

# KNOLL35

The Company Magazine | Edition 35 | 2024

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The 2024 business year was a year full of challenges and major developments for our company. Incoming orders fell by 17 %. Turnover was also 9 % down on the previous year. The reasons for the unsatisfactory situation are obvious. The economy including consumers are unsettled by wars and the political framework. We have therefore introduced cost-cutting measures across all departments. Our main aim is to ensure that the operating result remains positive.

The large order from an important manufacturer in the medical technology sector is welcome. With the LubiCool® high pressure unit we were able to win the benchmark for the supply of 200 units for the Chinese production plant. Once again we set the standard with the high pressure unit.

Our commitment to sustainability is reflected in the decision by an important automotive manufacturer to

dispose of their existing lathes and use the Aerosol-Master™ 4000 ATS minimum quantity lubrication system. The energy savings of 60% and increase in production of over 50% were the decisive factors here.

The HydroPur filters with filter capacities of 250 – 1,500 litres of cooling lubricant per minute will be launched next year. This modular universal filter is suitable for diverse applications, particularly grinding.

We were able to implement interesting projects and tasks with our flagship MicroPur®. The filter is perfect for the tool grinding of carbide metal and HSS. But it also delivers top results in machining cast iron. The throughputs range from 100 to 10,000 litres per minute volumetric flow rate.

Click.it, our new digital information system, helps make processes more efficient and reduce waste. The principle is simple: The employee can trigger a predefined

action at the touch of a button. Not only do we want to install the system in-house, but we also want to reach new customers and markets with it.

Automation is advancing further. In the past we were able to use our flow assembly conveyors for customised automation solutions. We are constantly expanding the range. Today KNOLL plays the role of integrator, i.e. we also use automated guided vehicle systems (AGV) and robotics in various projects.

We are on the move around the world. Substantial sums are being invested at the Bad Saulgau headquarters. A new service centre is currently being built. At the site in Dallas/North Carolina we purchased the newly constructed building spanning 2,500 m² and will produce conveyor and filtration systems there from the second quarter of 2025. In India we will start licence production with our partner SPAN.

Our future prospects are promising. The positive feedback at AMB in Stuttgart shows that we are successfully accompanying the change in the world of production with our ideas. Our main focus is on two pillars: On one hand, we would like to maintain a high level of expenditure in research and development. On the other hand, we are committed to successfully leading the family-owned company into the third generation. Job security and financial independence are top priority.

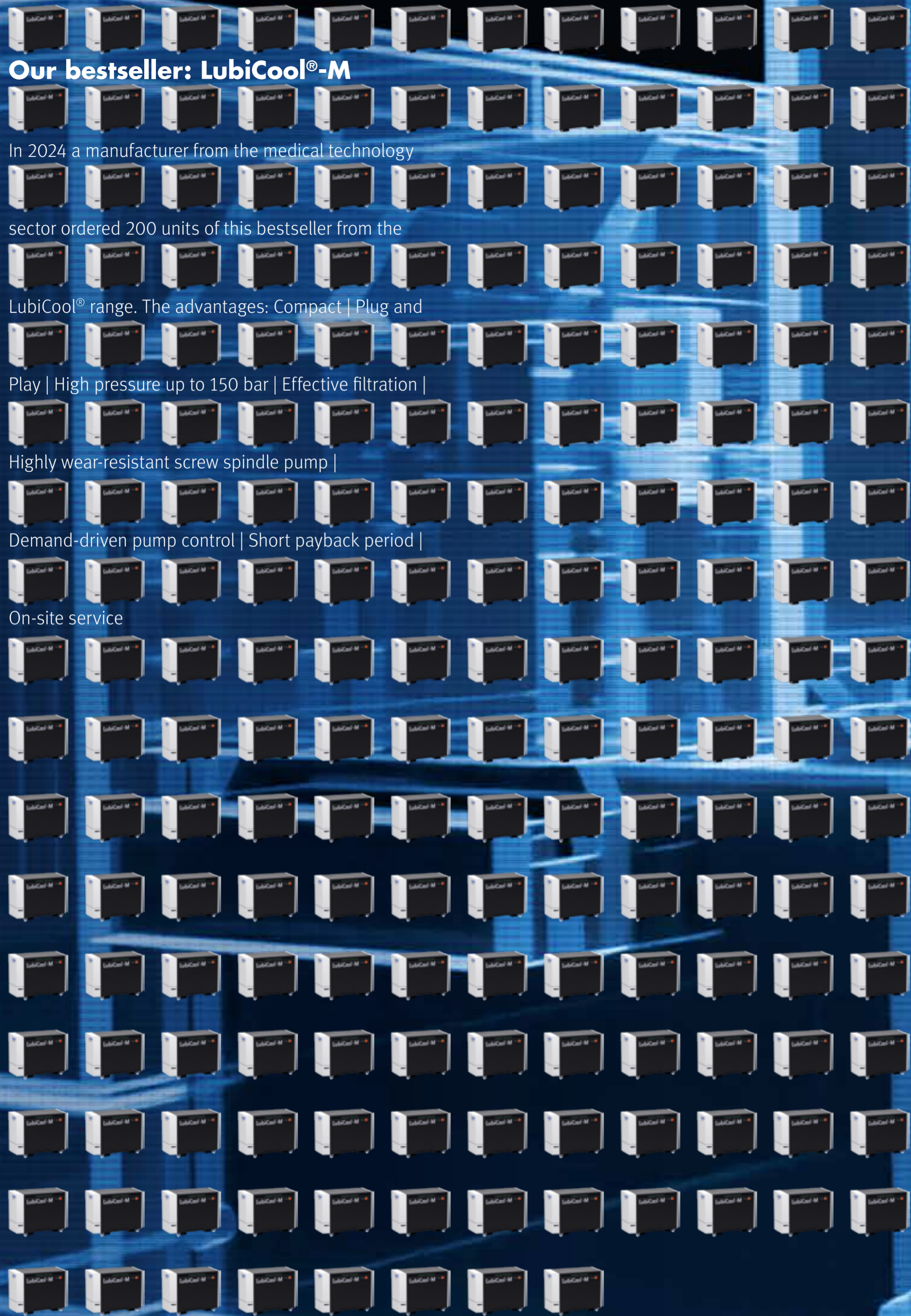
We would like to thank all of our employees as well as our loyal customers and business partners. We hope you enjoy reading our company magazine.

