

## Press Release

September 16, 2024

### Aucotec at InnoTrans 2024: Solutions for Development, Maintenance and Operation Start-up

- **Engineering Base: single source of truth for the electrical design, operation and maintenance of rail vehicles**
- **Premiere in Berlin: technology partnership between Aucotec and Altair opens up new possibilities for operation start-up and servicing of rail vehicles**
- **Customers benefit from advanced analysis and visualization options together with more efficient maintenance and production of vehicle electrics**

Aucotec AG will be presenting its data-centric platform Engineering Base at this year's edition of InnoTrans, the leading international trade fair for transport technology. Aucotec's established market solution enables seamless integration of all disciplines and processes, which is of crucial importance for the development, operation and maintenance of rail vehicles and other forms of mobility.

Every rail vehicle is unique, meaning that customized modifications are required. And the cooperation platform Engineering Base offers a central data source for this, a 'single source of truth' that keeps all relevant information consistent and up to date at all times. It also paves the way for an efficient development process, thanks to intelligent data management and transparent change management. Besides ensuring high levels of quality and efficiency for maintenance and operation start-up, this also has the effect of substantially increasing the service life of rail vehicles and their reliability. Now, though, Aucotec is going one step further.

#### **Collaboration with Altair: new digital processes for the workshop**

As part of a technology cooperation with Altair – a world leading company in the field of computational intelligence –, Aucotec is creating a link between Altair's EEvision visualization solution and its Engineering Base cooperation platform. The partners are pursuing a common goal: to create a fully complete digital twin for the development, production and, most importantly, operation start-up and servicing of complex electrical vehicle systems. "The new solution born from this partnership, which we will be showcasing together at InnoTrans, extends process digitalization into the workshop," comments Dr. Florian Jurecka, Vice President Global Sales and Marketing at Aucotec. "It ensures excellent data consistency, taking the 'single source of truth' as a basis, and results in far more efficient and reliable procedures."

Engineering Base provides all relevant data on the vehicle electrics in a fully digital, constantly up-to-date form. Electrical documentation has often been produced as drawings in the past, without exploiting the possibilities offered by modern technologies. Integrating EEvision allows the visualization to be generated dynamically with case-specific details. This closes the gap in the maintenance process, thereby fully harnessing the digital twin's potential.

#### **Primarily for use in operation start-up, maintenance and repair**

One of the key benefits of integrating this feature is the considerable time savings it offers, particularly for operation start-up and maintenance. There is no longer any need for tedious searches through lengthy documents and different diagrams, as all the relevant information is available at a glance. Devices and functions can be quickly located, while interrelationships are visualized by means of clear, generic display of the aspects being searched for. "This automatic and dynamic generation of circuit diagrams makes it easier for service engineers to quickly understand the electrical functions and speeds up the troubleshooting process significantly," says Gerhard Angst, Vice President EDA and Industrial Solutions at Altair.

Engineering Base has always enabled development processes for both correctly wired and functionally correct circuit diagrams. But now the integration of EEvision also provides an intuitive way of directly providing workshops with correctly wired visualizations while also allowing efficient signal tracking. This results in an ideal blend of maximum efficiency and quality in the development process plus optimum availability of data for maintenance without the need for time-consuming data transfers. At the same time, specific information relevant to maintenance – such as photos, videos, data sheets, etc. – can be added to the development data.

### Future-proof solutions for the mobility of tomorrow

"We are very much looking forward to joining Aucotec at InnoTrans to present this innovative digital process for the maintenance, servicing and operation start-up of complex systems," says Angst. "The solution is based on Aucotec's platform and provides a cloud-based digital twin using Altair's EEvision product, which simplifies and speeds up the servicing of complex electrical systems in trains and buses."

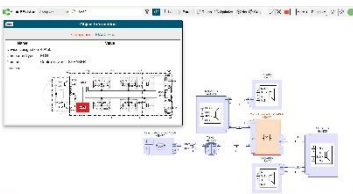
"Engineering Base as the platform and EEvision as the dynamic visualization tool on the service side are a perfect match," adds Dr. Jurecka. "That's precisely why they form such a promising combination. Together with our customers, we will play an instrumental role in workshop digitalization and, as a result, in how mobility evolves in the future."

Come and visit Aucotec at InnoTrans 2024 in **Hall 6.2, Booth 775** and experience for yourself how these forward-looking technologies are shaping the future of mobility.

### Images\* and captions:



Aucotec's [Engineering Base](#) platform enables seamless integration of all disciplines and processes, which is of crucial importance for the development, operation and maintenance of rail vehicles. (Photo: Aucotec)



This automatic generation of [circuit diagrams](#) makes it easier for service engineers to quickly understand the electrical functions and speeds up the troubleshooting process. (Photo: Altair)



[Gerhard Angst](#), Vice President EDA and Industrial Solutions at Altair. (Photo: Altair)



[Dr. Florian Jurecka](#), Vice President Global Sales and Marketing at Aucotec. (Photo: Aucotec)

\*These images are protected by copyright. They may be used for editorial purposes in connection with Aucotec and Altair.

---

**Aucotec AG** 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 near Hanover, the Aucotec Group includes six other locations in Germany as well as subsidiaries in China, India, Malaysia, 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!

**Contact:**

**AUCOTEC AG**, Hannoversche Straße 105, 30916 Isernhagen, [www.aucotec.com](http://www.aucotec.com)  
Public Relations, Arne Peters ([arne.peters@aucotec.com](mailto:arne.peters@aucotec.com) +49(0)511-6103192)