Motion

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The UNITED GRINDING Group's
customer magazine

UNITED GRINDING

UNITED FOR YOUR SUCCESS

THE FIRST 30 YEARS

How we became who we are. CEO Stephan Nell in conversation with Dr. Werner Redeker, chairman of the board at Körber AG (retired)

IN THIS EDITION OF MOTION, YOU WILL FIND:

Cover: David Maupilé (2); Photos: David Maupilé, Qilai Shen, Giacomo Maestri, KNARR Group, OSG, Natalie Bothur

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"A THANK YOU TO OUR CUSTOMERS."

Stephan Nell,
CEO, UNITED GRINDING Group

DEAR READERS,

"The first 30 years" is written on the cover of this issue of Motion. The history of our group has only just begun and we are continuing to write it every day. It's a story in which our customers play the starring role. We would therefore like to take this opportunity **to thank our customers** for their trust, loyalty, and valuable cooperation. But we also want to take a look at the past where the foundations were laid for so many of the things we stand for today.

"How it all began" is the title of the interview in this issue. I will be talking to one of our founders Dr. Werner Redeker, former Chairman of the Board of Körber AG, about the historical beginnings of our Group. The Group dates back to the 1990s. Shortly after the death of the legendary Hamburg entrepreneur and founder Dr. Kurt A. Körber, the executive board of Körber AG began to get interested in expanding the machine tool division. The focus of interest was on other German and Swiss grinding machine manufacturers, which were, with a few exceptions, in a deep crisis at the time.

Back then, Dr. Eberhard Reuther was Chairman of the Executive Board of Körber AG. In the nineties, together with his later successor Redeker, he set about shaping Körber Schleifring, from which today's UNITED GRINDING Group emerged. Reuther's approach of **forming a group to strengthen the resilience of individual companies and to facilitate international expansion** has proven itself a success. We owe a lot to Eberhard Reuther. One conviction that we have taken from the Körber era, and constantly consolidated, is that joint success in **long-term customer relationships is** the foundation on which a lasting sustainable future can be built.

UNITED FOR YOUR SUCCESS is the headline of a long article in which we portray some international customer relationships and attempt to provide a response. UNITED FOR YOUR SUCCESS is our claim that describes briefly and concisely what we stand for. Together as a group, we are strong, and we want to use this strength to make our customers even more successful. This is our goal and the foundation of long-term customer relationships.

It turns out that the most important things are the same as in all other personal relationships: **good communication, trust, and shared values.** This insight seems obvious, but the trick is putting it into practice in our everyday lives. We want to get better at this every single day.

Stephan Nell
CEO, UNITED GRINDING Group

TIME PASSES—BUT SOME THINGS REMAIN

30 years of the UNITED GRINDING Group—the perfect opportunity to delve into the archives and look at older means of communication. In the past, this primarily meant printed materials. The image shows some brochures, flyers, leaflets, anniversary brochures, and brand brochures from the nineties when Körber Schleifring and the UNITED GRINDING Group were founded. In the early years, the aim was to show the group of tool and grinding machine companies in all its diversity, the cosmos of brands and associated competencies that together had become Schleifring. Graphics were already used to illustrate the range of production technologies at the time, as shown here in the example from a brochure of Schleifring Maschinenbau GmbH from 1994. Although grinding is a much older business, 30 years is still an eternity in connection with technological development. The same can be said about the relatively simple design. Back then, there was no such thing as rendering as is used today to depict machines. The diagrams used were very similar to the engineering drawings and did not have any particular style. The STUDER S40 CNC cylindrical grinding machine was shown as being at the forefront of innovation—a futuristic machine. Today, it looks almost archaic, even if it was state-of-the-art at the time with its computer-based CNC control. But by no means everything in the brochure from the 90s is outdated. The promise made in the text that the group would draw its "innovative power for future innovations" from "long-standing tradition and experience gained from it" was as true then as it is today.


Was die Industrie
schon immer bewegte
Die Erfindung des Rades ist schon eine ganze Weile her. Doch es gilt heute mehr denn je: Die Dinge müssen rollen! In der Industrie bedeutet dies Weiterentwicklung, Innovation und heute vor allem auch Verbesserung von Präzision und Produktivität. Was wäre der technische Fortschritt ohne die Feinbearbeitung, ohne die Möglichkeit, Einzelteile immer genauer zu bearbeiten!
Seit vielen Jahrzehnten gehören unsere Firmen zu den Wegbereitern der Schleiftechnik. Viele Patente und weit über 100.000 in alle Welt gelieferte Maschinen bezeugen die Spitzentechnologie dieser Unternehmen. Die langjährige Tradition, die Erfahrung daraus und die innovative Kraft der gesamten Schleifring-Gruppe sind die Basis für künftige Neuerungen. Wir bleiben vorn – und unsere Kunden profitieren davon.
100.000
GELIEFERTE MASCHINEN
1914
1946
1975
1994
FIG.2

SWITZERLAND

UMATI HACKATHON

MORE THAN 30 EXPERTS from the fields of digitalization, mechanical engineering, and plant engineering met in spring for the second umati Hackathon. The event, organized by the UNITED GRINDING Group and the German Machine Tool Builder's Association (VDW) and held in Thun, was aimed at driving forward the connectivity and digitalization of machine tools and specifically integrating existing machines from older generations into umati. umati stands for universal machine technology interface. It is a globally standardized data interface that machines can use to communicate regardless of their brand. It is also part of C.O.R.E., the cross-brand software and hardware architecture of UNITED GRINDING. "As the host of this event, we provide a creative platform that brings together developers from different companies – not for their own purpose, but always with a focus on tangible customer benefits," says Christian Josi, Head of Digital Engineering at UNITED GRINDING Group.

GERMANY

BLOHM JUNG INVESTS IN SUSTAINABILITY

BLOHM JUNG CONTINUES TO INVEST in more efficient energy use in production. The 5000-square-meter assembly halls at the Hamburg site are now heated with new radiant ceiling panels. This has been a significant investment but the new system has been implemented in record time and offers numerous benefits, explained Arno Binder, CEO of Technology Group Surface & Profile. Previously, outside air was drawn in and warmed to heat the hall. However, this solution proved to be noisy and not ideal in terms of energy efficiency. A new ventilation system with heat recovery will also be fitted later this year. All in all, the investments should reduce energy consumption by 30 to 40 percent. BLOHM JUNG will then also be equipped for the use of heat pumps, says Binder.

USA

NEW MACHINES FOR THE GRINDING ACADEMY

UNITED GRINDING has delivered three new machines to the GRINDING Academy. They are a WALTER HELITRONIC POWER 400, a STUDER S31 (both with C.O.R.E.), and a STUDER favoritCNC. The Grinding Academy from TITANS of CNC is an online learning platform for grinding enthusiasts run by the former boxer Titan Gilroy and his team. "The new machines give the Grinding Academy a multitude of improved functions and updated possibilities, especially for digital solutions. I am looking forward to the fascinating content that Titan and his team will create in the near future with these state-of-the-art machines," says Markus Stolmar, President and CEO of UNITED GRINDING North America.

SWITZERLAND

STUDER CUTS CO_2 EMISSIONS

THE STUDER PLANT IN THUN has been successfully connected to the Steffisburg district heating network. This eliminates the need for dedicated heating systems and boilers to generate heating energy. Instead, it can be piped in from the municipality's central supplier using equipment that is space-saving, reliable, and virtually maintenance-free. "Conserving the environment and resources has always been important to STUDER, so we are pleased that we can significantly upgrade the sustainability of our site," says Michèle Zeller, Head of Communications. The new district heating connection saves STUDER around 330,000 liters (78,000 US gal.) of heating oil per year, reducing CO_2 emissions by around 900 tons.

CZECH REPUBLIC, SLOVAKIA, POLAND, HUNGARY

STUDER EXPANDS SERVICES IN EASTERN EUROPE

ADDITIONAL TECHNICAL SPECIALISTS and additional helplines are bolstering STUDER's services in Eastern Europe. Customers from the Czech Republic, Slovakia, Poland, and Hungary can now contact STUDER directly and benefit from an expanded service team, says Pascal Roggli, Head of Field Service. With the additional complement of staff, twice as many employees are now available to take care of on-site technical service. After completing their training at the in-house Service Academy, the new staff members will have the outstanding skills and expertise customary to STUDER employees. Local service specialists and regional service managers of the helplines alike are fluent in the respective national language.

TURKEY, NETHERLANDS, BELGIUM

CUSTOMERS VISIT STUDER

CUSTOMERS FROM TURKEY visited the STUDER plant in Thun, Switzerland, last May. STUDER has been organizing regular informational trips working with the Turkish representative company Form Makina since 2013. On these outings, grinding enthusiasts can find out about the latest technologies and developments firsthand. In addition to the plant in Thun, the schedule included a trip to the Internal Grinding Competence Center in Biel. The group also visited a well-known Swiss watchmaker. Another customer delegation came to the Bernese Highlands in June—this time from the Netherlands and Belgium. The STUDER tour took place in cooperation with De Ridder, the representative for the countries of Belgium, the Netherlands, and Luxembourg.

CHINA

NEW SHOWROOM SET UP

CUSTOMERS AND INTERESTED PARTIES can look forward to a new UNITED GRINDING showroom at the Shanghai site. With an area of around 480 square meters (5,150 sqft), it is about a third larger than the previous showroom, says Jessie Wang, Marketing Director of UNITED GRINDING China. More than ten machines are available for customer trials and training, for example, the latest generation of the STUDER KC33, a STUDER S131, BLOHM PROFIMAT XT, and WALTER HELICHECK PLUS. The company moved to a redesigned office building in the Jiading district of Shanghai in October last year. The expansion reflects the growing business activities of UNITED GRINDING in China.

Photos: Thomas Kunz, Redpixel.pl/Shutterstock

UNITED FOR

In the machine industry, long-term customer relationships are the foundation for shared success, with manufacturers and customers maintaining steady contact over many years. But what distinguishes these relationships? How can mutual appreciation be achieved? To commemorate the 30th anniversary of the UNITED GRINDING Group, "Motion" posed these questions to an international selection of customers

TEXT: Michael Hopp

The OSG Corporation in Toyokawa, Japan, is the world's biggest provider of complete solutions for cutting tools in the manufacturing industry—and a WALTER customer since 1982. Pictured: Takeo Koji, Managing Executive Director OSG (right), Michael Schmid of WALTER (left), and OSG Founder Hideo Osawa

Photos: OSG (4); Illustration: johavel/Shutterstock

"WHEN YOU GO HOME to your family in the evening," asks Adamo Venturelli, CEO VIS Hydraulics, near Bologna, "What do you talk about around the dinner table? You talk about the people you met and the things you experienced with them." Italy's Venturelli is another long-standing UNITED GRINDING customer we surveyed for this article. This time the discussion focused less on technical topics and more on the interpersonal relationships that allow businesses to work together successfully in the first place. "It doesn't matter if you have the best technology if the people who are supposed to work with it don't understand each other," Venturelli concludes. "It's a people business," he says, "at least that's how we at VIS see it—and as far as I can tell, the colleagues at STUDER see things the same way."

PROXIMITY, TRUST, RELIABILITY

You might think that Italians living in their warm Mediterranean climate are more inclined to personal warmth than Swedes in the cold north or the Japanese with their cool reserve, but after talking with customers in different countries and their contacts at the brand companies of the UNITED GRINDING Group, we have to question these old stereotypes. In all five of the examples, our interviews revealed just how much the success of any business collaboration depends on the ability of the people involved to connect on a personal level. In principle, everyone agreed that customer/supplier relationships are built on very similar foundations to relationships in the private sphere: proximity, trust, reliability, and shared values.

GLOBAL RELATIONSHIPS

OSG and WALTER have much in common: a global orientation—and commitment to high standards and innovation

TAKEO KOJI is the Managing Executive Director of OSG Corporation, a leading player in the international machine tool industry. Founded in 1938, OSG operates with over 7,000 employees in 33 countries, manufacturing and selling cutting tools such as taps, drills, and end mills worldwide, and are the world's largest manufacturer of solid tools. Takeo's experience with WALTER EWAG goes beyond just years of working together; he also personally visited Tübingen, Germany, in the 1980s: "My first impression back then was: WALTER is similar to OSG. At least in view of the fact that both were owner-operated companies at the time. And even back then WALTER was famous for high-end machines and value-adding equipment." Today, there are three main reasons why OSG likes to work with WALTER: "Firstly, reliability. Secondly, consistency. And thirdly, its conservative approach."