Matthias Knoll

Jürgen Knoll







### Our bestseller: LubiCool®-M

In 2024 a manufacturer from the medical technology

sector ordered 200 units of this bestseller from the

LubiCool® range. The advantages: Compact | Plug and

Play | High pressure up to 150 bar | Effective filtration |

Highly wear-resistant screw spindle pump |

Demand-driven pump control | Short payback period |

On-site service

# Every little thing counts!

## LubiCool®: KNOLL quality in a multipack



LubiCool® is available in sizes S, M and L for machine tools, particularly fixed and sliding headstock automatic lathes. They are mostly designed for the series production of microcomponents, for example those found in the watch industry, electronics sector or the medical field.

The compact KNOLL high pressure unit supplies the tools of precision machines with clean cooling lubricant as required.

All components installed in the filter and supply system are made by KNOLL. The KF compact filter or the KTS screw spindle pump have been tried and tested in thousands of applications. What more could you ask for? An attractive design? Yes, please!



# New dimension



Modular-based systems have a short delivery time and an attractive price-performance ratio. We further developed the HydroPur so that size and performance are an even better fit for the customer-specific requirements. The filter system for machining processes will be available in four sizes from 2025. There is also an optional vacuum support as well as filter fleece or continuous conveyor. Depending on size and configuration, the filters clean between 250 and 1,500 litres of cooling lubricant per minute.

Anyone who would prefer a custom solution can of course also modify the configuration according to their own requirements.

# 32 to 1



... for greater sustainability. The changeover from wet machining processes (cooling lubricant) to minimum quantity lubrication (MQL) is a win-win situation. A well-known automotive manufacturer arrived at this conclusion en route to more sustainable production, thus saving resources and energy in the details. In 2024 the automotive manufacturer arranged to have 32 lathes upgraded by GSN Maschinen-Anlagen-Service GmbH. Instead of one central cooling lubricant system, today 32 KNOLL AerosolMaster™ 4000 ATS with finely dosed spraying power ensure that everything runs like clockwork.

To conclude:

- 60 percent energy savings per machine
- Minimum supply and disposal costs for cooling lubricant (consumption of 3 to 25 ml of lubricant per hour and machine)
- Reduced time and effort for swarf disposal
- Further processing of workpieces without intermediate steps
- 30 to 70 percent increase in productivity



# Application-specific diversity

Not all MicroPur® filters are the same. There are various application possibilities for the consumable-free KNOLL superfine filtration system. Depending on their size, they are ideal as a single, group or central system. It can clean oil or synthetic cooling lubricants. In current customer projects it assists in the manufacture of carbide or HSS tools as well as in the grinding of compressor rotors made from cast iron, hard-coated brake discs or gear components. With all of its diversity, one thing always remains the same: Our MicroPur® filter satisfies the highest requirements of cooling lubricant purity.

**Cooling lubricant cleaning and supply in the manufacture of threading tools made from HSS**

- Superfine filtration of oil
- 760 l/min volumetric flow rate
- Supply of 2 thread grinding machines

**Cooling lubricant cleaning and supply in the finish and polish grinding of gear parts**

- Superfine filtration of oil
- Up to 1,900 l/min volumetric flow rate in final stage
- Supply of up to 7 gear-grinding machines

**Cooling lubricant cleaning and supply in the manufacture of carbide tools**

- Superfine filtration of oil
- Up to 10,200 l/min volumetric flow rate in final stage
- Supply of up to 100 tool grinding machines

