**User Report**

**A strong connection**

Clean labelling and effortless stacking - around 2.5 million times a year. At PC Electric's main plant in Upper Austria, three Schmalz area grippers take the strain out of order picking.

Just-in-time production. This saves storage space and enables manufacturers to realise individual customer requests. But it also requires a high degree of flexibility and speed of response. PC Electric (PCE) is committed to this maxim and only manufactures once the customer order has been received. "You want the cap of the plug to be black? Then that's what we do," says Daniel Lechner, Head of Automation at PC Electric GmbH, with a grin.

PCE, with more than 350 employees, has been producing electrical connection components at its headquarters in St. Martin im Innkreis, Upper Austria, since 1973. These include CEE industrial and safety plugs and sockets, power distributors, cable reels and wall boxes for e-mobility. The products are successfully sold in over 100 countries around the world. The group of companies employs a total of more than 1,000 people at five locations in Europe.

**Careful use of resources**

A high level of vertical integration and independence from supply chains are important to PCE. This is why the company not only produces the plugs in a highly automated process, but also manufactures the plastic components itself using injection moulding. The granulate silo in the courtyard towers twice as high as the production buildings and gives a good impression of the quantities of plastic that PCE processes every month.

PCE is committed to a sustainable approach to people, materials and the environment. This is why the specialist for industrial plugs and sockets relies on recyclable raw materials, utilises geothermal energy and photovoltaics, dispenses with plastic packaging and creates an ergonomic working environment.

One starting point, for example, was the picking of product containers. Every week, the skilled workers in the large, bright hall remove the items from grey plastic boxes. They pack plugs and distributors as well as cable reels in around 2.5 million packages in seven different sizes. Previously, they had to manually label and stack the boxes with a maximum weight of 2.5 kilograms and place them on pallets. In the long run, this was not only exhausting for the staff, but also inefficient. "In addition, like many companies, we were struggling with a shortage of skilled labour," says Lechner. An automated solution was needed.

**Labelling and stacking boxes**

During a visit to a trade fair, the production engineers from PCE discovered the FXCB area gripping system with integrated vacuum generation from Schmalz. The flexible vacuum gripper is ideal for the ergonomic handling of cardboard boxes, as the suction plate with high-performance foam allows the system to lift products with porous surfaces. The special feature: The foam has optimum adaptability to different workpieces and enables short cycle times thanks to its quick return. This is exactly what the engineers were looking for.

In 2020, PCE installed the first FXCB that works on a Kuka robot and is supplied with compressed air to generate a vacuum. The system has no sharp corners and is perfect for human-machine interaction. After a skilled worker has packed the items into the box, it is pushed into the so-called cell. There it is automatically weighed, sealed and given a "Tested" sticker. The area gripper lifts the box and holds it in front of the labelling device, which affixes the correct label to the narrow side. The robot then places the box back on the conveyor belt, which transports the stack onwards as soon as four boxes are lined up. "What's more, the large stickers are now always in exactly the same predetermined position - it simply looks much tidier," says Lechner with delight. And there was another detail that convinced PCE: in the past, the employees had to place the cardboard boxes individually in larger shipping units, but now they can grab and pack the entire stack. That saves time.

The system also has nothing to hide when it comes to energy efficiency. The integrated pneumatic vacuum generation ensures low operating costs. Of course, the system must not only be ergonomic, but also economical and "pay for itself".

"The handling solution met our expectations so well that we installed two more robots with the FXCB area grippers in the picking department at the beginning of this year," reports the division manager. In addition to the technical performance, Lechner is also very satisfied with the cooperation with Schmalz. "Since the initial contact at the trade fair, the dialogue has been on an equal footing and our questions have always been answered quickly and comprehensively. And the first-class solution speaks for itself anyway.

(5.084 characters incl. spaces)

**Meta-Title:** Area grippers from Schmalz optimise order picking at PCE

**Meta-Description:** Three FXCB large-area grippers from Schmalz relieve the employees at PC Electric's main plant in Upper Austria during order picking. They automatically label and stack around 700,000 boxes per week.

**Keywords:** Schmalz; Vacuum; Handling; Ergonomics; Area gripper; FXCB; Order picking; Kuka; PCE; Packaging

**Images:**

|  |  |
| --- | --- |
|  | **Image 1:**  The handling system stacks the parcels on the conveyor belt. |
|  | **Image 2:**  All labels sit exactly on the boxes. |
|  | **Image 3:**  The FXCB gripper holds, the labeller sticks. It all runs automatically. |
|  | **Image 4:**  Kuka robots and FXCB area grippers move around 700,000 cartons per week. |
| **Ein Bild, das Maschine, Industrie, Im Haus, Bautechnik enthält.  Automatisch generierte Beschreibung** | **Image 5:**  The gripping system has a low dead weight and an integrated pneumatic vacuum generator. |

Images: J. Schmalz GmbH

**About the company**

Schmalz is one of the market leaders in vacuum automation and ergonomic handling systems. The internationally positioned company's products are used in logistics applications as well as in the automotive industry, the electronics sector and furniture production. The broad spectrum in the vacuum automation business field includes individual components such as suction pads or vacuum generators, complete gripping systems and clamping solutions for holding workpieces, for example on CNC machining centres. In the Handling division, Schmalz offers innovative handling solutions for industry and trade with vacuum lifters and crane systems. With the Energy Storage business area, the company is establishing a further mainstay in the field of stationary energy storage systems.

The combination of comprehensive advice, a strong focus on innovation and first-class quality ensures sustainable added value for customers. Intelligent solutions from Schmalz make production and logistics processes more flexible and efficient - and at the same time fit for advancing digitalisation.

Schmalz is represented in all major markets with its own locations and trading partners in around 70 countries. The family-owned company, headquartered in Glatten in the Black Forest, employs around 1,800 people at 31 locations worldwide.

#### Contact for Questions

J. Schmalz GmbH

Marketing Communications

Johannes-Schmalz-Str. 1

72293 Glatten, Germany

T: +49 7443 2403-506

[presse@schmalz.de](mailto:presse@schmalz.de)

[www.schmalz.com](http://www.schmalz.com/)

**You can find more press releases on our website**

[**https://www.schmalz.com/en/unternehmen/schmalz-aktuell/presse/**](https://www.schmalz.com/en/unternehmen/schmalz-aktuell/presse/)

**Reprint free of charge - specimen copy requested**