

REFERENCES

Compact and powerful

Up to 24,000 sealed ampoules per hour - with the help of SMISSLINE TP



The special machines from Rota Verpackungstechnik GmbH seal up to 24,000 ampoules in one hour. Rota relies entirely on products from ABB to control this peak performance. The central component of the control cabinets is the SMISSLINE TP plug-in distribution system, which Rota is using for the first time in industrial mechanical engineering.

— 01 Space-saving: Many ABB components are characterized by their compact design (Photo: Luca Siermann)

Rota Verpackungstechnik GmbH in Wehr, South Baden, manufactures machines for automation and process optimization in the pharmaceutical industry. The range includes special machines for filling ampoules, bottles and pre-filled syringes made of glass or plastic, for closing containers, for visual inspection and for labeling. The growing company currently has almost 100 employees. Rota's annual turnover is around 15 million euros. The company exports 90% of its machines to around 70 countries.

Mechanical engineering for the pharmaceutical industry is characterized by high flexibility requirements. "In the pharmaceutical industry, there are often new regulations, for example from the FDA, the US Food and Drug Administration," says Sebastian Gierth, one of the two heads of the Electrics team at Rota. "For us, this means that the software of our machines in particular must be up to date at all times. In 2013, we therefore equipped our machines with new technology on the software side and relied more heavily than before on ABB products for the hardware."

Low space requirement

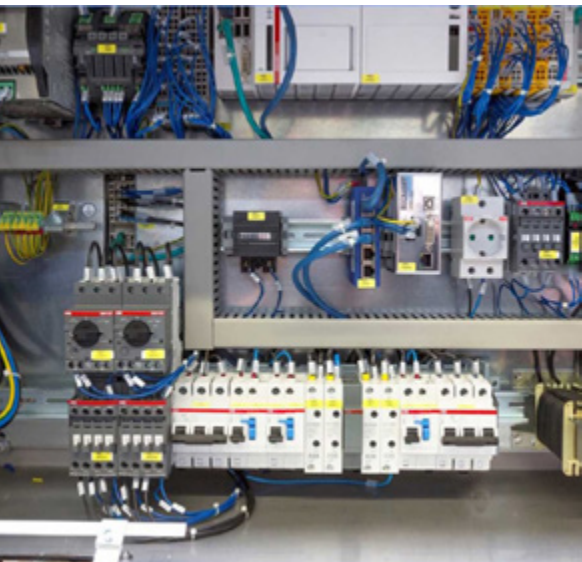
"Rota requested that the components be accommodated in the control cabinet in as little space as possible," says Christian Weiß, sales representative at ABB Stotz-Kontakt.

"We were able to offer an optimal solution for this, as many of the ABB components are characterized by their compact design."

"Every meter in the sterile area costs our pharmaceutical customers hard cash; That's why the control cabinets have to be as small as possible - and that's where the smaller ABB components are an advantage," says Sebastian Gierth.

50% faster installation

In addition, Rota uses ABB's SMISSLINE TP, a time- and space-saving plug-in system. It allows devices to be plugged in and unplugged without any load when live - without additional personal protective equipment. The protective devices are plugged in directly with SMISSLINE TP and can be installed with mixed poles. SMISSLINE TP also allows the use of just one cable duct for the incoming and outgoing wiring.



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01 Space and cost optimized: The structure with SMISLINE TP reduces the wiring effort and the number of cable ducts (Foto: Luca Siermann)

02 Gas burner nozzles seal the ampoules. (Foto: Luca Siermann)



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“By using SMISLINE, we are up to 50% faster than with conventional assembly,” says Dirk Strittmatter, the other head of the electrical team at Rota.

“The optimum feed-in capacity of the system is up to 200A.” says Christian Weiß. “This connected load is perfectly adequate for the vast majority of applications in mechanical engineering. In contrast, systems with up to more than 400A are often completely oversized and unnecessarily expensive - we sometimes speak humorously of ‘copper mines’ that hang unused in the cupboard.”

Investment pays off

The fastest Rota processing line can handle up to 24,000 ampoules per hour. “With active ingredient costs of 10 to 80 euros per ampoule, a pharmaceutical company would lose millions in the event of a half-hour malfunction.” says Dirk Strittmatter. “The use of SMISLINE TP therefore makes sense not only because of the technical advantage, but also from a cost point of view.”

“The higher investment in SMISLINE pays off due to the significantly faster assembly, but also in terms of faster availability in the event of faults,” says Sebastian Gierth.

From a single source

Rota also relies on a component from ABB for safety with the Dalton M31 process guard locking device. The packaging specialist uses ABB products and solutions for protection and control technology, distribution, drive technology and safety technology. “It is important for us to serve our customers from a single source.” says Christian Weiß. “If all technical and organizational issues can be bundled and clarified, a wide range of synergy effects can be created.”

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