**Cooling lubricant cleaning and supply when grinding screw rotors made from cast iron**

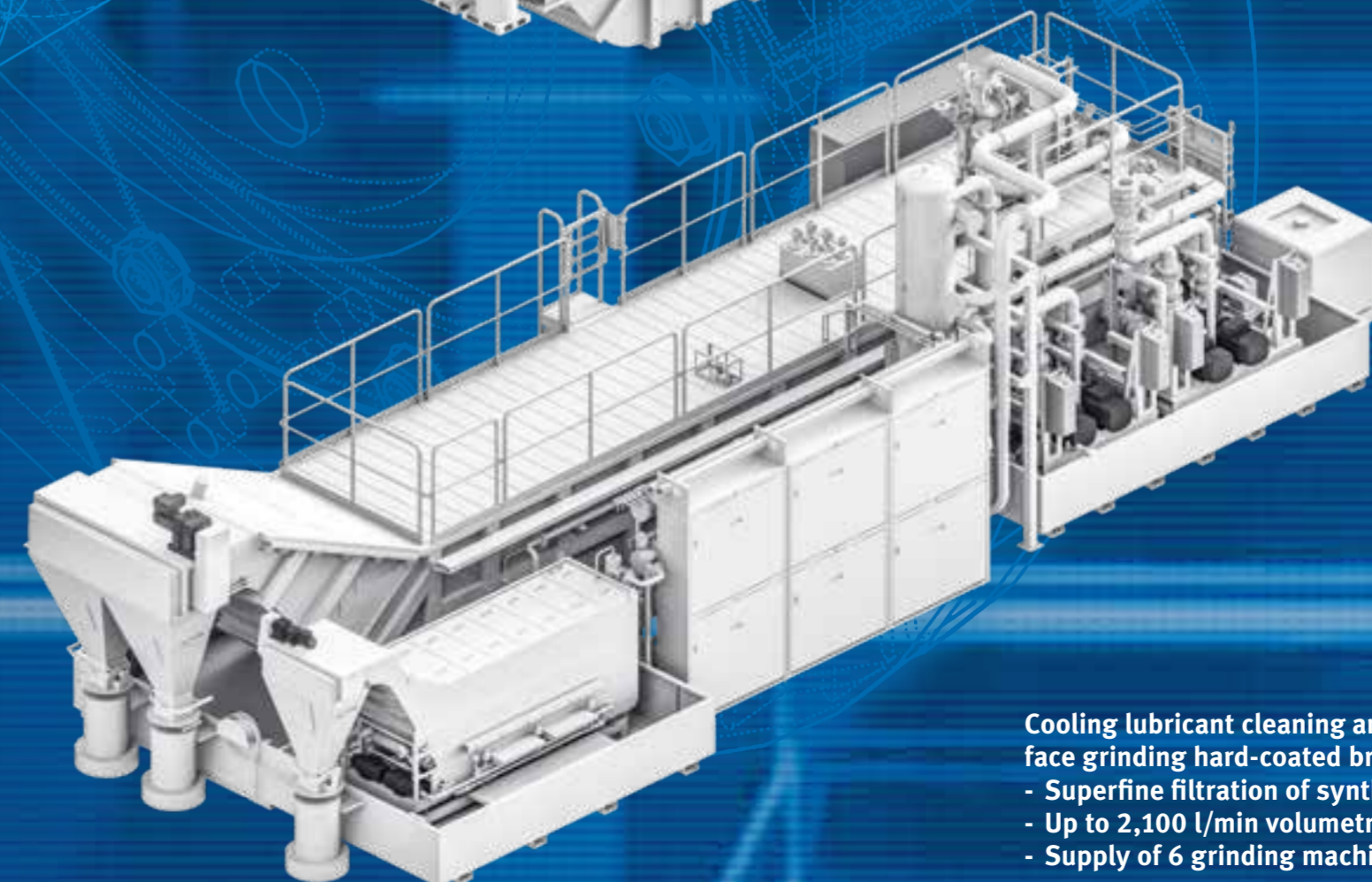
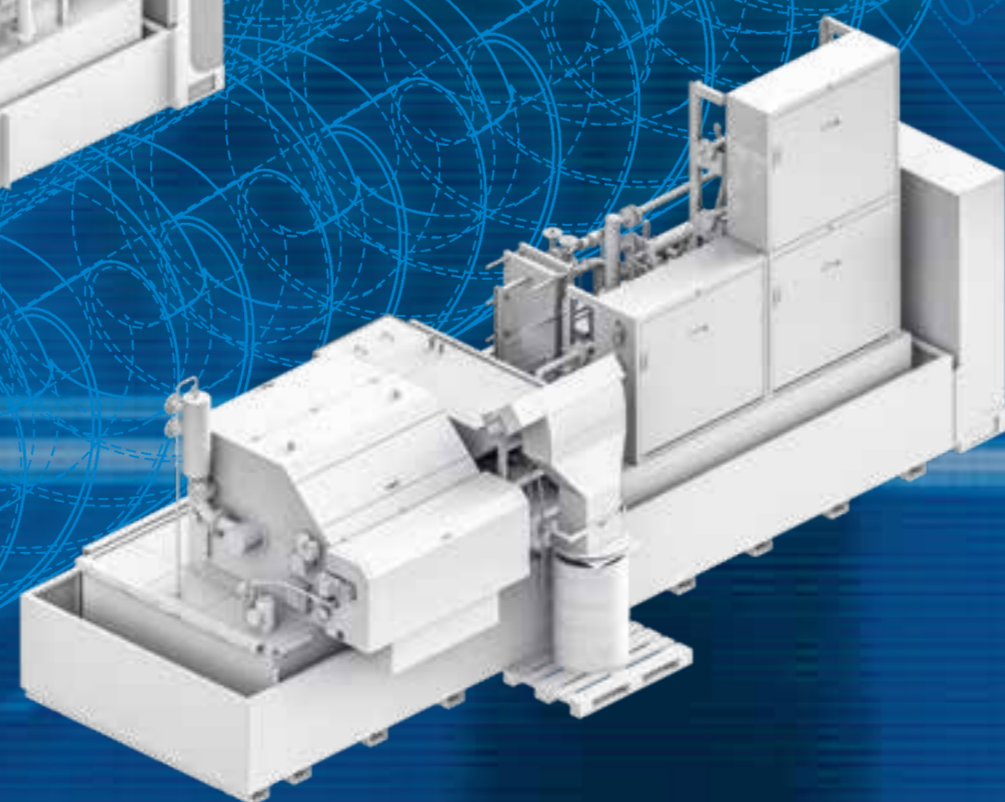
