APEG: Perforex cuts process times by two-thirds



Switchgear manufacturer AP Elektrotechnik GmbH (APEG) from Rechnitz in Burgenland (Austria) is facing up to the demands of Industry 4.0 (the Internet of Things). APEG has been manufacturing switchgear for the industrial sector since 2002, for use in sewage treatment plants, pumping stations or the steel industry, as well as in other applications.

The company supplied the entire process control technology for a hydroelectric power plant for Vorarlberg. Thanks to automated enclosure machining with the Rittal Perforex, the familyrun company is ensuring the continuity of its processes, from engineering to production. There will be a total of 130 enclosures in the ultimate configuration.



"The Perforex helps us a great deal because of the short time we have for the 130 enclosures. What used to mean many hours of work is now performed in mere seconds."

Burkhard Glatz, founder and Managing Director

THE PROJECT

The Challenge

- Machining 130 enclosures for a hydroelectric power plant project in a short time
- Machining stainless steel surfaces involving a high level of tool wear

The Solution

- Using Eplan for construction planning
- Accelerating the process by up to 50%, with an average machining time of
- 15–20 minutes per part
- Opening up new areas of business



Perforex accelerates working processes

To optimise the production of the 130 enclosures for the Vorarlberg hydroelectric power plant, the company's founders Burkhard Glatz and his son Christian decided to use the Rittal enclosure processing machine, since APEG only employs four to six people in its production facility, which is insufficient for a volume of this size. Consequently, father and son chose a Perforex BC 1001 HC from Rittal. It is not necessary to program the machining centre, since the data is taken directly from construction planning, which is performed using the Eplan software application.

The machining centre can be used to carry out all the machining tasks that arise when assembling enclosures. For example, it can drill holes, cut threads and mill cutouts in one single operation. The interaction between engineering and automatic enclosure machining promises to speed up processes by as much as 50 percent. This is because the average machining time is between 15 and 20 minutes per component.

Saving time on follow-up orders

The APEG managing director estimates the machining centre will generate time savings of two-thirds for door cut-outs and mounting plates. It also opens up new fields of business,

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

RITTAL GmbH & Co. KG Auf dem Stützelberg \cdot D-35726 Herborn Phone + 49(0)2772 505-0 \cdot Fax + 49(0)2772 505-2319 info@rittal.de \cdot www.rittal.de

EPLAN 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 as a result of which APEG has already won two new customers. Even if, according to Rittal, the machine already pays off with batch sizes of one, Glatz senior and junior are putting their money on follow-up orders. In power plants, two identical machines are always present. According to Christian Glatz, a lot of the work needed for the second machine has already been carried out. And with customers who order a certain number of identical enclosures over the course of the year, the electrical and construction planning, as well as the data transfer to the processing centre only has to be performed once.

Rittal automates enclosure manufacturing

The tasks in panel building and switchgear engineering can be spelled out quickly: Efficiency and innovation on the one hand and reduced costs on the other. Today, this is achieved mainly by optimising the production processes. Rittal aims to support this development by automated enclosure machining. By extending the product range by adding new manual tools, Rittal is expanding its Rittal Automation Systems business unit to make it a full range supplier for panel building and switchgear engineering. Through this new product, Rittal is supporting panel builders and switchgear manufacturers along the entire process chain – from engineering right through to workshop and production.

