

INFOTECH

NEWS OF THE AUTOMATION DIVISION



Diversity – SUHNER Products are as Varied and Unique as a Bouquet of Flowers

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the Subway Safer

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Editorial



SUHNER can always offer its clients a colorful bouquet of possibilities. We are firmly convinced that only the best possible solutions can guarantee success for both ourselves and our customers.

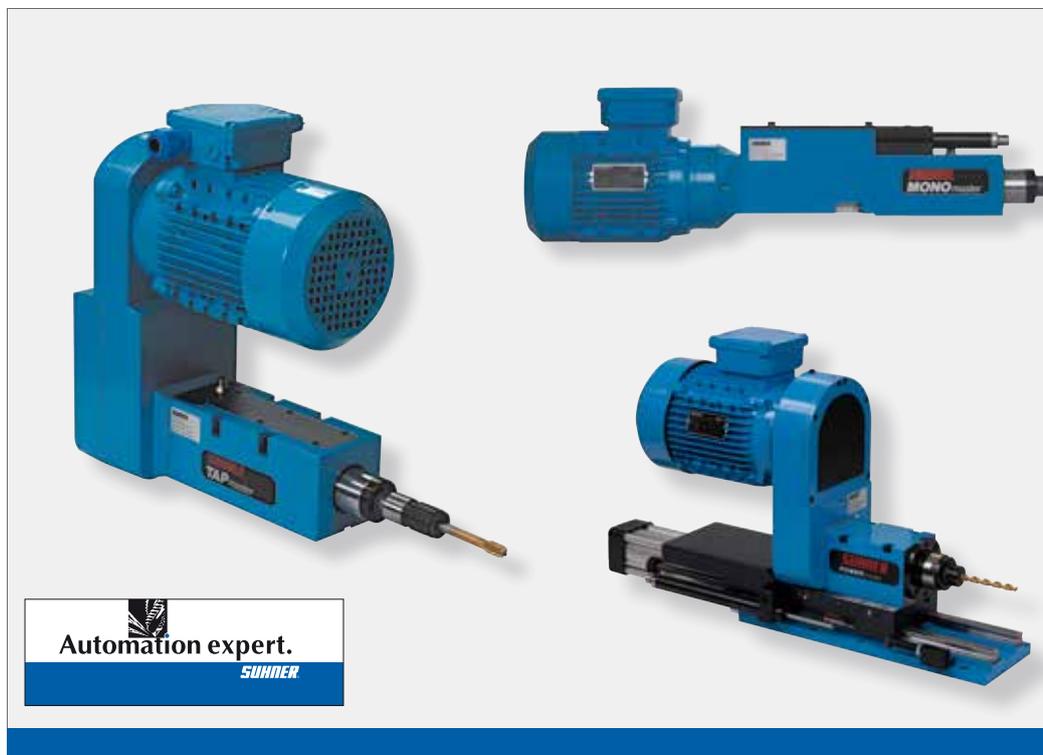
To achieve this, our approach includes highly versatile tools, extensive compatibility and modular systems with product families skillfully adapted to each other. This versatility covers market demand, so that our products are used in almost all industry sectors: from mechanical engineering to medical technology and up to aerospace.

But the bouquet of possibilities offered by SUHNER are even more colorful: apart from the diversity of products and possible applications, we as an internationally established company have locations in many different regions and can offer you our professional services all over the world.

We are, however, well aware of the fact that a large selection products can also be a challenge. This is why we strongly rely on our wide range of services to offer our customers extensive support – from consulting to installation.

We are always happy when our bouquet proves helpful and increases the productivity of your company, too.

Christian Jermann
Head of SUHNER Automation



Flexible Combinations

Since its beginnings over 100 years ago, SUHNER has been developing cost-efficient automation solutions, and today we are specialists in the field of machining units for drilling, milling and thread cutting.

We support our customers with our expert knowledge and established products from the very first automation step with single and multiple spindles up to complex, autonomous and monitored production processes.

Between the drilling diameters of 0.1 and 80 mm (for 600N/mm steel), there is a wide standard product range to choose from, with various feed and drive systems: from pneumatic, hydraulic or servo, up to the flexible shaft drive system.

As a modular system, these machining units are cleverly adapted to each other. Furthermore, these units – including a large selection of accessories – can be combined with each other, thus offering our customers virtually limitless possibilities for manu-

facturing customized solutions. This allows them to overcome the daily challenges in the field of machining in the most effective way. But if a customer's requirement still cannot be fulfilled, SUHNER will design and produce customer and/or application-specific special solutions at any time, either as a complete special machine or as ready-to-install components.