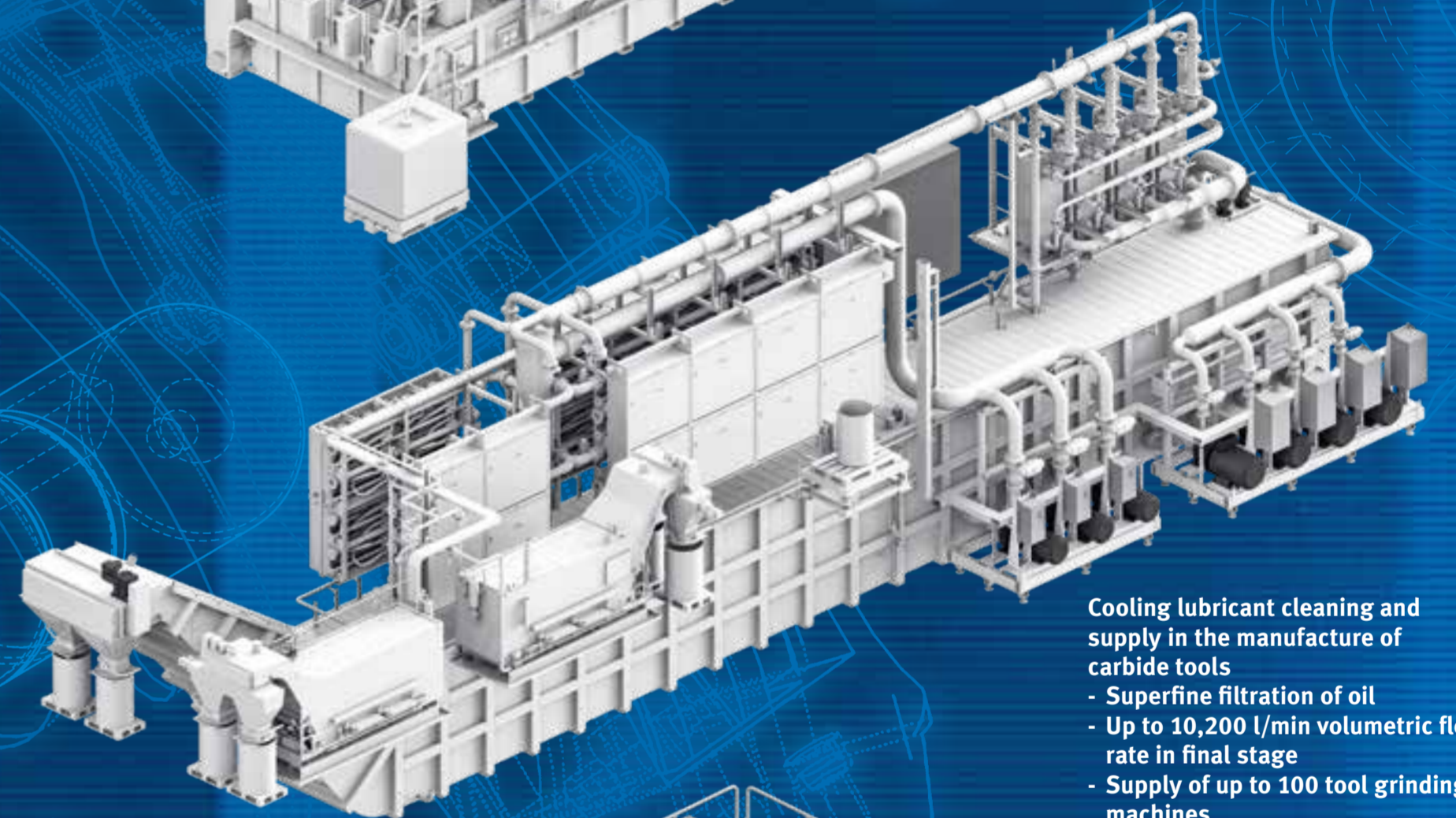
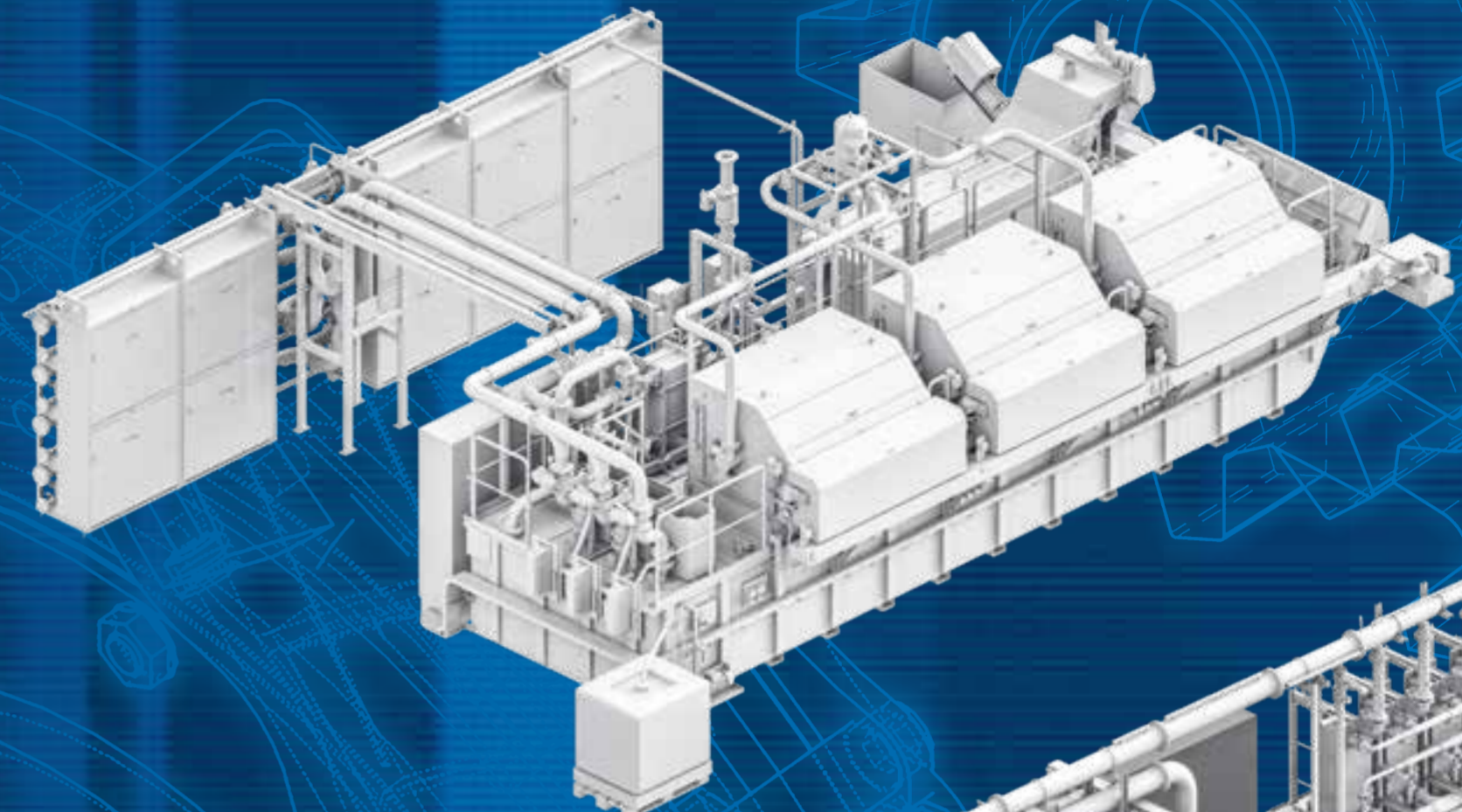
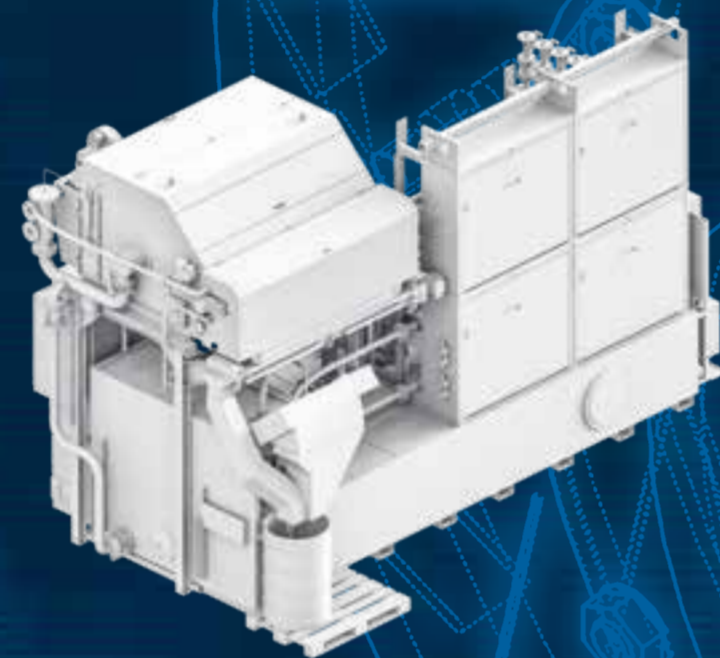