CLEAR WORDS

The video interview, which Takeo conducts from a conference room at OSG headquarters in Toyokawa (Aichi Prefecture), is also joined by Yasuhiro Tomida and Jun Ikeda from WALTER EWAG Japan, as well as Michael Schmid, who is responsible for all WALTER EWAG business in the Asia-Pacific region. Schmid, however, is not at OSG headquarters, but links in from a conference room at a trade show in Bangkok.

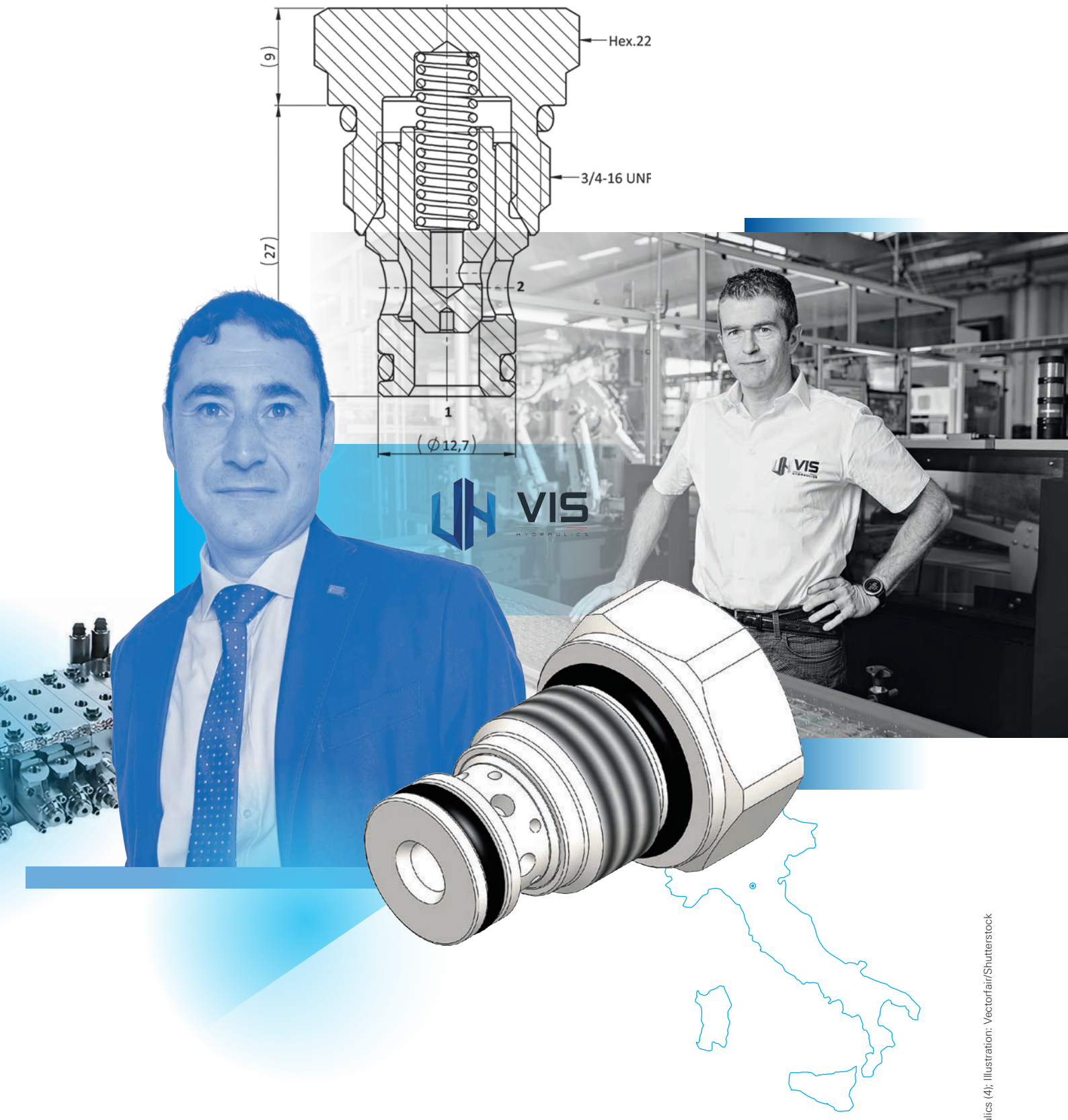
Takeo remains focused on every moment of the conversation and proves a man of clear, concise words. "There's an important reason why we work together—OSG is active globally, and we have production facilities around the world. And WALTER supports OSG with this." Michael Schmid adds: "Our partnership is very extensive. We're both concerned with customer support. We work closely with OSG maintenance staff. Our application engineers talk back and forth a great deal regarding application and production topics. We meet regularly. We have relationships with OSG at all levels, and that also helps solve problems."

YOUR

"WE COULDN'T HAVE DEVELOPED OUR CARBIDE END MILL WITHOUT WALTER. WE'VE ACHIEVED MUCH TOGETHER."

Takeo Koji, OSG

SUCCESS



VIS specializes in cartridge valve technology and manufactures hydraulic valves and components, including for agriculture. Customers all over the world appreciate the responsiveness, skilled support, and cost-effectiveness achieved by the Italians—with the help of STUDER technology. Pictured: Adamo Venturelli, CEO VIS (right), Diego Capitanio, STUDER (left)—a friendly pair

Photos: VIS Hydraulics (4); Illustration: Vectorfair/Shutterstock

"STUDER ALWAYS MAKES US FEEL LIKE PART OF THE FAMILY; WE'RE NEVER LEFT FEELING LIKE JUST ANOTHER CUSTOMER. WE'RE SIMPLY A TEAM THAT WANTS TO ACHIEVE GREAT THINGS TOGETHER."

Adamo Venturelli, VIS

"ONE IMPORTANT VALUE FOR VIS IS ENTHUSIASM. IT'S WHAT THE VIS BRAND IS BUILT ON, AND ADAMO VENTURELLI IS THE RIGHT PERSON TO REPRESENT THIS VALUE."

Diego Capitanio, STUDER

QUALITY KNOWS NO COMPROMISE

VIS and STUDER see fully open and direct communication as the basis for their shared success—and the passion for great machines

"WHEN THE CUSTOMERS come to visit our company and see all the beautiful STUDER machines, they say: 'Oh, you use STUDER—but aren't those the most expensive machines?' And I say yes, but they're also the best. If you want the best car in the world, where do you look? If you're looking for performance, warranty, durability, then it's Ferrari—they're the best but also the most expensive. And at that point it's clear what you need to do."

Adamo Venturelli never shies away from new comparisons when he praises his STUDER machines. He is CEO of VIS, a hydraulics and valve manufacturer he founded in 2009 with his brother Davide. The two were encouraged by the successes of their father, whose "Tarp" developed from a small turning shop into an industrial giant.

During the interview, in which STUDER Area Sales Manager Diego Capitanio also took part, Venturelli is in a great mood as he recounts his firm's beginnings:

"Our partnership with STUDER goes back to the era of my father's company, 20 years ago. That's when we bought our first S25, as well as a series of other STUDER machines. When VIS Hydraulics was founded in 2009, we had to choose a partner for our cylindrical grinding machines. It was the year of the Lehmann crash—a time of deep, global crisis. It was brave but also a bit crazy to start a company in that hurricane. We spent much time pondering this or that, and we also looked at other companies. But in the end, we saw from our father's experience that there can be no doubt that STUDER is the right partner."

ENTHUSIASM AS A USP

Today VIS has 18 STUDER machines in use; five STUDER S11s, all with loaders, were only delivered in 2021—and VIS has been internationally recognized for some time as a key supplier of hydraulic valves and components, including for example in agriculture. With the option of high-speed grinding, the S11 offers opportunities for further efficiency gains on the market. "The S11 is one of the most interesting machines we have," says Venturelli. "It is of very high value for our company because efficiency is the key factor in guaranteeing our success on the market."

So what drives this successful partnership? "We have totally open and direct communication with the STUDER world. Diego is our primary contact, and his technical knowledge holds enormous value for us. He doesn't just sell machines from the catalog. This makes it much easier to talk to him. He is simply not a typical salesperson." Diego Capitanio for his part says: "Sure, it's wonderful to hear all these nice words here. But when you're talking about reasons for success, then you have to mention enthusiasm. It's what the VIS brand stands for, and Adamo is the right person to represent this value."

A FIRE THREATENS EVERYTHING

When a fire broke out one Sunday in September 2021 at one of the VIS plants in Pavullo nel Frignano, several machines were affected by the fire, some others destroyed. A team of VIS and STUDER employees was soon working day and night and was able to restore full two-shift operation just four weeks later—sparing the end customers virtually any inconvenience. "This wasn't just about the business relationship, instead it was about surviving an ordeal hand in hand with a true partner," remembers Venturelli. "It was a unique experience that allowed the relationship to grow even further."

"I THINK OUR GRINDING EFFICIENCY IS TODAY A KEY FACTOR IN GUARANTEEING OUR SUCCESS ON THE MARKET."

Adamo Venturelli, VIS

TWO COMPANIES, ONE LANGUAGE

Seco and EWAG are united by the joy of customized, customer-oriented solutions—and something you might even call friendship

CENTRAL SWEDEN, in the historic Bergsladen mining area. The small municipality serves not only as the headquarters for Seco Tools, but it is also known as the birthplace of the Swedish steel industry. Seco is deeply rooted in Swedish industrial history. It all began in 1873 when Fagersta Bruks AB was founded in Fagersta, Sweden. Steel wire and steel tubes, rifle barrels, and springs for rail vehicles were manufactured here in the Bergslagen region. In 1932, the company started small-scale production of a carbide product called "Seco." Seco is Latin for "I cut."

Today, Seco has 4,100 employees and is represented in 75 countries, with machining solutions for milling, turning, drilling, and tool holding fixtures for the aerospace, automotive, medical technology, power generation, and utility industries. After the dismantling of the steel industry in the 1980s, many plants in Fagersta are now considered shrines of industrial history, and the Engelsberg smelter's plant has been named a World Heritage Site.

HOW DO YOU PLAY ICE HOCKEY?

And how do the locals here play ice hockey? This is an important topic in the interview with Andreas Westman, Manufacturing Engineer Grinding, and Georg Schröer, Head of Service at EWAG. To resolve this issue, we have to look back to December 1990, when Schröer "Jojji" was asked to suit up for the Seco-Ludvika team against the team of Motherhouse Seco-Fagesta at its annual ice hockey match at the Ludvika site … the Seco team was down a man. Asking Schröer to fill in was only natural, since he was clearly already seen as being part of the Seco team. "I'm not bad at ice hockey," recalls Schröer. "But shortly after the match began, I asked myself: 'Why can't I get a good lick in on these boys?' It was hopeless. After the match we went to the sauna—and then I learned that some of them played for the national team of bandy. And that's not all: They had different skates, capable of gliding much farther than normal ice hockey skates. They take two strides with them, and they're already five meters ahead. But they only told me that after the game." Westman laughs as he hears the story, the story about the higher speed which can be achieved by longer gliding surfaces of the runners he can only confirm, since he plays bandy himself.

SPONTANEOUS, TRUSTWORTHY COMMUNICATION

At that time, in 1990, Georg Schröer was still quite new to Seco. He got to know the company in 1988 when Jan-Olof Lundequist, the predecessor to Andreas Westman, ordered the first RS-12-CNC, followed by machines from the Ewamatic, Ewamatic Line, Compact Line, and Ewamatic

"WHEN I VISIT SECO, IT'S LIKE GOING HOME. BECAUSE SWEDISH IS MY MOTHER'S NATIVE LANGUAGE."

Georg Schröer, WALTER EWAG

The richly historical world of Seco Tools: Historical interior view of a steel plant in Fagersta for the manufacture of pipes (without date), the first plant of Seco Tools' predecessor company Fagersta Bruks AB, today's plant—and an employee with a matching cap. Left: Georg Schröer, right: Andreas Westman

"PEOPLE DEVELOP TECHNOLOGIES. AND IF THEY DON'T GET ALONG, THEN THEY WON'T UNDERSTAND EACH OTHER'S TECHNOLOGIES EITHER."

Andreas Westman, Seco Tools

Photos: Seco Tools (3), Henrik Mill, BTEU/TEKNISKA/Alamy, Archive PL/Alamy; Illustration: Agrus/Shutterstock

Linear. At the time, Schröer had moved to Sweden and then back to Switzerland in 1999, where he has been looking after Seco ever since. He hasn't forgotten his Swedish. "The good thing is that you can speak Swedish, which makes it easier for us," Westman says. "English would be a foreign language for both of us."