We also offer extraordinary solutions for extreme challenges: If, for example, the installation dimensions for a spindle are too tight or if physically separating the electric components from the spindle would have certain benefits, **SUHNER offers a globally unique solution** – with the help of our flexible shafts, we can transfer the drive power from the motor to the spindle.

In past years, SUHNER has increasingly included the knowledge from other corporate divisions in the development of its products. This was how an entire range of grinding tools for permanent industrial use on robots was born.



Not only did we thus expand our product range by adding tools for robot-controlled machining, but we will also be able to satisfy future requirements.

From grinding and polishing up to cutting and deburring, we can provide you with tools that will help your machining expand into new, future-oriented dimensions. Today, robots are increasingly handling a majority of standardized processes autonomously, which can be easily controlled and regulated. This allows for a better monitoring of the processes. With this service, SUHNER is opening the first door towards Industry 4.0. Although still a buzzword, soon it will redefine the production world and open up possibilities, which up to now have been really difficult to imagine.

As you can see, the variety of solutions, services and products offered by SUHNER is as colorful as a bouquet of flowers!

Aerospace

Unique Drilling Technology

The SUHNER STACKmaster, an automatic drilling unit (ADU), is the beginning of a new chapter of drilling technologies for stacks. This innovative, mobile device has been designed for STACK drilling in the field of aviation and aerospace.

The Advanced Stack Drilling (ASD) System, developed and patented by SUHNER, offers an active layer detection for drilling stacks. This detection ensures that each layer is drilled with the best possible cutting parameters. The drilling unit is driven by two servo motors. The single-shot machining is controlled by SUHNER's proprietary patented CNC software and control electronics. It offers a one-hole-per-sec drilling capability for diameters up to 9/16" (Titanium).

The integrated tool reader (RFID) combined with multiple operation modes, system monitoring



functions and data recording features offers a fail-safe, cost-effective all-in-one drilling machine. This brand-new invention therefore simplifies critical production processes and offers significantly higher reliability and productivity.

SUHNER's global distribution and partner network is never far away and can offer you the best possible service.

Tooling expert

High Surface Quality when Gear Milling



In the past months, SU-matic has developed, produced and successfully tested hobbing cutter units, which were used on lathes, milling and transfer machines.

SU-matic gear hobbing units are manufactured with a gear reduction and flywheel to

compensate for vibrations, which leads to a better surface quality. This allows for a very high level of gear quality, for example (ISO up to 9, AGMA up to 11, JIS up to 5). The hobbing cutter can be used on a machine with a Y-axis without any problems. A manual Y-axis can also be supplied. This additional axis helps distribute the wear and tear of the hobbing cutter in the best possible way.

Thanks to our great collaborative relationship with a company called Samputensili, which among other things manufactures hobbing cutters, SU-matic frequently provides you with the matching cutter and helps you evaluate the quality of the gears produced.

“Output and Quality Greatly Increased”



Automation expert

The SUHNER team is always happy to take on your projects and offer you help in word and deed. From small automation projects to complex machining solutions, our experts are always working to help you – in every corner of the world. **Where others stop, we're just getting started!**

The more you challenge us, the greater the impression that we will make on you!

Increase in production: 250 %

“Thanks to the SUHNER units, we have been able to increase our production by 250%. This has helped us reduce staff and material management costs. The units are very reliable, and SUHNER's experts offer us excellent support.”

**Srikanth G, Production Manager,
V-Tech Engineering Pvt Ltd, India**



R-Tech – Jacky Rennard, a company headquartered in the French township of Marignier – recently purchased an OKUMA lathe, type LB3000 EX MY. SU-matic AG was commissioned to equip the entire machine with SU-matic Capto and SU-matic PTS units, both driven and static.

François Rennard, CEO of Jacky Rennard, mentioned the following points, which influenced the company's choice in favor of SU-matic.

Customized

The quality of individual products and the ability of SU-matic to design and implement products fulfilling the company's requirements in terms of customized units precisely adapted to their needs. In the course of the development, simulations were used to modify the units for the event of a possible collision.

Reduction of set-up time

“With the supplied units, we were able to significantly reduce the set-up times. Now,

we only need to replace the respective quick release systems. In the past, this would mean arduously dismantling the entire unit from the turret disk. A further advantage of the SU-matic solution is that we can carry out a preliminary set-up and gauge all tools. This naturally means that less time is required to install them on the machine.”