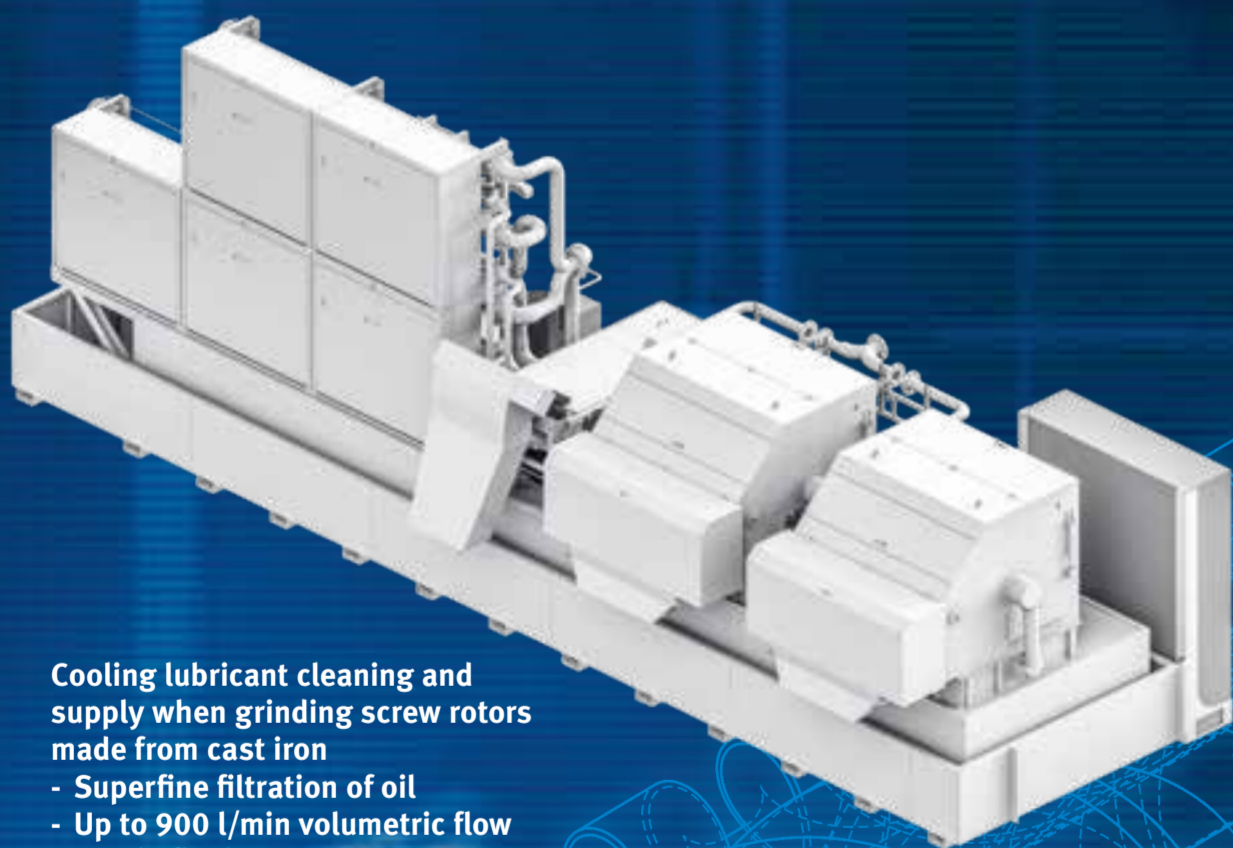
- Superfine filtration of oil
- Up to 900 l/min volumetric flow rate in final stage
- Supply of up to 2 rotor grinding machines

