Case study

Mittelstand 4.0 roadshow

Label printers and dispensers qualify for future technologies

The **Cottbus SME 4.0 Center of Excellence** promotes small and medium-sized businesses in Brandenburg, Eastern Germany, become digital. There is great demand for professional technology solutions. Since the end of 2021, stationary contact spots are complemented by a roadshow in peripheral areas.

In operations requiring labels be printed or applied, cab devices have proven their worth. Systems for industrial printing are already part of the roadshow, so are semi-automatic dispensers. In a further step, applicators will be taken into account for transferring printed labels precisely onto objects.

cab Produkttechnik GmbH & Co KG • Wilhelm-Schickard-Str. 14 • 76131 Karlsruhe • info@cab.de • www.cab.de/en

Touchable

"We present on various workstations a classic product life cycle, simple or highly complex," says Norman Günther of the Technical University in Wildau. He is the roadshow Manager. Participants can test systems and components that may be relevant to processes in their companies. Automation and robotics are subjects, so are artificial intelligence and voice control, sorting capability, identification and traceability of components or workpieces. Operations range from products being configured by customers to series production and quality control to providing such objects precisely on stock according to demands.

Contemporary manufacturing systems to touch - **Norman Günther** is enthusiastic about the concept.

Identifiable

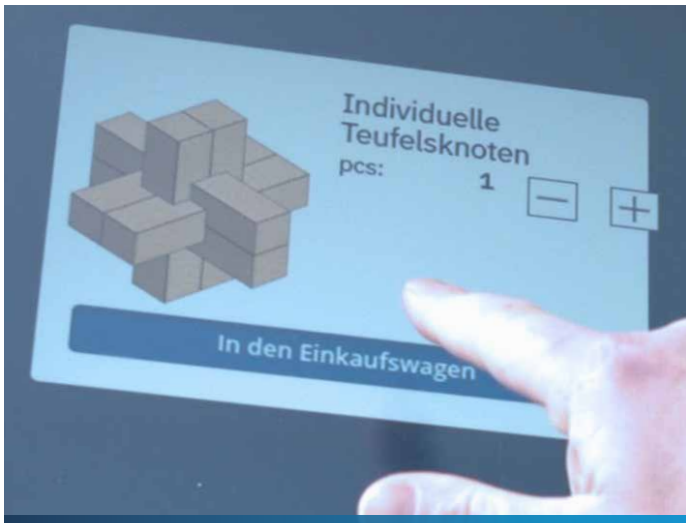
RFID technology is taken into account when tracking and tracing identified goods. On this occasion, electromagnetic radio signals transport information. A RFID system demands RFID tags, a steady or mobile reader to verify data and write data on such tags, as well as proper system software. RFID tags are self-adhesive labels providing a RFID chip and a RFID antenna. Requests by a reader to a RFID tag in a magnetic field are accepted by the latter's antenna, forwarded to the chip and finally answered, for example a serial number. Response received from the reader can be recorded and processed by software. By linking tagged objects to the cloud, product-specific information can be recalled and utilized at any time. For example, defective parts can be indicated quickly and replacements be provided at superrapid speed. As a result, operators are happy and satisfied because there are no downtimes.

A **devil's knot** has been **identified** explicitly using RFID tags.

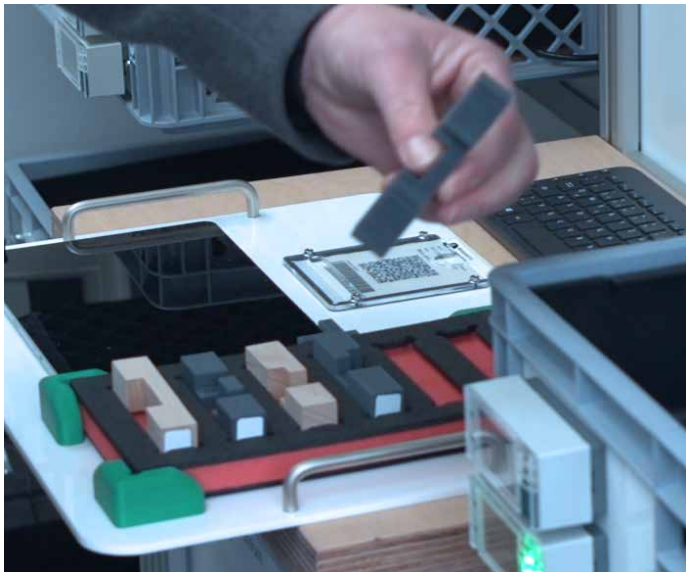
The **VS60+ label dispenser** is a practical assistant, peeling any RFID tag off its liner.