Trusting, spontaneous communication is the basis for collaboration—and a cultural commonality: "Like Seco, EWAG is essentially a family business, which is also one of the reasons why we get along so well," says Westman. "We think about the customers, not just one-size-fits-all industrial solutions. And EWAG is also service-oriented and highly individual. There isn't one standard machine, but rather a base that is then always adapted for our products so that a good solution is always found."

Schröer has an example ready for this: "Seco has a lot of custom products that require development and special handling. This was recently the case with a drill tip, for which we had to create a completely new handling setup to automate everything and eliminate the need for someone to stand next to the machine the whole time. The solution was image processing combined with robotics."

GROWING TOGETHER THROUGH SUCCESS

KNARR and BLOHM JUNG have grown together. Over almost 30 years, from the first machine to the 31st as it stands today

"THE TECHNICIANS OF BLOHM JUNG DON'T SIT MEEKLY BEHIND THEIR COMPUTERS. THEY TALK TO THE CUSTOMER. PROVIDE SUPPORT."

Thomas Wunsiedler, KNARR

THE PROVERBIAL STORY of companies being founded in a garage is cliche—but it holds true at least here at Orter Strasse 15 in the Wüstensel district of the small Bavarian town of Helmbrecht. As explained in an interview with Thomas Wunsiedler, Deputy Head of Marketing and Sales Representative, the firm's history traces back to 1994: "There was a small, old weaving mill with a larger entrance that young toolmaker Alfred Knarr chose to rent. One of the first machines he purchased for this space was a JUNG HF 50, a flat grinding machine, year of manufacture 1980. The grinder was added later, and it's still on the premises today." The JUNG HF 50 is actually still in use today as well. Meanwhile it is one of 31 machines from the UNITED GRINDING Group: two MÄGERLE, four STUDER, and 25 BLOHM JUNG machines.

Founded in 1994, KNARR is almost the same age as the UNITED GRINDING Group, which was founded in 1993. "Here at KNARR, we started with three employees alongside the boss. We now count 250 and are heading towards 280. We have grown together with UNITED GRINDING, I think it's fair to say."

Just how well the companies are in sync is immediately noticeable in the interview, which included Alfred Weber, Deputy Production Manager and QMO at KNARR, Ralf Traber, and Siegfried Völkel in addition to Wunsiedler. Traber is the Sales Manager at BLOHM JUNG, and Völkel represents the sales company Berner + Straller, which has supported the partnership since the very start.

In Völkel's words: "I remember driving to JUNG in Göppingen after an AMB trade fair in Stuttgart, late in the evening because Mr. Knarr wanted a 'J630', and we knew there was one there. It was pitch dark, and we had to look for the light switches." Weber says: "The machine wasn't even ready. I think the issue was how the digital display should be implemented on the machine. Mr. Knarr wanted to know how far things had progressed. He knows everything about the machines inside and out. That's why he's always there when it comes to larger purchases. He knows what he's talking about." Traber adds: "Mr. Knarr is an original. A guy. But in a good way! If a young man, as Mr. Knarr was at the time, hopes to set up his own company, then he needs the right mindset. The focus needs to be on moving forward …" Völkel adds: " … and of course also: short decision-making paths. A typical German medium-sized company."

From the founder's 'garage,' an old weaving mill converted in 1994, we then moved into the first new building and finally into the large new hall in Helmbrecht's industrial district—with photovoltaics on the roof since 2009. Pictured, right: Alfred Weber, Thomas Wunsiedler, KNARR, Ralf Traber, BLOHM JUNG

Photos: KNARR Group (4), Fredrik Karlsson/SolstaFoto, HANZA (2); Illustrations: ElenVD/Shutterstock, Agrus/Shutterstock

A SAVIOR ON FIVE AXES

Hanza and MÄGERLE support large customers from the gas turbine industry—with a great deal of trust in the partner and the latest technology

OLA SVENSSON, Site Manager at Hanza, is cheery as he joins the video interview, greeting the other participants with a "Morning, Morning, Morning, and Hi Stefan" to Stefan Zürcher, Head of Sales and Marketing at MÄGERLE and the "Motion" editor. Hanza has offered complete solutions in advanced machining for turbine, aviation, industry, and offshore since the 1970s and serves customers from the gas turbine industry such as Siemens or Energy Sweden in six production clusters.

"In 1995, Hanza made the big switch to the turbine business," says Svensson, "we initially worked on three-axis MÄGERLE machines and a BLOHM double-wheel machine." When prices for turbines began to fall, it was time to become more efficient. "Roger Persson and I visited MÄGERLE and initially considered purchasing another three-axis machine in order to grind the turbine blades. But then they showed us a completely new machine—and we had a lot to talk about for the next few days."

The new machine was the MFP 50—the first with five axes. "Hanza was one of the first companies to embrace MÄGERLE five-axis technology," says Stefan Zürcher. "And because Hanza itself was still relatively new to the turbine business, it was possible to produce more efficiently from the outset. They were pioneers." "After a year that featured a lot of help from MÄGERLE, we were able to reduce the number of setups for gas turbine parts for Siemens from the previous six or seven to two," Svensson reports. "This was the prerequisite for remaining on the market at all, because prices had fallen further in the meantime."

Here too, trust and communication were key to success: "We know each other very well, and we know exactly what the other needs. When we sit down to talk, we can go to the point immediately. And of course we also benefit from the experience MÄGERLE has worldwide. But we don't do everything that MÄGERLE says—and MÄGERLE doesn't do everything we say. And that's the way it should be."

"MÄGERLE IS RELIABLE AND FLEXIBLE. YOU CAN RELY ON EVERYTHING THEY SAY."

Ola Svensson, Hanza

"HANZA WAS ONE OF THE FIRST COMPANIES WORLDWIDE TO INVEST IN MÄGERLE FIVE-AXIS TECHNOLOGY."

Stefan Zürcher, MÄGERLE

Årjäng is home to the Hanza Group's most modern factory for machining and precision mechanics. Complex turbine parts are manufactured here using MÄGERLE MFP 50 five-axis technology. Pictured: Ola Svensson, Hanza (right), Stefan Zürcher, MÄGERLE

30 YEARS OLD BUT FOREVER JUNG

The UNITED GRINDING Group has not only provided its customers with new systems and made them more successful for three decades, but it also provides them with vital services such as rebuilds, which make outdated machines as good as new

TEXT: Markus Huth

It's a sunny afternoon in Fürth, the sound of birds chirping in the city park mingles with noises from JUNG grinding machines coming from the windows of an old building in the city center.

"Mr. Dorn, where can I reach you, do you have time to talk?"

"Mr. Friedrich, how nice it is to hear from you! Wait, I'll go to the office for a moment, we can talk better there."

"Wonderful. I just wanted to hear whether everything was OK with your five JUNG machines. Your next preventive maintenance appointment is coming up."

"Of course, everything is fine, as always. Or, as we say here: Forever JUNG!"

Reiner Dorn is Managing Director of Reichenbächer + Hasel Schleiftechnik GmbH, a successful company specializing in the highest precision for surface and profile grinding technology. Their customers include well-known companies from the electronics, medical technology, machine tool, mold and tool making, aerospace, and automotive industries. Since its foundation in 1971, the company has relied exclusively on JUNG machines.

"That's good to hear, Mr. Dorn. Of course, our technician will still come by to check everything in detail."

Matthias Friedrich, Sales Engineer at BLOHM JUNG, provides top technical support for revision requests from customers. Due to the high quality and longevity of JUNG machines, there are still around 15,000 models in use worldwide that are no longer manufactured. This also applies to the JE 525 machines at Reichenbächer + Hasel, which were built between 1989 and 1990. For these customers, OEM maintenance, inspection, and machine rebuilds are highly valued services.

"Is everything OK with the two latest rebuilds?"

"Mr. Friedrich, these machines are still as good as new. We just had the rebuilds done a few years ago. In any case, our customers can continue to rely on the usual high standards of precision. It also greatly reduces our energy consumption, which many of our customers insist on for their products."

Photo: GaudiLab/Shutterstock; illustration: ElenVD/Shutterstock

Matthias Friedrich (right) is a sales engineer at the Göppingen site of BLOHM JUNG (pictured). He advises and supports customers on subjects starting from defining the necessary extent of the machine refurbishment to the overhaul of the associated dressing units and making the entire system as good as new. This picture shows the difference between old and new using the example of a JUNG grinding machine from the JF series

"Yes, you're right, of course. JUNG machines have a top-grade cast steel base. The rebuild process means that the energy used to produce the machine the first time round is also used for a second machine life, which has a much lower energy footprint compared to building a new machine."

A complete overhaul (rebuild) of a machine at the JUNG plant in Göppingen breathes new life into old equipment. It is then as good as it was when first delivered and is just as easy to operate. After a rebuild, the service life of the machine is reset to up to several decades and the customer receives a machine that is as good as new at an economical price.

HOW A REBUILD IS DONE

A machine overhaul can either be for the complete machine or for individual modular components. If the entire machine is refurbished, we call this a rebuild. Although the process can take several weeks at the Göppingen plant, customers can continue production without losing much time at all. This is because they either receive a comparable as-new overhauled machine directly in exchange for their old machine, or they are provided with a loaner machine for the duration of the overhaul.

GUIDEWAYS

The guideways are crucial for the precision and longevity of JUNG machines. As an exclusive JUNG service for customers, these are ground in during the rebuild process. They are given a special surface hardening treatment and the proven cross-hatch finish, which ensures the necessary accuracy for medical technology and the automotive industry, among others.

GRINDING SPINDLES

One of the most stressed and important components is the grinding spindle, which is in direct contact with the workpiece and determines its quality. Grinding spindles are replaced when a machine is overhauled.

REPAINTING

Fashions change, even for grinding machines: in the past, green was the color of choice, but today gleaming white is much more modern. After a rebuild, your JUNG machine will look like a newly built machine.

DRESSING

The dressing unit in the machine sharpens and shapes the grinding wheel. The rebuild team in Göppingen restores it to an as-new condition for maximum precision by replacing spare and wear parts and grinding the guides.

UPGRADES

Outdated grinding equipment can also benefit from technical progress without having to replace the entire machine. An updated machine control, a new automatic centralized lubrication system, or new capabilities, such as creep feed, plunge grinding, or face grinding, are just a few examples.

SCHAUDT AND MIKROSA AS GOOD AS NEW TOO

THANKS TO UNITED GRINDING'S MAINTENANCE and rebuild service, thousands of SCHAUDT and MIKROSA machines are still in use today. "The life expectancy of grinding machines is longer than that of other machine tools. Because we have taken over the support of these models, there is no reason for our customers to replace them, even if no new ones are being built," says Ralf Schürl, Head of Technology at the Göppingen site of BLOHM JUNG. The technology center in Göppingen is currently being modernized and expanded to make it even more efficient. "Because, where a relatively small JUNG machine requires only around six square meters (64.5 square feet) of installation space, a SCHAUDT can take up to 40 square meters (430 square feet)."

The highly productive CamGrind L2 as a cylindrical and non-cylindrical grinding machine for producing medium and large series was specially designed to manufacture camshafts for combustion engines. However, it is extremely versatile and can be configured for other workpieces within a few days. Conversions of this kind are also performed in Göppingen, says Schürl. For example, by exchanging wheel guards on machines that use the multi-wheel concept developed by SCHAUDT, which allows all the cylindrical features of a workpiece to be ground in a single plunge. Another important service provided by the Göppingen site is the overhaul of individual components for machines in the field, which are then installed by experts at the customer's site. In addition to the CamGrind, our customers also use numerous FlexGrind machines and we provide the same service for these units as well. This versatile cylindrical grinding machine from SCHAUDT has clamping lengths of up to 4,000 millimeters (157 inches) and component weights of up to 1,200 kilograms (2,640 lbs). It is used for grinding tool spindles, printing rolls, and workpieces with individual forms.

MORE THAN 100 YEARS OF GRINDING HISTORY—AND STILL IN DEMAND

The Göppingen team consists of specialists in mechanical and electrical design, software, and process development. They are supported by employees from the Service department. In addition to the SCHAUDT systems, they also take care of MIKROSA machines.