**Cooling lubricant cleaning and supply when grinding screw rotors made from steel**

- Superfine filtration of oil
- 460 l/min volumetric flow rate
- Supply of 1 rotor grinding machine

**Cooling lubricant cleaning and supply when double-face grinding hard-coated brake discs**

- Superfine filtration of synthetic solutions
- Up to 2,100 l/min volumetric flow rate in final stage
- Supply of 6 grinding machines





# Click.it and you're all set to go!



## click'it Pro

- Gives employees direct access to the system
- Five configurable buttons
- Display with real-time information and status messages
- Flexible user customisation via web application configuration



## click'it One

- Ideal where space is limited
- Preconfigured button for easy operation and fast responses
- Flexible user customisation via web application configuration
- Can be expanded with additional input for external signals, e.g. from sensors



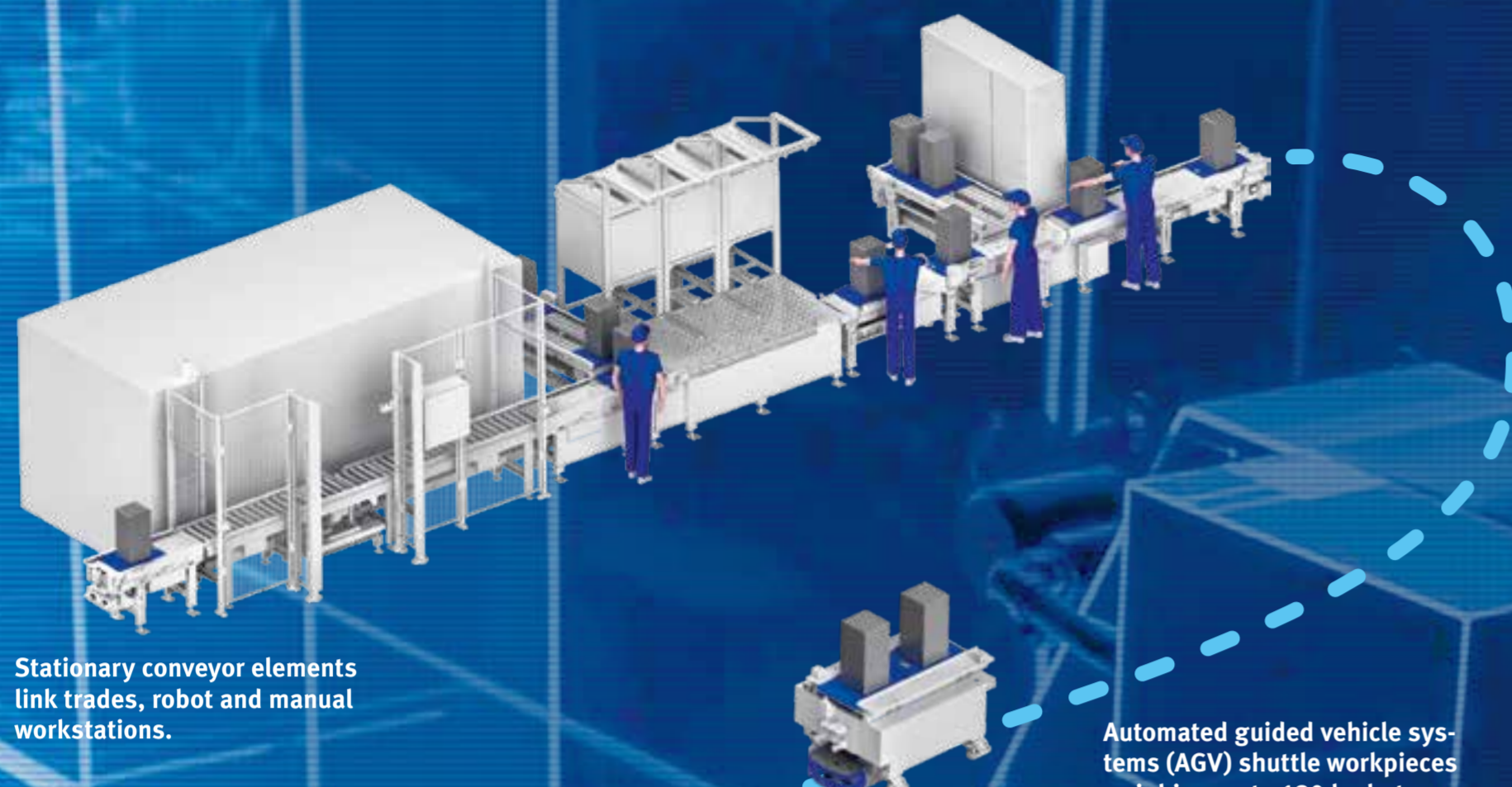
- Enables seamless integration of Click.it in other communication systems
- Has eight digital inputs and four digital outputs

## click'it Connect

Received the "Allianz Industry 4.0 Award". Awarded on 23 October 2024 by Dr. Nicole Hoffmeister-Kraut, Minister for Economic Affairs of the State of Baden-Württemberg.

Request material or start telephone calls at the touch of a button. Close sensor-controlled hall doors. Merge machine data. KNOLL Click.it makes automation simple. With the digital communication system presented at this year's AMB, stored workflows can be started quickly and simply. Click.it can be used in many ways in production and intralogistics. Hardware and software are configured as required. Operation is intuitive and simple. Local installation on company servers (on premises) ensures that all data remains in-house. We actually developed Click.it for ourselves, but we also want our customers to be able to use it too.



