

# Plenge GmbH: Fast and automated machining of stainless steel

## CUSTOMER REFERENCES

Electrical engineering & automation



**Plenge**  
Elektrotechnik - Steuerungstechnik

**Customer:** Plenge GmbH  
**Industry:** Electrical engineering and panel-building specialist  
**Company size:** 70 employees  
**Established:** 1949  
**Headquarters:** Oelde, Germany

Machining stainless steel enclosures is no easy task because this tough material can only be machined to a limited extent using metal-cutting methods. Plenge GmbH, a medium-sized switchgear manufacturer from Oelde in Germany's Münsterland region often has to deal with stainless steel. Much of the switchgear that the company manufactures with its 70 employees is destined for the food industry. In this industry, stainless steel enclosures are the standard

in order to meet the strict hygienic demands. Plenge therefore invested in a Perforex machining centre from Rittal Automation Systems that operates with a laser-cutting unit. The new laser machining centre has led to a major increase in production efficiency; one of the two employees previously employed in machining the enclosures can now take on other workshop tasks.

**“When we were considering investing in the Perforex LC, we didn’t have to think very long about the payback period because the benefits were plain to see.”**

Nicholas Visser-Plenge, General Manager

## THE PROJECT

### The Challenge

- Machining stainless steel enclosures for the food industry
- Skills shortage

### The Solution

- Consistent data management
- Improving efficiency by investing in the Perforex LC CNC machining centre
- Staff previously required for machining now undertake other skilled tasks in the workshop
- High-quality machining



### Workshop automation

A great deal of manual work is still the order of the day in control and switchgear engineering workshops. Alongside wiring, which takes up most of the time, the machining of the enclosures is also very labour-intensive. Previously, the stainless steel enclosures always had to be machined by hand. Rittal Automation Systems now offers the Perforex series of CNC machining centres to increase productivity in the workshop when machining enclosures. They machine both panels and entire enclosures quickly and accurately. The Perforex version with a laser cutting unit is ideally suited if many stainless steel enclosures are processed, as it the case at Plenge. Plenge itself has invested in precisely such a Perforex LC.

### Short payback period

With the new laser machining centre, Plenge is not only simplifying the processing of orders for which stainless steel enclosures are required, but also accelerating the process significantly. Cut-outs, holes and threads in stainless steel enclosures no longer need to be laboriously made manually.

And the staff are also enthusiastic about the quality because laser cutting does not produce any burrs on the cut edges. As a result, the time saved is available for other qualified activities in the workshop and productivity is increased.

The payback period for machining centres of the Perforex series is relatively short, even for SMEs. Depending on the number of enclosures machined each year, it often only lasts two to three years. The return on investment (ROI) can be calculated quickly and conveniently with the calculator to be found on the Rittal website.

### Consistent data management

The Perforex LC can be easily programmed, directly at its controls. However, it is particularly efficient when the data for the machining centre can be taken directly from the planning process. The employee then only has to place the enclosure on the worktable and start up the machine. The consistency of data management from the electrical planning to work preparation and production to the ERP system is a decisive factor when it comes automating control and switchgear engineering.

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

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

EPLAN GmbH & Co. KG  
An der alten Ziegelei 2 · D-40789 Mohnheim  
Phone + 49(0)2173 3964-0 · Fax + 49(0)2173 394-25  
info@eplan.de · www.eplan.de