The origins of this long-established company go back to 1878. Their state-of-the-art KRONOS S, M, L, and D series are renowned for their highly productive centerless grinding of precision workpieces. "The KRONOS S-series, with its cross slide system design for very high accuracy, is still unique on the market," says Schürl. And thanks to the outstanding rebuild and maintenance service with the know-how of the original manufacturing company, customers can use their SCHAUDT and MIKROSA machines for successful production for many more years to come.

GRINDING WITH TRADITION

With the founding years of their predecessor companies in 1878 and 1906, MIKROSA and SCHAUDT are among the oldest brands of the UNITED GRINDING Group. Since 2021, their business operations have been continued by BLOHM JUNG, who provide servicing, consulting, spare parts, retooling, and rebuilding services. For our customers, the contacts and the usual high quality remain unchanged.

RALF SCHÜRL ON THE REBUILD VARIANTS:

Our Rebuild concepts are tailored to the customers' needs. For example, **Rebuild @ the customer**: This is where the machine is overhauled at the customer's plant. This is possible up to a certain extent. Only more complex tasks, such as the rebuilding and upgrading of the guideway system are done at our site in Göppingen. We give our customers logistical support.

The second concept is called **Second Life**. A machine is bought back from the market from a third party and overhauled at our premises in Göppingen. This machine is then available on the market again. Customers can increase their capacity for established processes or develop workflows for new workpieces with the support of our experts.

Ralf Schürl (above, next to the Rebuild hall in Göppingen) is Head of Technology at BLOHM JUNG in Göppingen and, with his team, takes care of machine overhauls for JUNG, SCHAUDT, and MIKROSA. Below in the picture: a MIKROSA KRONOS S on the left and SCHAUDT CamGrind L2 on the right

WE FIND SOLUTIONS!

Even the best machine is useless if it stops and nobody comes to fix it. That's why our expert Customer Service staff get there quickly to fix your problem. This is only possible thanks to our motivated and impeccably trained employees. Motion presents four of them

TEXT: Markus Huth

"GOOD SERVICE IS BASED ON TRUST."

JOACHIM CERUSO

POSITION: Process Engineer at BLOHM JUNG, Göppingen

CONTACT: Joachim.Ceruso@blohmjung.com

"I LIKE INTERACTING WITH CUSTOMERS and solving tricky problems," says Joachim Ceruso. Today, the experienced technician works at the Göppingen BLOHM JUNG site looking after all SCHAUDT machines that are still being used by customers. Ceruso has a long history with the venerable company, where he began working in 1986. SCHAUDT's business operations and those of MIKROSA have been transferred to BLOHM JUNG. However, customers can trust the same high-quality services and keep their familiar contact persons. Ceruso's tasks include procedural project planning, the development of non-cylindrical and cylindrical grinding operations (for example for camshafts), supporting processes up to final acceptance, and development coordination in the software group. "I am currently supporting the optimization and conversion of a CamGrind machine to a new camshaft in Hungary," he reports. Ceruso always attaches great importance to discussing all the details with customers whether it concerns conversions, remote maintenance, or the installation of new software. "Because no two processes are the same and, ultimately, good service is based on trust."

"GETTING A MACHINE TO RUN IS THE BEST FEELING."

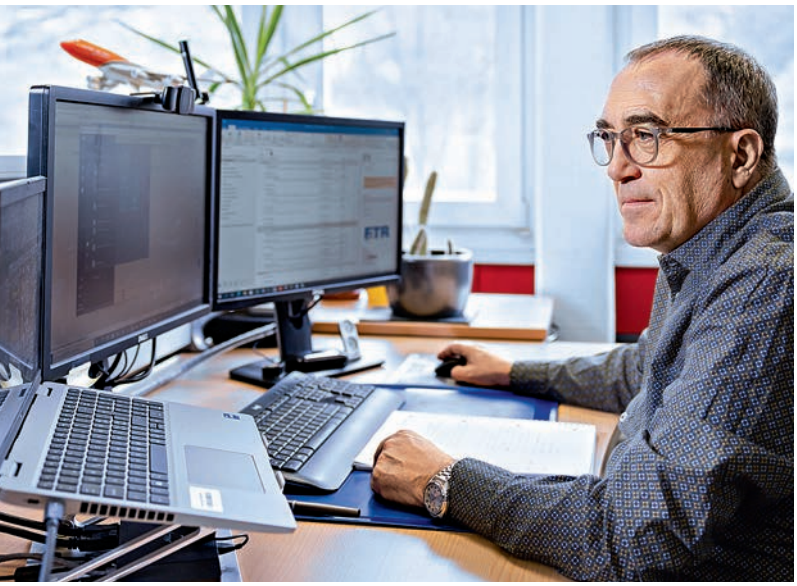
JERRY MASON

POSITION: Cylindrical Service Manager at UNITED GRINDING North America, Miamisburg

CONTACT: Jerry.Mason@grinding.com

"GETTING A CUSTOMER'S MACHINE running again is the best feeling in my job," says Jerry Mason. He is responsible for customer service in cylindrical grinding at UNITED GRINDING North America and primarily looks after customers with STUDER machines in the USA and Canada. He is responsible for a team of nine technical service professionals. They are based in different locations across North America to enable them to get to the sites as quickly as possible. "I also really enjoy working with my technicians and communicating with our affiliates. They give their best for our customers." Before Mason joined the company about 22 years ago, the qualified master electrician worked in this field in industrial and commercial buildings. Today, his working day begins with reading requests and service reports before he starts making customer calls and new emails land in his inbox. "Often these are very nice messages from customers thanking us for solving their problem quickly," says Mason, adding: "You never get tired of receiving those."

Photo: Romy Streit



"I STILL ENJOY MY WORK AFTER 40 YEARS."

PAOLO CURCILLO

POSITION: Regional Service Manager for Italy at STUDER, Thun

CONTACT: Paolo.Curcillo@studer.com

"WHAT I ENJOY most about my work is being in contact with customers," says Paolo Curcillo. These days, he is the STUDER service manager in Thun for the region from which he moved to Switzerland at the beginning of the 80s: Italy. "I had just graduated from the technical college in Italy with a degree in electrical engineering and initially worked as an electrician in Switzerland," he recalls. But he began working for STUDER as early as 1984 and today leads a Service team providing customers with outstanding technical support. His tasks include direct customer communication, preparing quotations, and the quick and solution-oriented organization of technical service calls. He starts his working day by reading emails and speaking with customers on the phone. And if Curcillo is unable to take your call due to other conversations, he will get back to you as quickly as possible. Just recently, he managed to restart a grinding machine that was disabled due to electrical problems. "I simply enjoy helping our customers—even after almost 40 years in the company and 25 in customer service," says Curcillo. "It is a nice feeling when production managers or owners call me specifically to thank me for my help in getting production back on track."

"PROFESSIONAL AND SYMPATHETIC"

PETR BAĎUŘÍK

POSITION: Service Coordinator for Central and Eastern Europe at WALTER, Kuřim

CONTACT: Petr.Badurik@walter-machines.de

"I LOOK FORWARD TO THE PHONE RINGING and being able to help our customers," says Petr Baďuřík. As Service Coordinator for WALTER at the Kuřim site. He and his team are responsible for the Central and Eastern Europe region and support more than 500 companies. In addition to expert advice and rapid assistance in the event of technical problems, Baďuřík also prepares quotations for spare parts and accessories. "If we cannot find a remote solution by phone or Internet, I send one of our service technicians to visit the customer," he says. Baďuřík graduated from an industrial school specializing in CNC machines and has been with the company for almost 20 years. "There are no stereotypical days in this job. Every day is different and I like that variety," he says. It is always important to remember to be sympathetic. It is not uncommon for customers to call him in moments of stress due to the machine issues they are experiencing. "My task is to communicate with them in a professional yet sympathetic way. Nobody should feel like they are talking to a call center robot," explains Baďuřík. "It feels good when these customers visit me at a trade show or an Open House to personally thank me for successful cooperation."

HOW IT ALL STARTED

CEO Stephan Nell met Werner Redeker, former Chairman of the Board of Körber AG, for the 30th anniversary of the UNITED GRINDING Group. The discussion takes them back to the nineties when the Körber Schleifring was formed during a serious crisis in the German and Swiss machine tool industry. The Schleifring was the predecessor from which the present UNITED GRINDING Group emerged. And it looks to the future of the group in a world where many things are changing and yet a surprising amount remains the same

TEXT: Michael Hopp
PHOTOGRAPHY: David Maupilé

I'll show you the 2013 Motion that was published to introduce the new brand and the new machine design. Do you remember, Mr. Nell?

Stephan Nell: The new machine design was a major revelation back then at the EMO in Hanover. For the first time, the outside world saw us as a group. We exhibited machines from all our brands together at the EMO, all with this new design. It was a big step in the right direction for us.

Werner Redeker: I remember this magazine. I was still Chairman of the Board at Körber. Creating a unified brand for the Group and achieving greater cohesion was already an ongoing issue at Körber that we never really managed to solve.

Nell: A lot has changed since then. The brands work together on many projects. We have established working groups beyond the separate brands in many areas. Cooperation is a priority—now we collaborate instead of competing. Another great example is our new C.O.R.E. OS user interface. It would not have been possible without close cooperation. But we also achieve more together in sales, marketing, finance, production—by which I mean our manufacturing concept—and in many other areas. Nevertheless, we are still not where we could be.

Redeker: I can tell you something, you never get there 100 percent …

Mr. Redeker, you started as a development engineer at Körber in 1979.

Redeker: I can still remember the interview with Eberhard Reuther. He first gave me a tour of HAUNI. At the time, HAUNI was already a model plant. The Mecca of manufacturing technology with all the latest machines and equipment. And then we crossed over the road to BLOHM. What a difference between them. Eberhard Reuther explained his plans for BLOHM and convinced me to start working there. And what can I say, it all turned out like he explained it. Better in fact.

What role did German Chancellor Helmut Schmidt play in the takeover of companies such as BLOHM or SCHAUDT?

Redeker: Bergedorf, the location of HAUNI and BLOHM, was in Schmidt's constituency. And Schmidt asked his friend Körber to take over BLOHM. However, Körber was initially only interested in taking on the employees he needed for his growing business. At the same time, however, he also investigated the future of the machine tool market. At the time, BLOHM had a famous twin-head machine for the turbine industry. That was interesting.

Nell: They are still available today …

Redeker: … and it was one reason that convinced Körber to acquire BLOHM as a machine tool company. Eberhard Reuther organized the takeover and immediately became the division manager after the takeover. As a non-technician, he got very deeply involved in the technology and began to rebuild BLOHM with great verve. That is when I met him for my job interview.

Photos: picture-alliance/dpa (2), picture-alliance/ZB

In 1992, Körber AG started bringing together separate tool and grinding machine companies in Germany and Switzerland to form the Körber Schleifring. It was established 30 years ago in 1993. In 2013, the group was separated from Körber AG and renamed UNITED GRINDING. Stephan Nell had been appointed CEO beforehand in 2012. For this interview, he met Werner Redeker. In the 90s, Mr. Redeker helped Eberhard Reuther (then Chairman of the Board of Körber) to set up the Schleifring and was himself appointed Chairman of the Board of Körber AG in 2000

TAKING PART IN THE DISCUSSION

WERNER REDEKER
Werner Redeker was born in 1947 in Stemwede, North Rhine-Westphalia, Germany. He studied mechanical engineering at the Technical University of Braunschweig starting in 1967 and initially remained at the university as a scientific employee from 1972. In 1979, after receiving his doctorate in engineering, Redeker was hired by Eberhard Reuther as a development engineer for the HAUNI plants of Körber AG. In 1989, he became managing director of Blohm Maschinenbau GmbH. In 1992 he became a member of the board of Körber AG, then chairman of the board of Körber AG, and a member of the board of trustees of the Körber Foundation in 2000. In 2009, he moved to the supervisory board. Mr. Redeker retired in 2016.

STEPHAN NELL
As CEO, Stephan Nell has been responsible for the UNITED GRINDING Group's business worldwide since 2012. He joined STUDER in 2003 as a sales manager for Europe and served as CEO from 2007 to 2011.

And the Schleifring companies in former East Germany, like MIKROSA for example. How did they join the Group?
Redeker: East German companies had been held in escrow for disposal of assets since reunification in 1989. Reuther himself comes from Leipzig. Helmut Schmidt was already on the Körber Supervisory Board at the time. At the EMO 1992, he saw our BLOHM and SCHAUDT booth and had a word with me: do not close any of the three East German companies in the next three years! And so we also took care of the East German Schleifring. We fought hard during this time. I kept saying, this is going to go terribly wrong with only BLOHM and SCHAUDT and the three East German companies. But, the decision at the time was that we either get out of the machine tool industry or we do it right.