Integration

“Our most important objective was to use the high-pressure solutions provided by Seco Tools. SU-matic AG successfully managed to carry out this integration. We are now able to use the 'Jetstream tooling' products provided by Seco Tools without any problems.”

“All in all, I must say that we were able to greatly increase our output and the quality of the manufactured products with the help of SU-matic products.”

**François Rennard
CEO of Jacky Rennard**

Trade Fair Calendar

4–7 April 2017
INDUSTRIE
France
Stand 6W127
SOMEX SAS, SU-matic AG

4–7 April 2017
FORMA TOOL
Slovenia
Hall D, Stand 25
OTTO SUHNER AG, Klasand

17–22 April 2017
CIMT
China
Stand E6-124
SUHNER (Suzhou) Industrial

9–12 May 2017
AUSTECH
Australia
Stand 640/641
OTTO SUHNER AG, Romheld Automation Ltd.

16–18 May 2017
EASTEC
USA, West Springfield
Stand 5020
SUHNER Industrial Products Corp.

6–9 June 2017
ITM/MACH-TOOL
Poland
Hall 8, Stand 20A
Integrator-RHC Sp. z.o.o.

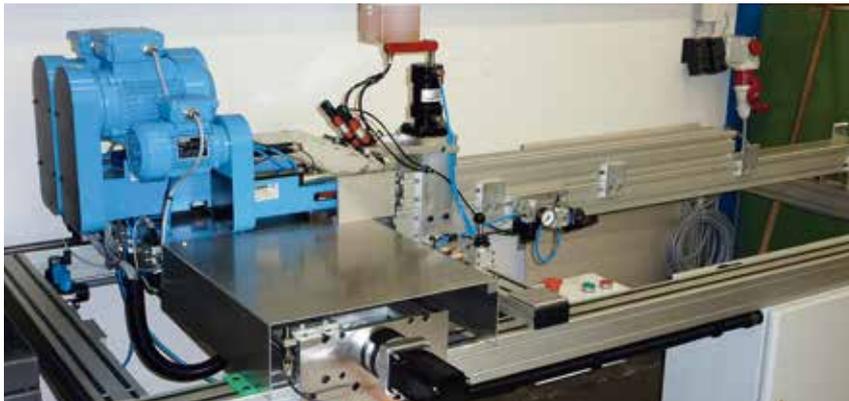
19–25 June 2017
PARIS AIR SHOW
France
OTTO SUHNER AG

3–5 October 2017
MRO EUROPE
England
OTTO SUHNER AG

6–9 November 2017
FABTECH
USA
SUHNER Industrial Products Corp.
www.fabtechexpo.com

Automation expert

Reduction in machining time: 50 %



“The system with SUHNER units enables us to fulfil the extremely tough requirements with regards to precision and reproducibility. Furthermore, we have been able to achieve time savings of at least 50 % in comparison to conventional machining. So, we are really happy!”

T. Gerschwiler, Management
Algewa AG, Switzerland



Tooling expert

Reduction in machining time: 40 %



Under the expert guidance of a southern German machine tool manufacturer, we designed and produced a machine that was specifically tailored to the requirements of a producer

of medicinal components. The basis was a shuttle machine equipped by Sauter with a 4-fold crown-type turret in one of the two work positions. That turret had four angular heads with two SU-matic spindle outlets on opposite sides.

Thanks to the flawless collaboration with the end customer, who contributed the highly complex clamping devices and the entire tool technology, the machining time of the components was reduced by at least 40%.

Testimonial of a customer from the medicinal industry



Deep Hole Drilling with SOMEX – Specifically Tailored to Your Needs

Reliability, repeatability and low operating costs are some of the critical factors for increasing productivity and competitiveness. This is the objective our customers aspire to achieve, and we want provide the tools to help. We will do so even when things get really deep – for example, when it comes to deep hole drilling. For this purpose, SOMEX has spent the last two years developing solutions for getting the most out of this machinery. These solutions can be divided into different models:

The integrated solution MSPP 200 / MSPP 500

Special drilling machines MSPP 200 and MSPP 500 are complete, flexible and efficient solutions for deep hole drilling. Thanks to their modular construction, these machines can be quickly and easily tailored to customer requirements.

