadmin/user_upload/News_Press/Press_Releases/2022/Pouria_G._Bigvand.jpg), Head of Product Management at Aucotec: *"EB Alliance will further strengthen EB's role to be THE data hub for Engineering Technology (ET), optimally supporting IT and OT."* (Image: AUCOTEC AG)

Or: *"With efficient data exchange even across a cascade of suppliers, EB Alliance helps the twin stay a twin instead of becoming an 'older' sister with less and less similarity to the plant."* (Image: AUCOTEC AG)

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[**Aucotec AG**](https://www.aucotec.com/) has more than 35 years’ experience in the development of engineering software designed for use throughout the life cycle of machinery, plant equipment and mobile systems. Solutions range from flow diagrams and process-control/electrical technology for large-scale plant systems to modular on-board power supply units designed for the automotive industry. Software supplied by Aucotec is currently in operation throughout the world. In addition to the headquarters in Hanover, the Aucotec Group includes six other locations in Germany as well as subsidiaries in China, India, South Korea, the Netherlands, France, Italy, Austria, Poland, Sweden, Norway and the USA. What is more, a global partner network ensures local support all over the world.

We would be grateful if you could supply us with a copy of your article. Thank you very much!

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