And we know what decision was made.
Redeker: We wrote to many grinding machine companies asking them to join us and many were interested. To our surprise, so were the Swiss companies STUDER and MÄGERLE. I still remember the first discussions. The two managing directors were very successful, but very different personalities.
Nell: The same applies to the owners: One was a well-known Swiss investor, the other an architect and art lover—which is where we got the slogan "The Art of Grinding.".
Redeker: When all the discussions went well, it was clear that we had to set up Schleifring as a separate division. It was a completely different business than we had with HAUNI before. Very strong competition, a very diverse international customer base.

How bad was the crisis at the beginning of the nineties?
Redeker: The economy was at rock bottom worldwide. Industries such as the automotive sector and turbine manufacturers were no longer investing. For example, SCHAUDT did not receive any inquiries for six months and therefore did not receive a single order. Some companies disappeared into obscurity or the owners gave up due to poor equity. Many East German companies still believed that the market would revive thanks to good contacts with Russia, but they were wrong. However, MÄGERLE, which turned a profit during the crisis, and STUDER were not at risk. But all the other companies in our new Schleifring Group could not have survived without us or another investor.

Mr. Nell, you started your career in the midst of this crisis?
Nell: Well, I didn't start until 2002. But I know about crises too. They are common in the machine tool business. There is a slump roughly every seven years—it is a volatile industry. I have friends in the food industry who complain if sales fall by five percent. That wouldn't even bother us. You have to learn how to deal with it and develop something like resistance to downturns. We always need to know what would happen if sales dropped by 30 percent from the peak. What exactly? What measures to take, when will they take effect? There is only one rule: permanent staff will not be made redundant. Our goal is to keep the team. Because it is also clear that things will improve again afterwards and then we can only succeed if we also have the people.
Redeker: At the time, we didn't have a setup like that for Schleifring. We simply had too many people for the few orders we received. And the German companies could not be adapted quickly enough due to legislation. Besides that, we never liked dismissing people at Körber. There was a completely different mentality in Switzerland. Despite staff reductions, the people in the companies were much happier than those in Germany. There, they knew they would be needed and hired back very quickly when things picked up. And that is exactly what happened starting in 1994. But many German companies had already disappeared by then.
Nell: We have gained additional market shares after every crisis of the last 20 years. And that is because we had the strength of the Group—and the people. Also because we did not need any funding for larger orders and because we ordered material early on. We only lose out if the issue of the moment is pricing. We do not engage in the kind of price competition that our competitors do out of desperation. Because what I sell has a value—and it still has the same value even if the market doesn`t perform.
Redeker: But you also need to have the products. Before being taken over by Körber, BLOHM had relied on standard machines that were never really developed any further for 20 to 30 years. There were hardly any innovations. Sales were steadily declining, and in the meantime, the competition in the turbine industry, which was so important for surface and profile grinding machines, had made considerable progress. When we

"THE ADVANTAGE OF A GROUP IS THAT EVERY COMPANY IS BACKED UP BY A STRONG PARENT ENTERPRISE. THIS IS ALSO HELPFUL DURING A CRISIS."

Werner Redeker

"OURS IS A VOLATILE INDUSTRY. YOU HAVE TO LEARN TO DEAL WITH IT AND DEVELOP SOMETHING LIKE RESISTANCE TO DOWNTURNS."

Stephan Nell

In this interview, Werner Redeker and Stephan Nell discuss the 30-year history of the Group. They agreed that the current UNITED GRINDING Group would not exist if Körber AG had not taken over the then crises-ridden tool and grinding machine companies in the nineties and restructured them—with staying power and entrepreneurial foresight

"BLOHM AND SCHAUDT ALREADY HAD MAJOR CUSTOMERS IN THE USA AND CHINA. WE DIDN'T HAVE MUCH OF A PRESENCE YET BECAUSE OF OUR SIZE."

Werner Redeker

"THE DIFFERENCE IS THAT BACK THEN WE WERE A EUROPEAN COMPANY WITH INTERNATIONAL BUSINESS. TODAY WE ARE AN INTERNATIONAL GROUP."

Stephan Nell

were acquired by Körber, Eberhard Reuther initiated a period during which we caught up extremely quickly and then outpaced our rivals.

Nell: Today, the UNITED GRINDING Group invests the same amount into research and development every year regardless of the state of the economy. We already established this habit during the Körber years. You can always find excuses for not spending money on development: If things are going badly—we have no money. And if things are going well—we have no time. So you end up with an outdated product range. We can only convince new customers to buy from us if they earn more with our machines than with the machines made by our competitors. That's why continuous investment is crucial. Results can be optimized, of course, but never at the expense of substance. And the other thing: we can be sure that machine tools will always exist. For as long as we humans move, live, and deal with things we can physically handle.

Redeker: The machine tool industry is the mother of all machines, they say.

Nell: This is a business that works in very long cycles. It is not a question of raising the return on sales by two tenths. This is a long-term business, and that's how we want to handle it. Responsibly.

New topic: the Schleifring Group had already begun to expand internationally and today the UNITED GRINDING Group generates more than half of its sales outside Europe. What has been continued and what has changed?

Redeker: BLOHM and SCHAUDT already had major customers in the USA and China, and a few in Japan. We didn't have much of a presence yet in these locations just because of our size. Then STUDER joined us and already had its own subsidiaries and agencies around the world. We were then able to afford to expand our presence in the USA and China. Local contacts, local service technicians. At the time, we were struggling to find a name to use in the USA and ended up choosing UNITED GRINDING Technologies. This then became UNITED GRINDING Group. I am very happy about that.

Nell: The difference is that back then we were a European company with international business and now we have become much more of an international group. Anyone seeing UNITED GRINDING North America today would see an American company, not a branch of a German or Swiss company. It's very similar in China. Many of the things we are discussing today were set in motion years ago. And we have actually made excellent progress.

One reason for this was certainly that both the Körber Schleifring and UNITED GRINDING Group are based on the idea of running separate companies as a group. What are the tangible benefits?

Redeker: Quite simply that every company and every brand is backed up by a strong parent enterprise. This is helpful during a crisis—for example, we can always provide our customers with services no matter what predicament we are in. Is it also advantageous for international expansion. We can afford to open sales and service branches without each company having to fund everything themselves.

Nell: The various member companies also have different customers and industries with different business cycles. This buffers the fluctuating effects of every economic cycle across the group. Digitalization is a current topic where working as a group is beneficial. The size of the group and the fact that we cooperate with more people are favorable as we can develop more know-how and better software.

But aren't there also situations in which companies are not so enthusiastic about being welded together into a group?

Redeker: Of course, individual company managers have a healthy self-interest. This selfishness is partly healthy, but partly also an impediment to enhancing our synergies.

Nell: They only get enthusiastic later on when the additional benefits become apparent.

Redeker: Another thing that was certainly crucial for the development of the group as it is today was the earlier combination of Körber AG and Körber as a foundation-owned company—a great concept. Models of this kind are similar to a family business—they think in the longer term and keep profits within the company. The executives and workers alike feel that they are also doing something for the benefit of society.

Nell: This is the background to how today's group came to exist.

Redeker: Without the foundation, the UNITED GRINDING Group would not exist today. I don't think that anyone else in 1993 would have been willing to bring together so many companies, almost all of which were struggling, and take over the East German companies too. Although these were bought for negative purchase prices, i.e. with subsidies. You can live on subsidies for two or three years but not in the long term. You have to get your feet on the ground at some point. You can only do that in companies or investor groups that consider long-term goals, not just tomorrow and the day after.

"I DON'T THINK THAT, IN 1993, ANYONE ELSE WOULD HAVE BEEN WILLING TO BRING TOGETHER SO MANY COMPANIES."

Werner Redeker

"THIS IS THE BACKGROUND TO HOW TODAY'S GROUP CAME TO EXIST."

Stephan Nell

Project Engineer Chen Songchuan and his team at UNITED GRINDING China plan and configure machines for customers

FROM PLANNING TO COMPLETION

TEXT: Markus Huth
PHOTOS: Qilai Shen

"FOR ME, direct communication with customers is the top priority. This is the only way we can align processes and plans with their wishes and requirements," says Chen Songchuan. The project engineer has been with UNITED GRINDING China for 16 years and supports customers from the Shanghai site along with a team of nine. His tasks include pre-sales and planning support. He is a graduate of the renowned Jiangsu University in Zhenjiang and has acquired extensive expertise in machining injection pump parts and assembling injection systems over more than 15 years. His working day begins with reading and answering customer inquiries and telephone calls. He is currently working on behalf of a customer who has four STUDER grinding machines to develop the perfect machine configuration for the workpieces they produce. In addition, he and his team are currently preparing a KC33 machine of the latest generation for delivery. Commissioning at the customer's site and issuing the certificate of completion takes an average of ten days, explains Songchuan and adds: "That's one of my favorite moments because many customers thank us."

CONTACT:
Chen.Songchuan@grinding.cn

9:00 A.M.

DIRECT COMMUNICATION

Songchuan's workday begins with reading emails and answering customer questions

10:00 A.M.

CUSTOM CONFIGURATION

Together with his colleague Liu Dongliang from the Development department, he inspects a customer's process plan and workpiece drawings. This allows them to configure and adapt their machine perfectly

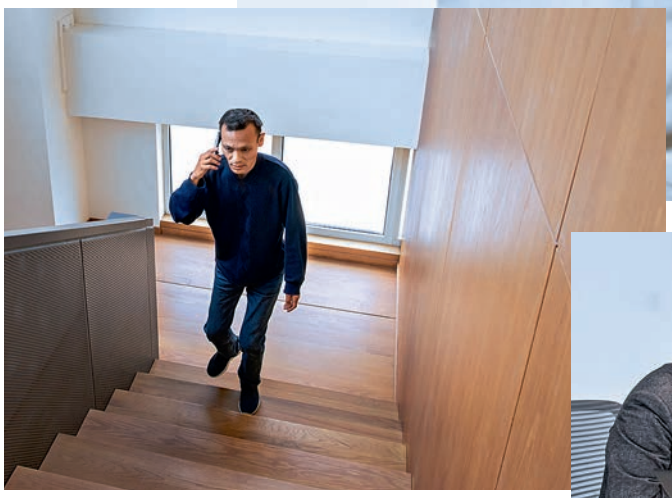
10:45 A.M.

QUALITY

He consults with Shi Yalin from Quality Control as the process plan is very complex

"THANKS TO DIRECT COMMUNICATION WITH THE CUSTOMER, WE CAN IMPLEMENT ALL THEIR WISHES PRECISELY."

Chen Songchuan



11:30 A.M.

ON THE WAY

The customer needs the requested services to be implemented quickly. Songchuan calls the Sales department on his way to the office to ensure that everything is well-coordinated

12:00 P.M.

MEETING

Together with product manager Liu Bing (left) and application engineer Jiang Bo, he updates the process plan before sending it to Sales

1:30 P.M.

IN THE WAREHOUSE

Songchuan picks up materials and accessories from the warehouse to install on the current machine

2:45 P.M.

PERFORMANCE TEST

He installs and tests the accessories on the current machine with the help of application engineer Hou Keke

3:30 P.M.

