

Bauer Systeme Reliable data every step of the way

CUSTOMER REFERENCES

Electrical engineering & automation



Customer: Bauer Systeme GmbH
Industry: Automation of machines and plants
Company size: 30 employees
Established: 1999
Headquarters: Bretten, Germany

End-to-end automation and consistent digitalization of all processes are success factors in panel building and switchgear manufacturing because they enable efficiency to be optimised along the entire value chain. This user report of Bauer Systeme – a company based in Bretten, Germany – shows how successfully this model can be put into practice. Eplan Electric P8 is used for electrical planning at Bauer Systeme. This is followed by 3D construction planning in Eplan Pro Panel, during which a virtual prototype is generated. “We already lay the foundation for automation in our workshop,” explains Oliver Martin, Head of Electrical Design at Bauer

Systeme. All the other processes are based on the data generated. And not only in the workshop; purchasing, costing, inventory management, logistics and work preparation also access the same data. An appropriate planning quality is needed in order to achieve a high level of quality in production. Only when all data is correct, subsequent processes can run automatically.



“The Eplan database is the key in our engineering process and it is correspondingly maintained with a great deal of care.”

Oliver Martin,
Head of Electrical Design

THE PROJECT

The Challenge

- High quality in production

The Solution

- Electrical design in Eplan Electric P8, 3D construction design in Eplan Pro Panel
- All other processes (purchasing, calculation, logistics etc.) are based on the generated data
- High level of detail as early as the planning stage
- Machining of enclosure on Perforex machine center



A high level of detail creates efficiency

“We make use of a lot of functions in Eplan Electric P8,” Mr. Martin explains: “There are very few other panel builders with a data density in P8 like the one we have to realise.” Consequently, both the electrical diagrams and the virtual prototypes display a high degree of detail and are correspondingly extensive. The wiring plan and virtual prototype form the basis for all the subsequent work stages. The more detailed the planning is, the more efficient manufacturing can be. Although the effort needed in the planning office is slightly higher, this all pays off during the subsequent production process. Overall though, the projects can be completed with lower personnel costs.

Workshop automation

The importance of high data quality can then be seen in the workshop where the enclosures are processed on a Perforex machining centre from Rittal Automation Systems. “The data for the Perforex machining centre comes straight from construction planning; in the workshop, processing can then be started with a few clicks of the mouse,” Martin explains. In addition to enclosure machining, consistent data management also enables tasks such as assembling cables and cutting support rails and cable ducts to size. The extent to which Bauer Systeme has digitalized all its processes can be seen in the workshops: Both in the mechanical engineering and electrical workshops, all the staff work without any printed wiring plans.

Your partners of choice for state-of-the-art panel building and switchgear manufacturing.

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