

Press Release

08 December 2021

Calculated in an instant

Using simulation of electrical systems across disciplines in engineering

Aucotec AG, an engineering software developer since 1985, is expanding its range of simulation integrations for the Engineering Base (EB) cooperation platform with a standard connection to ETAP. The analysis solution, widely used especially in the USA and China, simulates and calculates all electrical components in the fields of energy, transportation, low-voltage and industrial plants.

Data-based and cross-discipline

With the interface, Aucotec is creating the most comprehensive connection of engineering and simulation on the market to date. This is because it also covers all aspects of instrumentation and automation in mechanical and plant engineering at the same time as the electrical engineering data. The reason for this is EB's data-based principle of a single source of truth that can be used across all disciplines for all core tasks in plant engineering. This versatility fits with ETAP, which is designed as a "calculation machine" for various industrial sectors.

For example, the interface transforms a single-line diagram (SLD) from EB to ETAP at the push of a button into a tool-compatible representation that can be directly edited there and, if necessary, supplemented. After analysing and calculating the electrical specifications of the equipment defined in the SLD, such as cables, buses, circuit breakers and the like, the results are transferred back to the engineering platform via an EB wizard. EB augments the corresponding objects in the SLD with this data by mapping and supplementing the attributes. This causes the central data model of the (sub-)plant to grow and all those involved - including the instrumentation and automation specialists - can use all the details gained directly for their further processing.

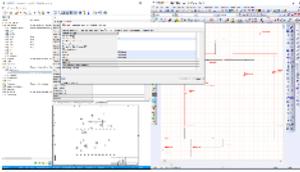
More reliable AND faster

The integration not only saves the manual transfer of data and plans to ETAP and its results to EB, but also the associated high potential for errors. There is a substantial gain in quality, because the simulations are reliably consistent despite significant acceleration and can be retraced in EB over the entire life of the project. Good reasons also for customers from the oil & gas sector such as Equinor, Kongsberg or Haldor-Topsoe, who use EB as a data backbone for their entire engineering as well as the operation of their plants.

Future-oriented bandwidth

"Their interest in integration was also a reason to approach ETAP's simulation professionals, as the tool is widely used in the industry," explains Aucotec's head of Product Management, Dr Pouria Bigvand. But the many users and potential users in the field of energy supply, as well as the transportation OEMs who develop their electrical systems with EB, should also benefit from the integration. "This way we kill several birds with one stone, so to speak," says Bigvand, and: "We are already working on an expansion of the solution that will completely automate the exchange. This integration is the way forward for us and an important completion of the range of simulations facilitated and accelerated by EB. Aspen, Unisim and Pro II for process simulation are further examples," says the product manager.

Links to images*:



Simulation and engineering closely linked: [ETAP's calculations](#) can be used across disciplines in EB in no time.
(Image: AUCOTEC AG)



[Dr Pouria Bigvand](#), Head of Product Management: "This integration is the way forward for us and an important completion of the range of simulations accelerated by EB." (Image: AUCOTEC AG)

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[AUCOTEC AG](#), Hannoversche Straße 105, 30916 Isernhagen, www.aucotec.com

Press and PR Officer, Johanna Kiesel (jki@aucotec.com, +49(0)511-6103186)

Aucotec AG has more than 35 years' experience in the development of engineering software designed for use throughout the service life 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. Hanover-based Aucotec also operates six further sites in its home country of Germany, along with subsidiaries in China, South Korea, France, Italy, Austria, Poland, Sweden, Norway and the United States, while counting on a global network of partners to supply local support throughout the world.