PRELIMINARY ACCEPTANCE

Internal preliminary acceptance of the current machine includes measuring the first workpiece after grinding

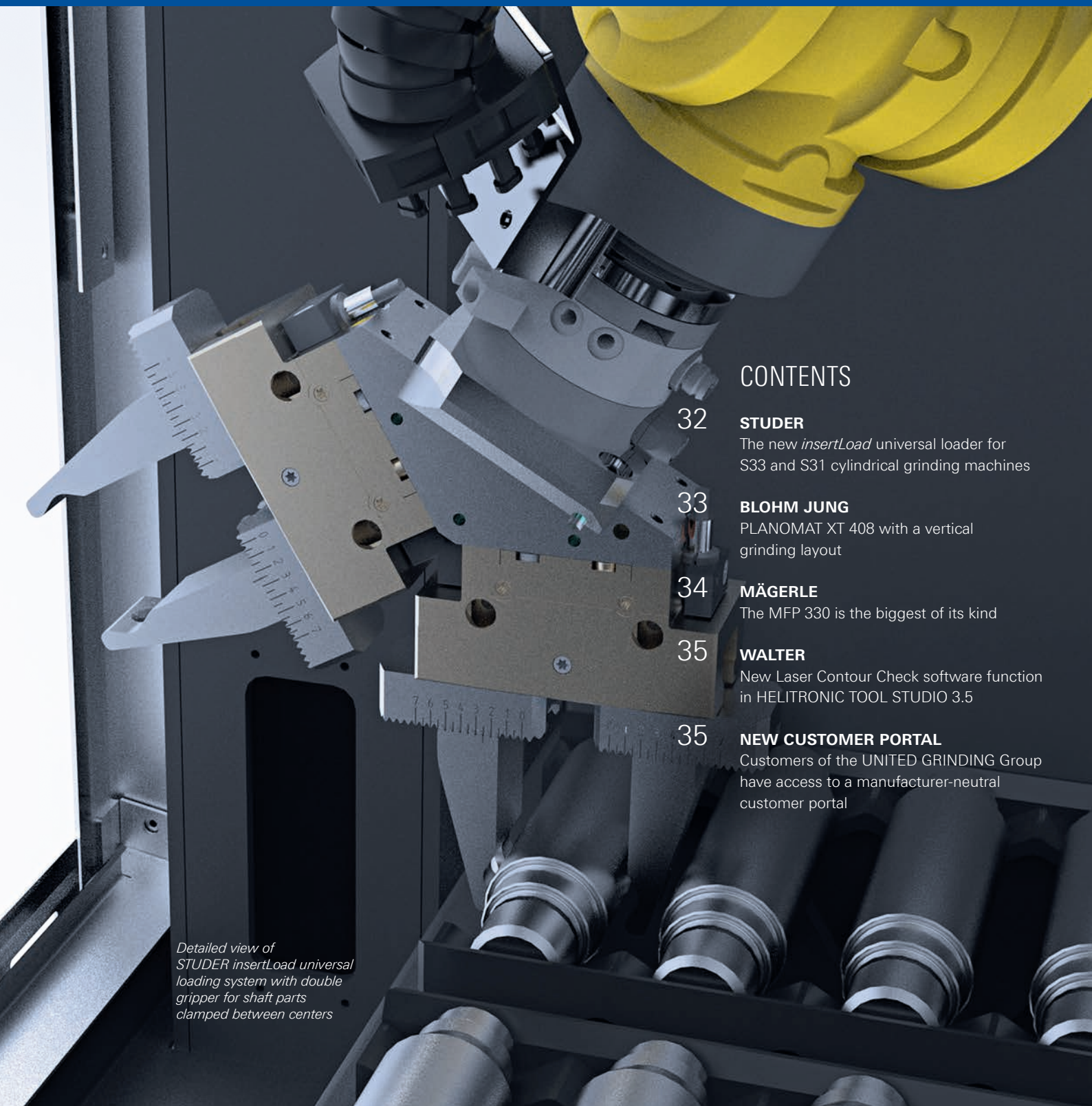
5:00 P.M.

A LAST CHECK

Songchuan is on his way back to the office to check his emails before going home

TOOLS & TECHNOLOGY

NEWS FROM THE UNITED GRINDING GROUP



Detailed view of STUDER insertLoad universal loading system with double gripper for shaft parts clamped between centers

CONTENTS

S31 – CNC universal external cylindrical grinding machine with new insertLoad automation solution

NEW UNIVERSAL LOADING SYSTEM

The new STUDER *insertLoad* loading system is a universal automation solution for S33 and S31 cylindrical grinding machines. It can load parts between centers and in chucks

THE NEW, UNIVERSAL AUTOMATION solution makes it easier to load and unload the S33 and S31 CNC universal cylindrical grinding machines. Until now, customer-specific loaders were required for automation. The new standardized loading system can handle both vertical and horizontal workpieces and, thanks to its design, can be easily configured for centers or chucks by the users themselves. A set-up wizard helps users to program the loading system using simple visualizations; no programming knowledge is needed.

The S33 and S31 are ideal grinding solutions for small to large workpieces in one-off, small-batch, and mass production. Both machines have a distance between centers of 400 to 1,600 millimeters (15.75 to 63 inches) and a center height of 175 millimeters (6.9 inches). The *insertLoad* can handle distances between centers of up to 1,000 millimeters (39.4 inches) and thus closes a gap in STUDER's standardized automation systems. The workpieces can be up to 100 mm in length and weigh 1.5 kg in alternating or 5 kg in individual operation.

GREAT FLEXIBILITY

Due to the great flexibility of the loader in terms of geometry, size, and the time required for the relevant grinding task, its level of autonomy varies, as does the capacity of the workpiece drawers. The time without operator intervention is typically between half an hour and one hour. A Fanuc robot takes over the loading and unloading of the workpieces. It moves back and forth along a linear axis between the loader and the machine's workspace.

Another important factor in the development was reliability in grinding processes that use grinding oil. For example, a loading hatch separates the loading area of the automation solution from the workspace of the machine. This prevents flame flashback in processes that use grinding oil. The software and a safety switch furthermore ensure that operators are not at risk in the event of a deflagration. STUDER will present the new *insertLoad* loading system to an international audience for the first time at EMO Hannover 2023 – it is also currently being prepared for use on other machines.

CONTACT:
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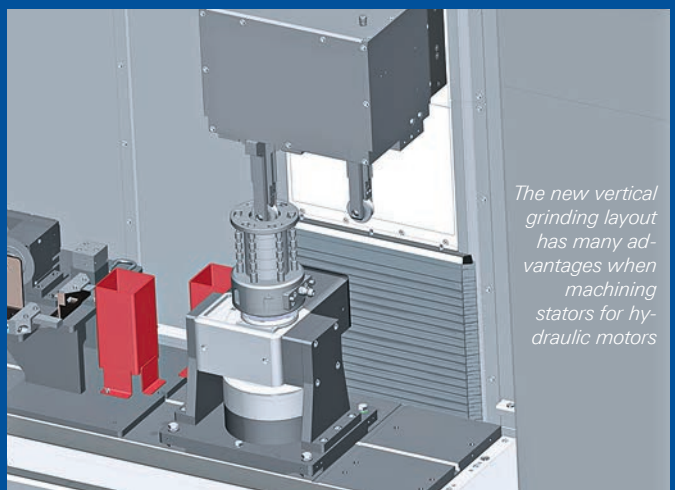
BENEFITS AT A GLANCE

- Economical standard solution
- Universal use
- Operate using set-up wizard
- Loading between centers or in chuck
- Completely integrated into machine design

MORE PRECISE AND PRODUCTIVE

BLOHM JUNG equips its PLANOMAT XT 408 with a vertical grinding arrangement and an automation solution for the internal machining of hydraulic motor stators



The new vertical grinding layout has many advantages when machining stators for hydraulic motors

MORE UNIFORM DISTRIBUTION OF GRINDING ALLOWANCE, higher feed rates, shorter cycle times, and less strain on the grinding spindle belts: The new vertical grinding layout of the PLANOMAT XT 408 offers numerous advantages when machining stators for hydraulic motors. A quick-clamping device also lets the grinding arm be replaced faster and easier. Changing to a different stator variant by retooling the spindle arm, grinding wheel, dressing roller, and workpiece clamping device only takes around 30 minutes all told. This results in higher precision and increased productivity.

The vertical grinding arrangement does not require special spindles. It has standard spindles with flange-mounted motors that use belt drives to achieve the speeds required for the durable CBN grinding wheels. No separate cooling is required for spindle or motor. The grinding wheel is dressed within the machine, typically after every five to six loads. In order to precisely hit the profile on the dressing roll, the heat conduction of the grinding arm and machine is recorded in the workspace using a Samsomatic air impact measurement system.

OUR OWN AUTOMATION SOLUTION

The new automation solution specially developed for this purpose also contributes to higher productivity. A robot gripper picks up the stator package to be ground from a buffer magazine and loads it into the workspace through a side door on the right-hand side of the machine. The finished package is discharged from the machine and placed on a conveyor belt. Automation can currently work independently for up to an hour, giving users more time for other tasks. BLOHM JUNG will demonstrate how the new system works in practice for the first time ever at EMO Hannover 2023 using a two-armed variant of the PLANOMAT XT 408 with a buffer magazine and automatic loader.

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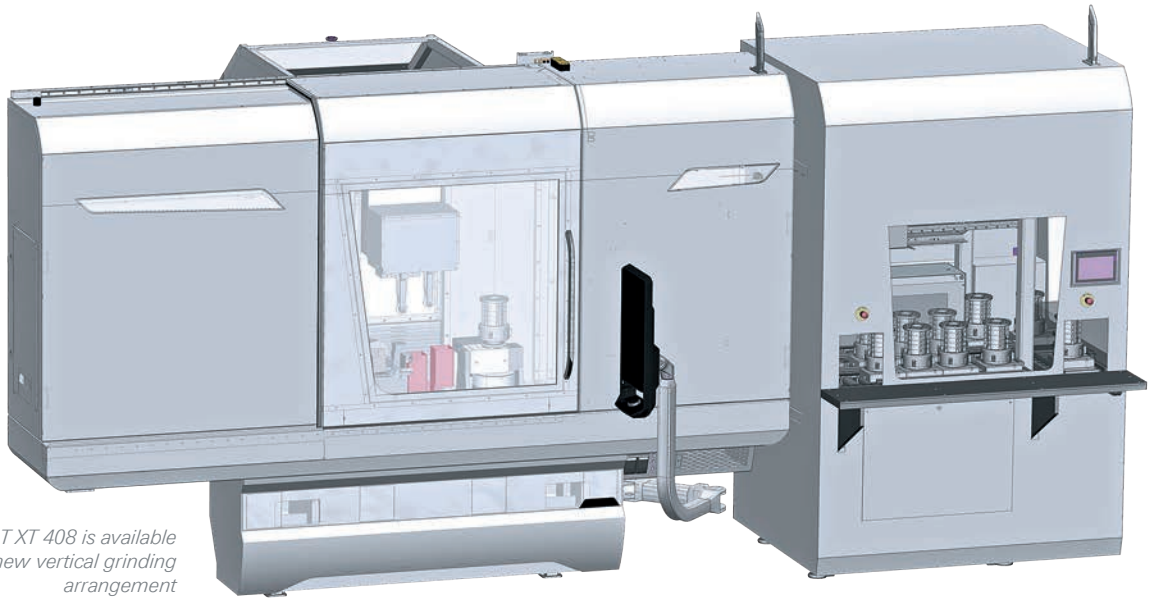
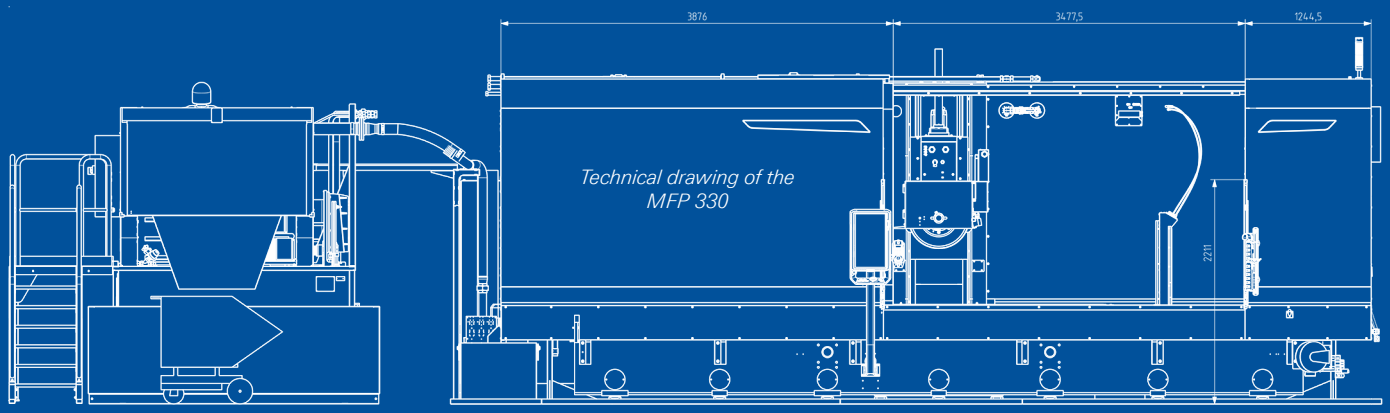
TECHNICAL SPECIFICATIONS

- Footprint including automation components approx. 6,500 x 2,200 mm (256 x 87 inches)
- Grinding length/workpiece stack height: max. 130 mm (5.12 inches)
- Cutting speed: max. 80 m/s (15,750 sfpm)
- Grinding power: up to approx. 7 kW (9.5 hp)
- Quick-change interface for time-saving retooling
- One or two grinding arms
- Automation with buffer magazine