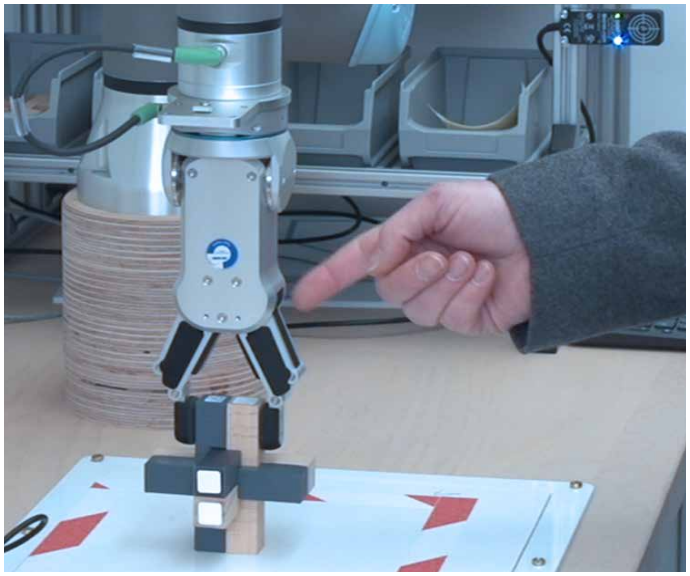
Thoroughly transparent

The roadshow manufacturing plant integrates **VS60+ label dispensers** to provide the RFID tags. On these, tags are inserted on rolls, then separated one after the other from the liner and provided on the peel-off plate. They can be removed by the operator and stuck to a component right at the workstation. Labels must no longer be peeled uncomfortably off a liner. They can be fed by pushing a control button, automated after a label has been removed or by an external signal on the back of the device. cab label dispensers have been designed according to ergonomic workplace requirements. **VS** devices provide labels in vertical direction, **HS** models horizontally. By this, they meet any individual motion sequence.



Product-specific data can be recalled on screen at any time, to be processed.





Intuitive and highly flexible

"In terms of label printing, we decided for the **SQUIX 4** cab model (pictured left). Its modernity has been convincing," says Mr. Günther. He particularly targets easy connectivity and configurability. **SQUIX printers** provide interfaces and protocols for data exchange with higher-level networks, manufacture planning, robots, databases or external control units. They enable opportunities, in which mechanical and electrical engineering interconnect intelligently with the latest information and communication technologies.

Firmware can be updated, memory cards managed and data synchronized centrally. An OPC UA server is part of the firmware, so is a client. The server enables configuring and controlling a printer. Dynamic print data can be edited using a defined programming interface. The client enables data fields of other machines ready for OPC UA be read and placed on a label. No additional software is needed.

It requires minimum effort to implement a printer on the basis of a configurator individually to processes, as demonstrated by the roadshow or those of any other manufacturing line. "Switch on the device, start a job, print the label, done" is how Mr. Günther puts it: "Rapid access," he adds, "worths its weight in gold, both for us and the participating companies." In a further step, applicators will be taken into account for transferring printed labels fully automated onto components and units. In this respect, cab at present offers the widest range of models on the market.

See information on devices introduced in this report on **www.cab.de/en/squix** and **www.cab.de/en/hsvs**

The center of excellence

The **Cottbus SME 4.0 Center of Excellence** is part of a program initiated by the German Federal Ministry of Economic Affairs and Climate Action to promote small and medium-sized businesses become digitital.

www.kompetenzzentrum-cottbus.digital

The University

The **Technical University of Applied Sciences** in **Wildau** is a campus academy. Based on 30 years history, research and teaching have been established in engineering and economics, natural and computer sciences, management, law and administration.

https://en.th-wildau.de

Video of the application:
www.cab.de/en/thwildau-video