Vidal: panel building and switchgear manufacturing trimmed for efficiency



Flexibility and rapid production are two of the main demands placed on panel building and switchgear manufacturing today. The Spanish company "Vidal Automatización y Control" had also been facing up to these challenges and was looking for ways to increase the efficiency of the processes along its value chain. Vidal has now found its "Dream Team" in the companies and products of Friedhelm Loh Group. The panel builder and switchgear manufacturer has identified three areas for optimisation. The Engineering Department relies on Eplan Electric P8 and Eplan Pro Panel. High-quality enclosures and control cabinets from Rittal meet the superior quality demands of the customers. A Perforex machining centre from Rittal Automation Systems also ensures both shorter throughput times and improved production quality compared to manual production processes.



"The Perforex really is just what we were looking for."

Javier Vidal, Managing Director

THE PROJECT

The Challenge

Optimising processes throughout the value chain

The Solution

- Enginenering in Eplan P8 and Eplan Pro Panel
- Corrections are already possible in planning phase
- Reducing manufacturing throughput times and improving quality compared to manual processes
- Direct control from Eplan Pro Panel
- Cutting manufacturing times by as much as two thirds



Engineering is optimally integrated

Engineering at Vidal is performed with Eplan P8. Following electrical planning, all the systems are designed three-dimensionally in Eplan Pro Panel. The resulting virtual prototype forms the basis for all the further processes within the company. "For example, the material used for the project is automatically transferred to our ERP system, so that the management of materials is fully automated," explains José Miguel Belda, Head of Purchasing at Vidal: "This slashes the time we spend on acquisition." The 3D construction planning also shows the possible difficulties that could arise later during production. For example, if a component on the mounting plate collides with the enclosure door, it can be detected at this early stage. This means that any corrections are made directly during the planning stage and not in the workshop, which - in turn - cuts production times significantly. This way, Vidal can deliver the equipment to the customer faster. The panel builder and switchgear engineer also views the products as part of the integrated solution that makes a significant contribution to the quality of the completed system. The company therefore depends on products from Rittal for its housings, enclosures, power distribution components and climate control solutions. "We also use the configurators for heat calculation and enclosure selection during the planning stage. The technical data that can be downloaded from

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

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EPLAN Software & Service GmbH & Co. KG An der alten Ziegelei 2 · D-40789 Mohnheim Phone + 49(0)2173 3964-0 · Fax + 49(0)2713 394-25 info@eplan.de · www.eplan.de the Rittal website makes it even easier to select products," says Fernando Romero, Vidal's Technical Director.

Automation in the workshop

Vidal has also invested in a Perforex BC CNC machining centre from Rittal Automation Systems to increase efficiency in the workshop. This permits rational automation when producing distribution enclosures made of steel, stainless steel, aluminium, copper and plastic. At the same time, the quality of the machined enclosures is also increased, as the Perforex makes very precise cut-outs, drilled holes and threads. The data needed to control the machining centre comes directly from Eplan Pro Panel's 3D construction planning. The time-consuming process of placing and measuring components on the mounting plate is no longer necessary, so that machining can start immediately in the workshop. "The Perforex really is just what we were looking for," says Javier Vidal, Managing Director of Vidal AC. The entire changeover is a further step on the path to Industry 4.0 (IoT) for the panel builder and switchgear manufacturer. The production times previously required can now be cut by up to two thirds, thanks to efficient engineering, automated production and process optimisation.