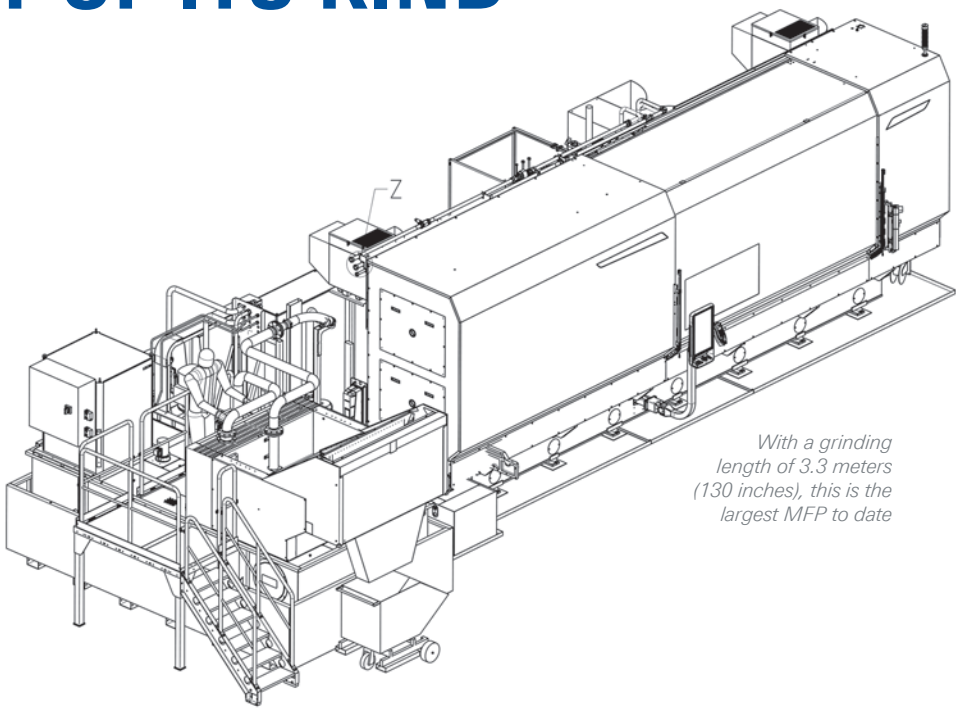
PLANOMAT XT 408 is available with a new vertical grinding arrangement



Technical drawing of the MFP 330

THE LARGEST OF ITS KIND

The MÄGERLE MFP 330 is the biggest machine of its kind ever made



With a grinding length of 3.3 meters (130 inches), this is the largest MFP to date

MÄGERLE MFP MACHINES stand for precision grinding of large workpiece series in continuous operation. The robustly designed systems for creep feed grinding, profile grinding, and surface grinding using the pendulum method are modular in design. The basic modular system features a variety of table lengths, vertical strokes, additional axes, and special components for workpiece-specific configuration.

The most recent example of the great variability of the series is the MFP 330, which MÄGERLE built on behalf of a customer. This machine has a grinding area 3,300 millimeters (130 inches) long and a table width of 750 millimeters (29.5 inches). This makes it the largest machine of its kind ever made.

The MFP 330 has been specially manufactured for a leading manufacturer of motor-driven devices for the forestry, landscape maintenance, gardening, and construction industries. This long machine was designed to grind long machine tool components, such as guideways and injection molds, and is, therefore, an economical alternative to gantry machines. However, it can also be used to economically process special tools. "Machines like the MFP 330 enable us to sell to particularly challenging niche markets," says Viktor Ruh, Product Manager at MÄGERLE.

HIGH PERFORMANCE

In order to perform its special tasks optimally, the MFP 330 has a particularly powerful grinding spindle (115 kW/155 hp) and a correspondingly large grinding wheel (600 mm x 300 mm/26 x 11.8 inch). The workpiece profile is dressed in the machine using a table dresser. A special clamping device was required to withstand the high grinding forces. Like the machine, the coolant cleaning system of the MFP 330 is unusually large. It has a 10,000-liter (2,640-gallon) tank and achieves a flow rate of 780 liters (205 gal) per minute for the grinding process.

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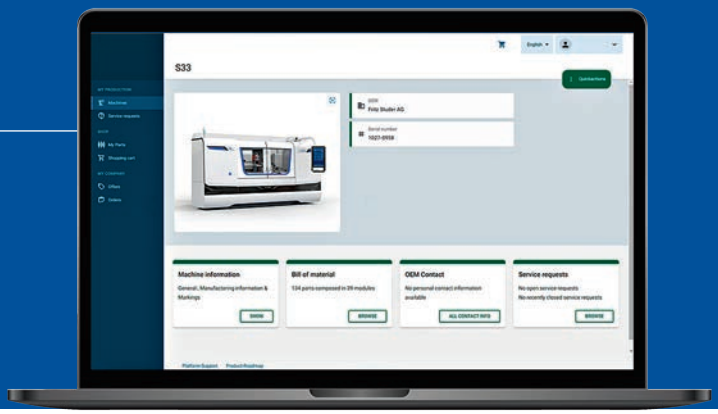
TECHNICAL SPECIFICATIONS

- Table size and grinding area: 3,300 x 750 mm (130 x 29.5 inches)
- Configurable grinding spindle power: 25, 50, 75, or 115 kW (33, 67, 100, or 155 hp)
- Maximum grinding wheel speed: dia. 600 mm x width 300 mm (dia. 26 x 11.8 inch)
- Footprint with coolant cleaning system: approx. 13 x 4.5 m (42.6 x 14.75 ft)
- Coolant cleaning system with 10,000-liter (2,640-gallon) tank
- 780 l/min (205 gal/min) flow rate for cooling the grinding process

TRANSACTION-NETWORK

UNITED GRINDING Group invests in platform providers to expand the functions of Digital Solutions



Screenshot of the Transaction-Network portal

UNITED GRINDING CUSTOMERS will be able to order spare parts, resolve service tickets or maintain machine records faster and more easily than ever before using the Transaction-Network customer portal. This tool developed by Transaction-Network was so impressive that we bought shares in the company as well as licenses. The digital platform is a software-as-a-service solution for quick, simple, and affordable digitalization of after-sales service using standardized interfaces.

"A manufacturer-independent customer portal has many advantages for customers, such as uniform logins and consistent user interfaces," says Paul Kössl, Global Head of Business Development and Customer Care at UNITED GRINDING Group. The portal gives customers access to all important master data, documentation, and the history of their machines. For UNITED GRINDING customers, it is particularly convenient that the new customer portal will also be connected to the in-house SAP system, which will enable manual machines to be managed in separate accounts. This means that the appropriate operating instructions, documentation, and parts and spare parts lists are also automatically available for analog grinding machines.

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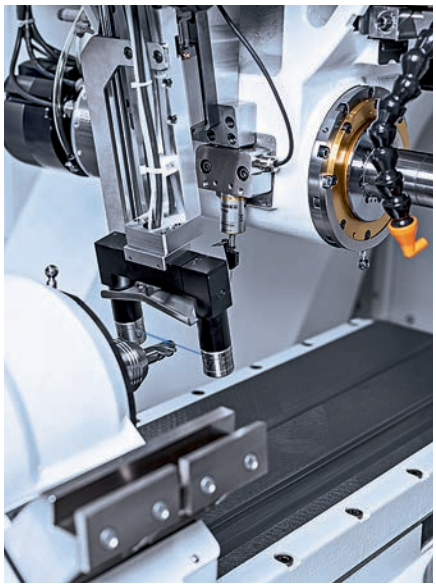

Laser Contour Check measuring system in a WALTER tool grinding machine

NEW LASER CONTOUR CHECK FEATURE

At EMO Hannover 2023, WALTER will present new software functions for its intelligent, non-contact measuring system in HELITRONIC TOOL STUDIO 3.5

THE LASER CONTOUR CHECK SOFTWARE module in the latest release of the HELITRONIC TOOL STUDIO 3.5 workpiece processing software is more powerful than before. Measurement operations can be added to a program with just a few clicks. The laser operation locks onto the workpiece contour, automatically follows the corresponding grinding edge during measurement and then compares the target and actual contour. If the deviations are outside the specified tolerance range, the software initiates a fully automatic correction to ensure that subsequent parts are within the tolerances. The aim is to reduce the number of rejects.

Non-contact tool measurement using lasers is fast and avoids damaging the tool. Among other things, the new software module presented at EMO Hannover can correct any tangentially connected contours. Furthermore, all corrections are presented in graphical and tabular form in a clear measurement report.

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The UNITED GRINDING Group has been making its customers more successful around the world for 30 years. This also applies to Mexico, where the manufacturing industry has great potential for the grinding machine market, but domestic companies often struggle to compete internationally

TEXT: Markus Huth

LAND OF

Antonio Mendoza (above, next to the Guadalajara Cathedral) is the CEO of Moldes Mendoza, an internationally successful company for high-performance thermoplastic injection molds for large industries, such as food, hygiene, medicine, electronics, automotive, and aerospace. As CEO of UNITED GRINDING North America, Markus Stolmar (right) is proud to count him among his customers

Mexico combines diverse landscapes, a momentous history, and a state-of-the-art manufacturing industry. Shown here (from left): the sun pyramid of Teotihuacán, the pillar of independence in Mexico City, the historic colonial town of Real de Catorce, and the Ford automobile plant in Sonora

Photos: Diego Grandi/Shutterstock, eskystudio/Shutterstock, E Rojas/Shutterstock, Claudio Briones/Shutterstock, IMAGO/Ingimage, Luis Gutierrez/NortePhoto.com/Alamy

PRIDE AND ENTHUSIASM resonate in Antonio Mendoza's voice when he talks about his new STUDER machine. For Mexico, his history is both typical and extraordinary. Like many of Mendoza's compatriots, his father once emigrated to the neighboring USA to find a better life. There, he kept his head above water by working as a kitchen assistant and in other temporary jobs until at some point he got a chance in a metalworking company. Through his hard work and enormous aptitude for learning, he became a sought-after master of the grinding trade. He produced metal parts for the aerospace industry with great precision and finally founded his own successful company and a family. But what might be the happy end of a story for the majority of people was just the beginning for the Mendozas.

"One day my father decided that we would return to his home country of Mexico to start a business," says Mendoza. Moldes Mendoza was founded in 1972 and today is the market leader for thermoplastic high-performance injection molds in Mexico. The company also supplies customers around the world, including the automotive, aerospace, and electronics industries. However, their main business is covers and caps for hygiene and medical products, food containers, and other everyday products. "Everyone probably picks up something every day that was made using our tools," says Antonio Mendoza, who helped his father as a teenager and learned the trade from him early on.

Today, he is the CEO himself and is responsible for Moldes Mendoza's success story. Among other things, he modernized their machinery by purchasing a S33 CNC universal cylindrical grinding machine from STUDER.

FOREIGN COMPANIES DOMINATE

Moldes Mendoza has around 60 employees and is a purely Mexican-run company – something that makes this success story unusual for Mexico. The Mexican manufacturing industry is mainly dominated by foreign corporations. A glance at the map reveals what makes this country with 126 million residents interesting for companies around the world: It forms a bridge between North and South America, is a direct neighbor of the largest industrial nation in the world (USA), and, thanks to deep-sea ports in the Atlantic and Pacific, is well integrated into the global supply chain system. It is also one of the most open markets in the world: 13 free trade agreements with around 50 partners including the USA, Canada, the European Union, Japan, and numerous South American countries.

"Mexico is already an important market for us as a manufacturer of grinding and machine tools and has great potential," says Markus Stolmar, CEO of UNITED GRINDING North America. According to figures from the Association for Manufacturing Technology (AMT), grinding machines worth around 158 million US dollars were imported in 2022. With a gross domestic product of around 1.41 trillion USD, Mexico was in 15th place globally in 2022 and boasts major well-established industries such as automotive, aerospace, energy, and electronics.

The federal capital Santiago de Querétaro is the headquarters of UNITED GRINDING Mexico, headed by German Gordillo. It is an important cultural city with UNESCO World Heritage status. The famous statue of an indigenous dancer is located in the city center

Moreover, the country's population is very young, which is promising for the future labor market—in contrast to the aging workforce in many industrialized countries.