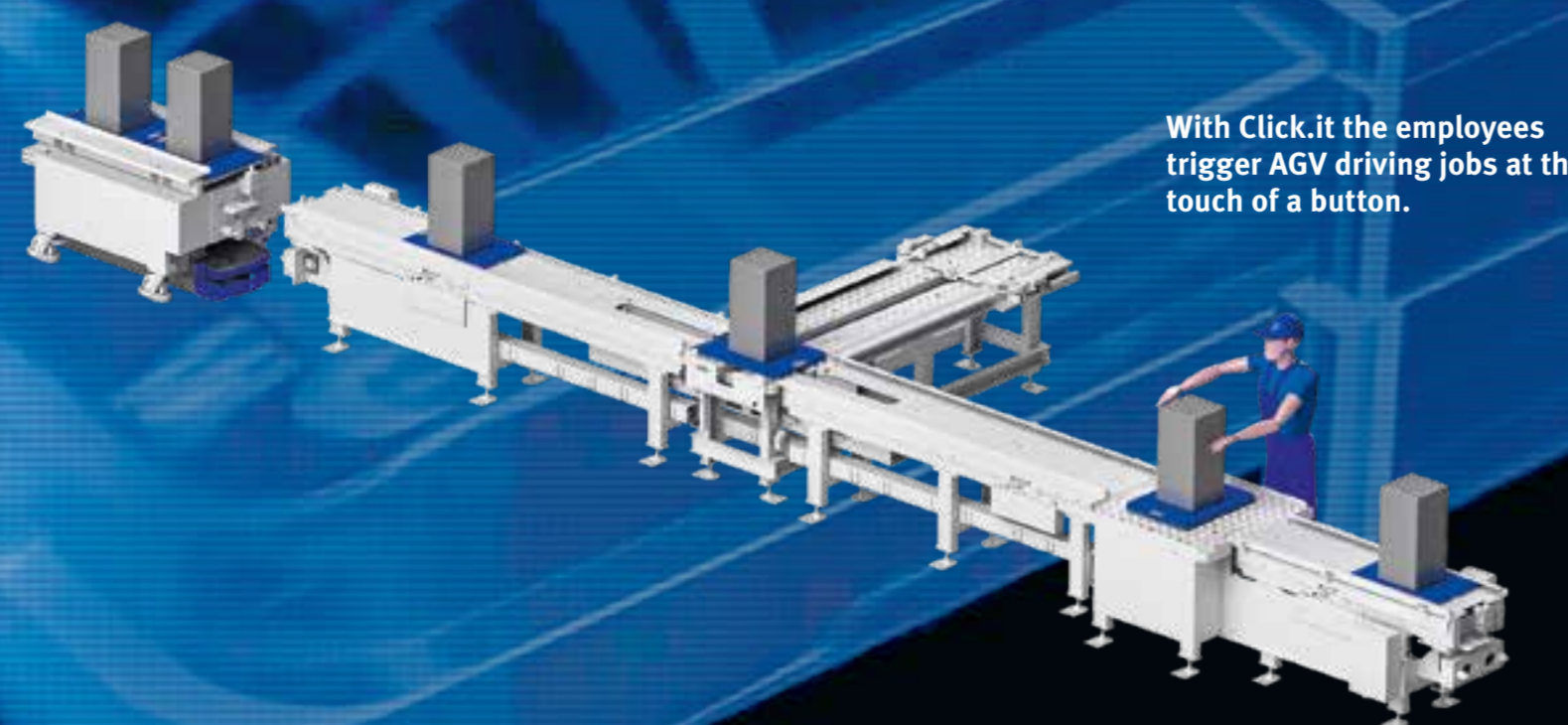


Stationary conveyor elements link trades, robot and manual workstations.

Automated guided vehicle systems (AGV) shuttle workpieces weighing up to 180 kg between the two assembly lines. The vehicles are equipped with conveyor elements for automated loading and unloading, which are operated by the batteries of the AGV.

## Moving technology. Perfect interplay.

In modern production processes the interaction between man and machine decides on the productivity. Everything flows with customised KNOLL automation solutions. In 2024 we automated two assembly lines for a manufacturer of cooling units, which combine machine process steps with manual workstations. The goal: Half the cycle from around eight to four minutes. Our contribution: Digitally networked conveying technology that makes the work easier for the people.



With Click.it the employees trigger AGV driving jobs at the touch of a button.

# Already in an energy-saving mode?

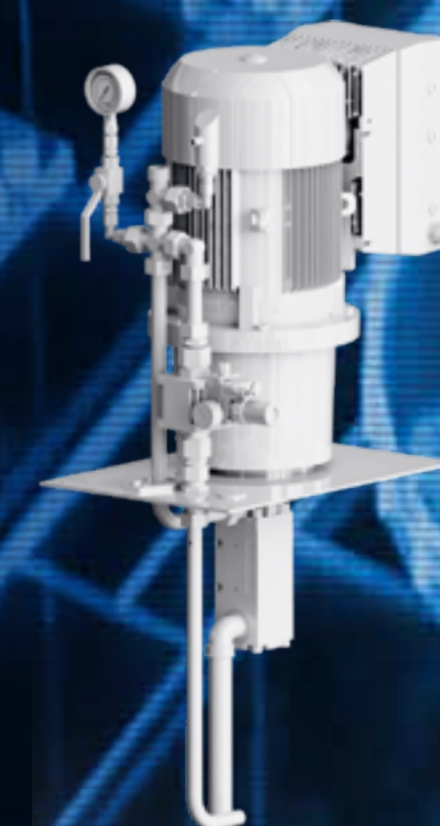
High pressure pumps for cooling lubricant supply can switch to energy-saving mode with KNOLL.

### Savings programme 1: Motor replacement

The motor replacement in high pressure pumps offers considerable benefits with minimal effort and at low expense. The conversion to a motor with a higher energy efficiency class is simple. The costs are paid back in roughly two years.

### Savings programme 2: Frequency control

Frequency-controlled high pressure pumps provide full power using half the energy. The KNOLL PQ-Tronic frequency control can be easily retrofitted and ensures demand-driven pressure and volume flow for every tool via a speed adjustment of the pump. The energy savings compared to pumps with a fixed speed is on average over 50 percent. With the KNOLL E-PASS case interested parties can determine achievable energy savings in advance during current machine operation.





# The world is changing. KNOLL is too.

KNOLL has been present in Madison Heights/Michigan in the USA since 1989. A new building is currently being constructed in Dallas/North Carolina. The relocation is planned for the end of 2024. In a 2,500 m<sup>2</sup> building the production of conveyor and filtration systems will start in the 2nd quarter of 2025. Sales and service will also take place from the new site.



Mercatus Sweden has been part of the KNOLL Group since 2019 and is a sales and service partner in the Nordic countries. Patrick Hörmann is the new CEO since November.



Significant sums are being invested at the headquarters in Bad Saulgau: a new warehouse with 3,000 m<sup>2</sup>, microgas turbines for heat/electricity generation and the new construction of a service centre. The project is due to be completed for 2025.



KNOLL China installs conveyor systems, filters and pumps, primarily for machine tool manufacturers, in Zhongchen (south-west of Shanghai). The company also handles the spare parts business from there and provides services. The latter is being further expanded due to the high demand.



Further expansion is underway in Mexico: Sales and service activities are stepping up with the partner GSN. KNOLL sees huge sales opportunities here, especially in end user business.

Global interest in the Indian production site is growing. KNOLL concludes licence production with SPAN/Bangalore. In the first step the company manufactures chip conveyors and filtration systems for OEM customers.







# Outside

"After 40 years in a company it is much more than earning money. You also think and act for the company and promote KNOLL on site with the customer."