The component solution ECPP 40-200 / ECPP 40-500 / ECPP 40-800

The three gun drill units ESPP 40-200, ESPP 40-500 and ESPP 40-800 were developed as components for building special machines and can be integrated into production lines without any problems. As

early as the designing phase, our development engineers concentrated their attention on the end user and created a number of

“For me, purchasing a SOMEX solution was the best investment I had made in over 20 years.”

Testimonial from the United States

various adjustment options. In this way, they made sure that this established technology could be used in many different industries, such as automotive, aviation and aerospace, mechanical engineering, energy, petrochemistry, medicine, navy or metrology.

Whatever your requirements may be, SOMEX can offer you a reliable and competitive solution that doesn't involve a great deal of operating costs.

In order to shorten the start-up time, we can, upon request, carry out tests even before the delivery. This enables SOMEX to set the operating parameters in accordance

with your requirements. Following successful site approval at our premises, experienced SOMEX technicians carry out the assembly on site. In this way, we can ensure a fast commissioning, as well as a handover of the customized unit in flawless condition and equipped in accordance with established state-of-the-art technology.

Thanks to our experienced project management team, you will have a comprehensive point of contact that intimately knows your requirements and expectations and implements them.

Standard functions:

- Drilling diameter: 3 to 12 mm
- Drilling depth: up to 500 mm
- Deviation: 0.04/100 mm
- Motor: 4 kW, 9000 t/min
- CNC-controlled feed
- Control via absolute encoder
- Oil cooling

SOMEX Helps to Make the Subway Safer

In order to increase the safety of subway passengers when a train is approaching the station, the Parisian subway has to equip all platform edges with safety grids. SOMEX was commissioned to supply customized drilling spindles for this project, which are used for drilling all 8 mounting holes at the same time and which, in a second step, also cut all threads at the same time.

The main challenge was to develop a mobile solution which would independently and automatically recognize different scenarios, thus preventing malfunctions. In order to achieve this, parameters such as the feed speed and the torque are constantly recorded and compared to the set values. This makes it possible to recognize the state of the tools and understand whether the right tool is being used.

As a specialist for customized solutions, SOMEX was able to gain the customer's trust thanks to its technical superiority on the one hand, and to its ability to offer a reliable turnkey solution on the other. **Our dedicated project manager met all of the customer's requirements and was able to control the quality, time and costs.**

Another challenge that had to be overcome was the customer changes. This required the engineering team to be flexible and responsive to the necessary changes.

Thanks to the manufacturing being carried out at our own production facilities, SOMEX can guarantee a high quality of the components, which, in the long run, has a direct influence on the reliability of the products.

Specifications for customers

The advantages of our solution are:

- Simultaneous control of all parameters
- Complete integration through SOMEX
- A point of contact for any questions and issues
- Mobile «plug & play» solution
- Mobile solution that achieves a positional tolerance of ± 0.5 mm for the 8 holes
- Tool set is positioned using laser
- The ability to carry out a factory test at SOMEX premises
- Environmentally friendly minimum quantity lubrication (MQL)



Preview

FORMA TOOL, Slovenia

On 4–7 April 2017, FORMA TOOL 2017 will be taking place in Celje/Slovenia. This is an international trade fair for tools, machine tools, equipment and accessories. Our distribution partner KLASAND d.o.o. will be presenting a large selection of SUHNER products. Visit KLASAND d.o.o. at **Stand 25, Hall D**, and ask the staff to demonstrate our expert solution for machining pipes and pipe ends.

MACH-TOOL, Poland

Our long-term distribution partner Integrator-RHC Sp.z.o.o. will be representing SUHNER and our products at the ITM POSLKA MACH-TOOL trade fair. It will be taking place in Poznan on 6–9 June 2017 and is the largest technology and machining trade fair in Poland. Do stop by at INTEGRATOR-RHC Sp.z.o.o. at **Stand 20A, Hall 8**, and learn how you can perform a large number of drilling operations at the same time, in highly confined spaces and in a cost-efficient manner.

CIMT Beijing

CIMT – China International Machine Tool Show – is one of the world's largest and most influential trade fairs for machine tools. All renowned mechanical engineering companies will be participating in the exhibition and displaying the newest state-of-the-art manufacturing technologies. This year, SUHNER (Suzhou) Ind. Techn Ltd. will again be introducing the company's latest achievements. From robot tools to machining spindles, you will find a large range of products at **Stand E6-124**.

SUHNER®

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ABRASIVE



AUTOMATION



TRANSMISSION



STAMPING



					
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