

# Press release

Application Copper processing

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New competence centre for copper processing boosts switchgear manufacturing



## More power for the lifelines

**(Ladenburg) With one of the most modern plants for copper processing in Europe, SEDOTEC has built up a competence centre that is second to none. With this, the company wants to give a boost to switchgear construction and at the same time give its customers more time for the new challenges posed by digitalisation. As a close partner for many years, EHRT has installed the system for the production of the lifelines of modern power distribution.**

"Digitalisation comes with power and speed, which is why switchgear manufacturers and electrical installers have to face new challenges. There is less and less time for the classic tasks. This is where we want to help and offer even better solutions and services, which will relieve our partners and customers of these tasks or make them easier", emphasises Dirk Seiler, Managing Director of SEDOTEC GmbH & Co. KG in Ladenburg. With one of Europe's most modern facilities for copper processing, SEDOTEC has established a competence centre in the summer, which translates this philosophy into money and time savings for customers.

## **Copper processing is a responsible job**

Anyone who processes copper into busbars and couplings should know what they are doing. And they should be aware of their responsibility. Starting with the special machines required for this, know-how and experience are also required in the production of the individual copper parts. With the types of copper that SEDOTEC processes, factors such as tensile strength, yield point and elongation at break must be known and observed. The fact that these values can change depending on the processing method does not make it easier. All this needs to be considered if copper is to be cut to length, punched, notched, bent, ground, lowered and deburred in order to produce the couplings and main busbars for a switchgear. With more than 500 tons of copper processed by SEDOTEC every year, the Ladenburg company has long been one of the experts in copper processing.

With this partially automated facility for copper processing, SEDOTEC made a great leap into the future in July 2020 and set another milestone in the company's development. The long-standing partner EHRT has supported SEDOTEC. The experts from Rheinland-Pfalz have been developing and manufacturing punching and bending machines for copper, aluminium and steel rails for almost 60 years. The company is the global market leader in the precision processing of flat materials such as busbars, barstock or profiles. "Our cooperation dates back to the year 2014, when SEDOTEC received a prototype machine. It was a development partnership right from the start," recalls Thomas Ehrt, managing director of the machine manufacturer. And Seiler adds: "We have been happy to describe our wishes and ideas and EHRT always did a great job of implementing them". That was also the case with the current machines. "The people have done a great job. After 14 days of installation and commissioning, the result was: "Switch on - it runs", praises Seiler.



## **Gantry system with portal crane replaces material store**

Thus, Ladenburg now has self-sufficient copper punching machines, which are supplied by a common Gantry storage system with Gantry crane. The existing HC 80 will be joined by a further highly professional, latest-generation Holecut Professional HC 80 punching machine and two EB 40 Professional E copper bending machines with electric servo drives.

Under the Gantry crane in front of the machines there are two storage areas, each of which can hold about 40 tons of material of different dimensions. The Gantry system with the storage area and the Gantry crane is thus the core of the automation for the two independently operating punching machines. Leading material is automatically recorded, stored, managed and fed into the machines. "Above all, the automatic storage of material makes our work much easier," says SEDOTEC production manager Leonardo Torresi enthusiastically. The current status of the system can be called up at any time - at the machine and in the office. "The Gantry can replace an existing material store," assures Daniel Schenk from EHRT's technical sales department. And so SEDOTEC is glad that EHRT has also taken care of dismantling the massive Paternoster storage system. "Otherwise the monstrous Paternoster would probably have survived us all", says Seiler with a smile.



## **Interface to ERP enables full transparency**

The state-of-the-art and largely automated system is controlled by PunchPRO, the EHRT solution for nesting multiple production orders. Schenk explains the possibilities: "The challenge today is to organise the production orders in the best possible way. PunchPRO offers the solution, because it can arrange the production orders in such a way that material utilisation is optimised". This does not affect the order in which they are placed, as it is all about optimising material utilisation. "The waste of raw materials is minimised, which saves costs and reduces waste," promises Schenk. The operator sees the production orders clearly displayed. A status enquiry of the respective order is possible both from the office and for the operator himself.

Individual orders and even entire production shifts can be planned in advance in the office while the machine is producing in the shopfloor. "This makeready time optimisation increases the machine running times quite considerably", emphasises Schenk. Production orders can be saved and recalled at any time. Any deviating quantities can then be easily edited.

## **Digitalisation instead of copper production helps customers**

"In this way we are raising our production to a completely new level in terms of both quality and quantity", Seiler is convinced. With this competence and the new machinery, Seiler wants to convince switchgear manufacturers that it will be more lucrative for them in the future to address the challenges posed by digitalisation. "With the digitalisation of a switchgear and its integration at the operator's premises, switchgear manufacturers and electrical installers can open up a new field with a lot of added value and assert themselves better in an increasingly competitive market", Seiler is convinced. The internal copper processing with everything that goes with it, such as purchasing, warehousing and production with secondary activities such as pressing nuts, is no longer profitable for switchgear manufacturers in the long term. "We can do this faster, better, more cost transparent and cheaper", promises Seiler. The new, automated copper competence centre, which SEDOTEC has installed with its machine partner EHRT and which provides more power for the production of the lifecycles of a switchgear, will ensure that Seiler is probably right in the end. And this can also inspire the lifelines of customers and partners.



## **A partnership with the same objectives**

And Seiler has also already expressed the next wishes for the integration of the subsequent processes such as deburring, bending or pressing into the automated punching production towards a fully automated production at EHRT. "We are striving for a completely interlinked and automated line production, as we have already realised in our sheet metal production", he describes the next step. At Thomas Ehrt, Seiler is thus breaking down open doors. "This is exactly the direction in which our developments are heading and digitalisation is providing us with excellent support. So nothing stands in the way of a continuation of the development partnership between SEDOTEC and EHRT. Switchgear manufacturers, electrical installers and planners will be happy to hear it.

## **Company information about SEDOTEC**

### **With innovations into the Champions League**

SEDOTEC GmbH & Co. KG is an established manufacturer of kit systems for low voltage switchgear. With over 50 years of experience, SEDOTEC produces switchgear cabinet systems and parts for the electrical industry in Germany at its sites in Ladenburg and Mittweida/Saxony, according to the highest quality criteria. 100 employees work according to business excellence and lean criteria and generate annual sales of around 20 million euros. With the involvement of all employees, the company has consistently aligned the value-added chain to customer benefit and established a dynamic corporate culture for continuous improvement. In 2020 SEDOTEC was awarded the Top Employer Medium-sized Businesses of the Year award.

With their own Vamocon kit system, the Ladenburgers are showing how innovations, together with top quality and adherence to delivery dates, can be successful in Germany. Since its introduction in 2008, SEDOTEC has placed more than 10,000 Vamocon systems. The customers - switchgear manufacturers, installers or operators - are free to choose the circuit breaker. This is well received and has massively promoted the success of the Ladenburger. And so, over time, many customers have become partners - and Vamocon has become the planners' favourite due to its numerous advantages and regular top marks in tests. The control cabinets 'made in Germany' can be found in the most diverse applications in industry and building technology in Europe.

## **Company information about EHRT**

### **High-precision machines for copper processing**

EHRT Maschinenbau GmbH has been engaged in the development and manufacture of CNC punching and bending machines since 1963. With constant further developments in close contact with its customers and over 50 years of experience, the company has become the worldwide market leader in the precision processing of flat materials such as conductor rails, bar stock or profiles. With maximum flexibility and efficiency of the EHRT machines and its solutions the machine manufacturer sets high standards in terms of CNC bending and punching wherever quality and time play a role for their customers.