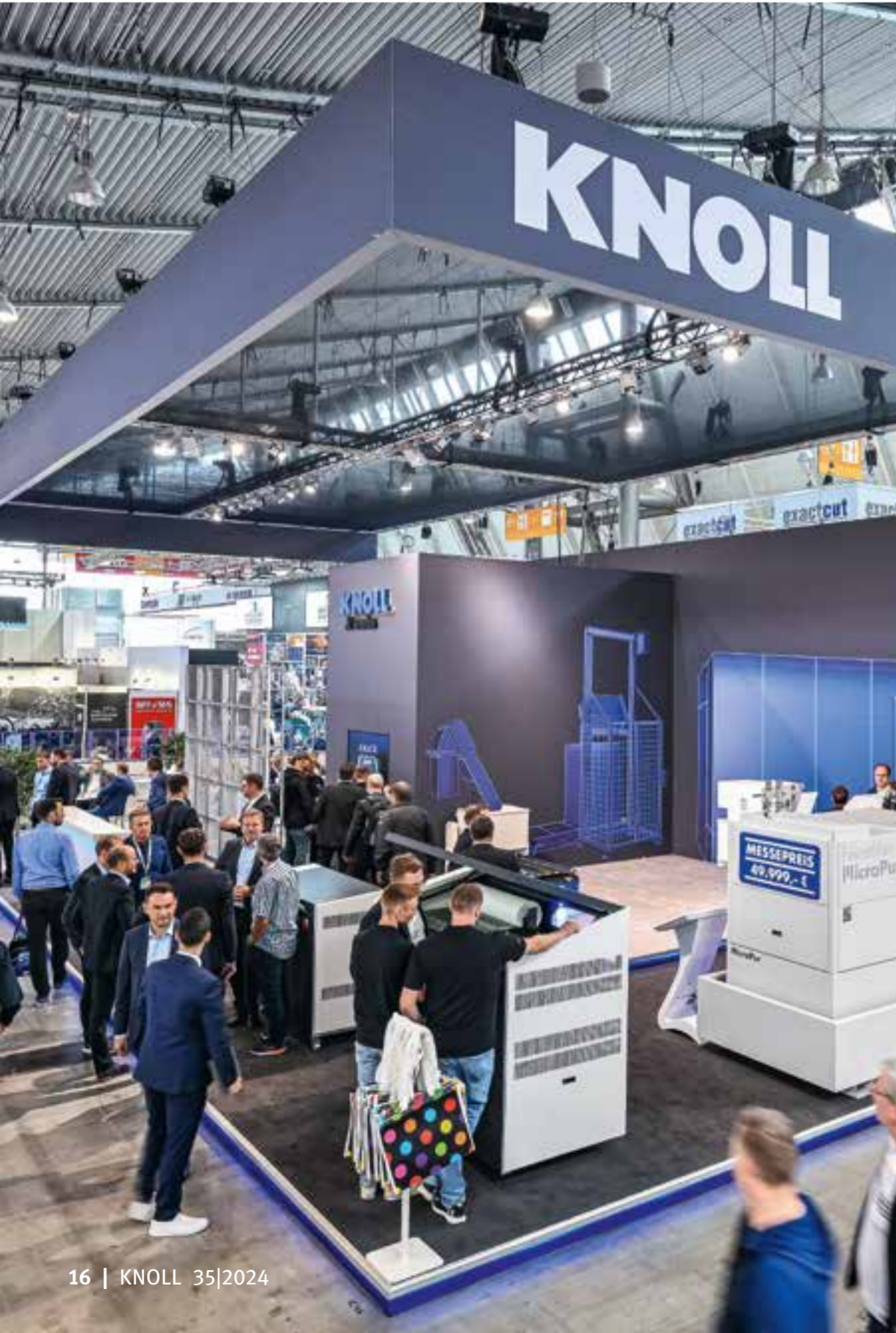
Klaus Maucher  
Service Technician  
In the company since 1984



# Inside

"Many people from my personal life have been working here longer. They were right: KNOLL is cool."

Evelyn Hänslér  
"Ulm model" dual study programme, mechanical engineering  
In the company since September 2024



KNOLL showcased itself with a new digital look at AMB in Stuttgart. The main focus of the trade fair appearance was automation in production. The themes digital networking, our new Click.it communication system, as well as the stationary and mobile KNOLL transport systems, generated considerable interest among the expert audience. We can accompany the change in the world of production with our ideas.



"KNOLL has accompanied me throughout my career. Internship, training, and today I am a Key Account Manager. My skills are relied upon. I'm happy to work in a family-owned company like KNOLL."

Michael Kössler  
Key Account Manager  
In the company since 1995

"In my 23 years at KNOLL I never thought about looking for something new. I'm happy here and feel accepted."

Elisabeth Raible  
Production Planning Department  
In the company since 2001,  
due to retire in 2025







# Experience meets young talent.

We congratulate the following staff members on their **25-year company anniversary**: Hakki Angin, Eugen Becker, Michael Birkler, Werner Blaser, Raimund Burth, Matthias Drechsel, Steven Duske, Herbert Knobelspiess, Armin Knoll, Michael Kössler, Thomas Musch, Andreas Nischt, Karl Schanda, Elmar Schmid, Jürgen Spöcker, Martin Wohlwender, Ralf Wrobel (missing from the picture: Marc Miller, Olga Ruppel, Irina Schlee). Congratulations to the following staff on their **40-year anniversary**: Roland Eberhart, Brigitte Manthei, Klaus Maucher (missing from the picture: Anton Baumgartner). We bid farewell to the following staff members and wish them well in their **retirement**: Roland Fleihs, Anton Forstenhäusler, Thomas Hillmann, Rade Kujundzic, Günter Pippig, Elisabeth Raible, Valentin Weiss (missing from the picture: Sergej Bojko, Ingeborg Bosch, Dieter Brose, Anton Hiller, Walter Lindner, Josef Zinsmayer).

We extend a warm welcome to staff members who started their **training** on 2 September 2024 (m/f/d): 10 industry mechanics, 2 machine and plant operators, 2 construction mechanics, 4 mechatronics engineers, 3 electronics technicians for operating technology, 1 electronics technician for automation technology, 5 industrial electricians, 3 technical product designers, 4 industrial clerks, 1 IT specialist, 1 specialist for warehouse logistics, 1 DHBW student in industrial engineering, 1 DHBW student in BWL Digital Business Management, 1 student on the Ulm model. The trainee ratio is a proud 10%. We are currently training 102 future skilled workers. They will help to safeguard the future of our family-owned company.



**KNOLL**  
**.It works**

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