AT THE HEART OF INDUSTRY

UNITED GRINDING has had its own branch in Mexico since 2014, where four service technicians and one customer manager currently work. It is located in the famous UNESCO World Heritage Site city of Santiago de Querétaro in the center of the country and in the heart of an important and dynamic industrial region, as German Gordillo, Managing Director of UNITED GRINDING Mexico, explains. Large automotive and aerospace companies have their plants here or in neighboring states. For example, Volkswagen operates Mexico's biggest automotive plant in Puebla with around 13,000 employees. The north of the country, which borders the USA, is also easily accessible thanks to the good highway connectivity and international airport, and this is where the majority of production facilities for metal components are still located. To the west, we head to the state of Jalisco and its capital Guadalajara, which is considered Mexico's Silicon Valley due to the abundance of tech companies.

EXPERTISE AND PERSONAL COMMUNICATION

Moldes Mendoza is also located in Guadalajara and has already been visited by German Gordillo's team. "Our customers in Mexico expect highly expert services. At the same time, Latin American culture attaches great importance to personal contact and direct communication," he says. But why did Antonio Mendoza choose a new UNITED GRINDING system in the first place just over a year ago? "My father preferred to work with his usual manual cylindrical grinding machine. He was a true master in its use and achieved great precision," says Antonio Mendoza. But when he retired, there was no substitute for these skills and so the decision was made to purchase a new, technologically advanced, and easy-to-operate system. "I am a fan of TITANS of CNC and was very impressed by what they achieved with the STUDER system. I simply wanted to invest in the best and most future-proof machine with diverse capabilities and reliable service," says the CEO, explaining his decision to opt for the S33.

Thanks to this, his employees can now reliably produce precise components with accuracies down to the micrometer after a short introductory phase. Production has become quicker, more efficient, and cheaper overall, says Mendoza, and some components that used to have to be made externally are now made directly in-house. "The machine opens up completely new opportunities for our business and I see a very successful future for us in Mexico."

"UNITED GRINDING'S MACHINE OPENS UP COMPLETELY NEW OPPORTUNITIES."

Antonio Mendoza, CEO of Moldes Mendoza

Photos: Angel Flores Guerra Bistrain/Unsplash, VED cine naturaleza arte/Shutterstock

UPDATE

DESIGN IS THE FUTURE

In the UNITED GRINDING Group, design has the role of anticipating the future as well as a functional purpose. This became apparent in 2013 when a new machine design was developed for all the Group's brands. And continued from 2015 with C.O.R.E., the first joint interaction design, and the development of a cross-group digital ecosystem which will result in further innovations

TEXT: Michael Hopp

THE NEW MACHINE DESIGN

Those responsible at the UNITED GRINDING Group and designer Dominic Schindler had little more than a year to complete the new corporate design in time for EMO Hannover 2013. This was a major, high-impact task. The transition from Körber Schleifring to the UNITED GRINDING Group was shown at the time by a uniform machine design and consistent design elements, such as the signal light, etc. The premium design was intended to convey the additional value of the machines, and also to appeal to customers and employees.

Motion 02/2013 showed the new machine design of the UNITED GRINDING Group and aligned the layout with the new CI

C.O.R.E. PRESENTATION – MORE THAN DESIGN

The C.O.R.E. initiative was started in 2015 advocating Industry 4.0 and the digital transformation of the entire Group. The C.O.R.E. hardware and software architecture presented in Milan in 2021 added group-wide uniform machine operation concepts to the new machine designs. On the operator side, a panel was developed for all machines that ensures a consistent user experience. As with the hardware, we now have a design system containing a uniform component library for software development.

The standardized C.O.R.E. panel with user-friendly, configurable C.O.R.E. HMI, based on state-of-the-art web front-end technology; uniform software has complemented the visually coordinated appearance of the machines from 2021

THE FUTURE HAS ALREADY BEGUN

Developed by IRPD, the additive manufacturing specialist of the UNITED GRINDING Group, the LPBF IMPACT 4530 system marks the beginning of the next evolution in machine operation. If this trend continues, fixed control panels may disappear almost entirely from machines in ten years. The IMPACT 4530's sophisticated, vacuum-resistant laser protection glass could then be replaced by a large screen built into the protective door that shows the images transmitted from cameras inside the machine. The operator would see what was going on inside the build area in high resolution on a digital screen, as well as other important processing and access data.

This IMPACT 4530 shows what machines will look like in the future. Control panels are replaced by touchscreens for human-machine interaction

Photo: Thomas Eugster

DIGITAL, NETWORKED PRODUCTION NEEDS CLEVER MINDS

The history of human production has always focused on expanding possibilities—and has always been accompanied by fears that it could harm or replace human beings

With digital technology, humans can create a new, modern production reality involving fewer repetitive and monotonous tasks. Their creativity and intuition are crucial

TEXT: Sebastian Barth

PROGRESSING FROM SIMPLE WORKSHOPS to digitally connected production facilities is just one remarkable process from our industrial history. The driving force behind this progress has always been and still is human creativity and innovation.

The German word for factory (Fabrik) comes from the Latin word fabrica, which means workshop or structure. In ancient Rome, the term was used to describe buildings in which craftsmen produced everyday products mostly using hand tools. Today's factories are rarely associated with craftsmen but rather with skilled labor, engineers, and knowledgable employees. However, it is still essential that they understand their craft.

The factory concept continued to evolve, particularly during the industrial revolution in the 18th and 19th centuries. This period saw the emergence of large, industrial production facilities in which human manual processes were replaced with machines. Thanks to the development of ever-more sophisticated machine designs and their continual further advancement, machine tool manufacturing has today become one of the world's key industries.

HOW IS THE ROLE OF HUMANS CHANGING?

The machine tool industry today is in a special period of evolution. Rising levels of machine digitalization, the technological leaps and bounds made in artificial intelligence (AI), and the growing availability of production data are all leading to a positive boom in automation. More and more factories are now digitally networked. Intelligent machines and systems communicate in these facilities to create highly complex production systems. In this socio-technological environment, the role of humans is also fundamentally changing. But how exactly is the role of human beings changing?

In the past, humans were often entrusted with repetitive and monotonous tasks. They were responsible for the manufacturing and operation of machines, carried out assembly work, or supervised production. With the introduction and constant expansion of assistive digital technologies, we have unprecedented potential to cut back on people performing these activities. Machines are better than humans at handling large amounts of data quickly and efficiently. They can carry out complex calculations and perform repetitive tasks both quickly and accurately. Tasks involving heavy loads or hazards can be done with less risk for the employees. Errors are avoided, productivity is increased and occupational safety is enhanced.

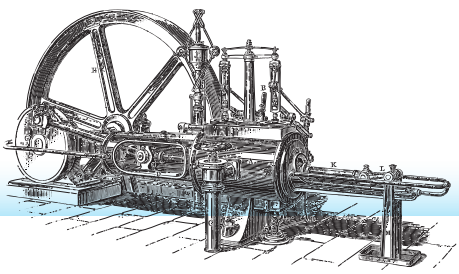
WHEN IT COMES TO COMPLEX QUESTIONS, AI IS NO MATCH FOR A CLEVER MIND

One of the most important tasks of humans in this environment is to create suitable interfaces via which humans can communicate with the intelligent machines in the production network. Exercising this inventive capacity enables humans to interpret data and information from machines and systems and derive added value. Humans must also employ their technical knowledge and experience to design, configure, and optimize machines. It is particularly important that machines and digital assistance systems created by humans can be used intuitively. And only clever programming and constant maintenance of intelligent machines and robots ensure the safe, productive execution of production tasks.

Human creativity will continue to play a central role in the future as it did in past centuries. Innovative approaches to optimizing processes are often found by combining technological knowledge and inventiveness. When it comes to finding creative solutions, developing new ideas, and solving complex problems that require a high degree of flexibility and originality, no artificial intelligence can match the abilities of a clever human mind. In contrast to machines and algorithms, humans' many years of experience and interdisciplinary cooperation enable them to develop innovative products and

"HUMANS CAN WEIGH PERSPECTIVES WHEREAS MACHINES DEPEND ON PARAMETERS."

Sebastian Barth



Photos: Natalia Leinonen, koya979, Nyvit-art, Itsmesimon, Hein Nouwens, Marzolino (all Shutterstock)

differentiate between correlation and causality. In this way, they can identify the causes of problems and technologically evaluate the effect of measures.

CREATIVITY AND CRITICAL THINKING WILL BE IN GREATER DEMAND IN THE FUTURE

The flexibility and adaptability of humans are becoming ever-more important in the increasingly volatile, uncertain, complex, and ambiguous (VUCA) economic environment driven by climate change, legal and geopolitical uncertainties, and crises in raw material and skilled worker availability, to name but a few current issues. Changes or unfamiliar situations often require us to quickly adapt our skills and mindsets. Human cognitive abilities and intuition are crucial here because mechanical systems usually depend on programmed instructions and parameters to achieve their targets.

"DIGITALIZATION DOESN'T REPLACE HUMANS, IT EXPANDS OUR POSSIBILITIES."

Quote: Bartels, May, von Au

Critical thinking and making ethically based decisions will also be in greater demand in the future. More and more manufacturing companies are focusing on sustainable products and production methods. This is causing them to rethink products and processes to which machine systems have not yet been adapted. Humans can analyze and weigh different perspectives in complex and disorderly situations and information systems. Machines and production systems, on the other hand, are limited to working with defined rules and algorithms.

The role of every one of us is to be aware of this interplay and to form a symbiosis between our own strengths and the machinery strengths newly created by the innovative power of other people. In this way, each of us can contribute our specific expertise to make the best possible use of the current wide range of economic, ecological, and social opportunities. The authors Bartels, May, and von Au sum it up: "Digitalization does not replace humans, rather it expands their possibilities."[1] And as bright minds, we know how to exploit these possibilities and create a new world of production.

[1] Peter Bartels, Peter May, Dominik von Au: "F.cube – How to secure the future of your family business". Publisher Murmann

ABOUT

SEBASTIAN BARTH

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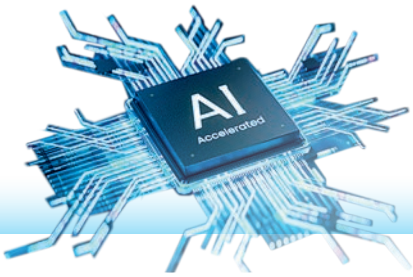

Photos: AFANASEV IVAN/Shutterstock, IM Imagery/Shutterstock, private

LEADING TRADE SHOW FOR GRINDING TECHNOLOGY

MAY 14-17, 2024, STUTTGART, GERMANY

IN MAY, GRINDINGHUB WILL ONCE again be held in Stuttgart. It is one of the most important international trade shows for grinding technology. It is being organized by the German Machine Tool Builder's Association (VDW) in cooperation with the Swiss Association for the Machinery, Electrical and Metal Industry (Swissmem) and the Messe Stuttgart exhibition center. Here, trade visitors can find out about new developments in grinding machines, tool grinding machines, and abrasives. An additional theme is current trends in software tools, quality management, and the entire production environment related to the value chain of grinding technology. The UNITED GRINDING Group is also looking forward to informing customers and grinding enthusiasts about our latest technologies and products. You can experience the revolutionary and cross-brand C.O.R.E. hardware and software architecture or try out state-of-the-art grinding technologies and automation solutions directly at the booth. GrindingHub celebrated its premiere in 2022 and takes place every two years. "We are delighted to be back at GrindingHub presenting our new products to customers and interested parties," says Michèle Fahrni, Head of Marketing & Communications.

GrindingHub, May 14-17, 2024,
Landesmesse Stuttgart GmbH,
Messepiazza 1, 70629 Stuttgart, Germany

www.grindinghub.de/en

OTHER TRADE SHOWS:

OCTOBER 2023

MSV 2023

OCTOBER 10–13, 2023
MSV –
BRNO, CZECH REPUBLIC

MECT 2023 メカトロテック ジャパン 2023 MECHATRONICS TECHNOLOGY JAPAN

OCTOBER 18–21, 2023
MECT –
NAGOYA, JAPAN

NOVEMBER 2023

METALEX 2023

NOVEMBER 22–25, 2023
THAI METALEX –
BANGKOK, THAILAND

APRIL 2024

CCMT

APRIL 8–12, 2024
CCMT –
SHANGHAI, CHINA

MAY 2024

GRINDING HUB

MAY 14–17, 2024
GRINDINGHUB –
STUTTGART, GERMANY

YOU CAN FIND THE LATEST TRADE SHOW DATES AT
www.grinding.ch/en/events

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