

Motion

01.2024
The UNITED GRINDING Group's
customer magazine

INTERVIEW

IDEAS

INTERNATIONAL

Competing for the best talent

Don't be afraid of Gen Z

Czech Republic, country of skilled workers and industrial production



*Roger Leuenberger (right),
Head of Vocational Training at
STUDER, trains young professional
Luis Salzmann (19) to participate
in WorldSkills 2024 in Lyon.
There is no shortage of ambition
and passion*

WHERE ENTHUSIASM COUNTS

High performance in precision manufacturing, genuine teamwork, internationality, and the company's networking with many industries – the UNITED GRINDING Group offers an ideal environment for anyone who wants more than just a job



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PUBLISHER UNITED GRINDING Group Management AG, Wankdorfallee 5, 3014 Bern **RESPONSIBLE** Michèle Fahrni
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LITHO EINSATZ Creative Production GmbH & Co. KG, Hamburg **PRINTING** Walstead Kraków, Poland

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“WE CAN BE PROUD OF OUR OFFERINGS FOR YOUNG PROFESSIONALS”

DEAR READERS,

The cover of this Motion, with **its focus on recruiting, employer branding, and young professionals**, shows how the training team at STUDER is preparing for the international professional championship WorldSkills 2024 in Lyon, France.

The motif was created during training at STUDER in Thun, Switzerland, on some of the country’s most modern training machinery. STUDER apprentices regularly take top places in national and international competitions, which shows that their training is among the best in the world and that they **enjoy doing it**.

There are often complaints today about how difficult it is for manufacturing companies to find well-motivated young professionals. At UNITED GRINDING Group, we can only confirm this to a limited extent. We’re looking for employees and specialists for our companies on three continents, and find very different conditions in each case.

Of course, we are also in competition for the best talent. But we have proven experience **that the high quality of the training we offer plays a major role in the successful recruitment of young professionals**.

To convince young applicants, our industry needs to show how we work and what we work on because there are often outdated perceptions about this. **We no longer have any noise or oily workbenches, but rather our factories are super clean, bright, and quiet**. We employ hundreds of software engineers. What we do is precision technology, often at the physical limits, which makes many industrial products possible in the first place. I think that’s one of the best offers for young people who want to make a difference in their profession.

In this Motion, we show how attractive the UNITED GRINDING Group is as an employer in a series of reports from a wide range of perspectives. This means that our customers can continue to rely on us to have the best specialists thinking about how we can contribute to their success with optimal solutions.



*Stephan Nell,
CEO, UNITED GRINDING Group*

Stephan Nell,
CEO, UNITED GRINDING Group



USA

GRINDING ACADEMY WITH A RECORD NUMBER OF MACHINES

The TITANS of CNC team now have a record number of UNITED GRINDING Group machines in their workshop in the U.S. state of Texas. A total of five machines are installed: a STUDER S31, STUDER favoritCNC, WALTER HELITRONIC POWER 400, WALTER HELICHECK 3D, and the BLOHM PROFIMAT XT with tool changer. With the help of these systems, tutorial videos for the Grinding Academy and content for the social media channels of TITANS of CNC, which have several million followers, are produced. The Grinding Academy is a joint project between the UNITED GRINDING Group and TITANS of CNC. It provides high-quality CNC grinding training online. "With the technology installed at TITANS of CNC, we have the opportunity to create more educational content than ever before," said Markus Stolmar, CEO and President of UNITED GRINDING North America.



SWITZERLAND

GOLD AND SILVER AT SWISSKILLS

STUDER trainee Luis Salzmänn won the gold medal in the "Industrial Design EFZ" category at SwissSkills 2023. The Swiss Professional Championships took place during the Sindex trade show in Bern. "I would like to thank my teachers, colleagues, friends, and family for their support," said the 18-year-old, who qualified for the WorldSkills 2024 international professional championships in Lyon, France. From September 10 to 15, he will compete in the category of Mechanical Engineering CAD with young professionals from about 30 countries. STUDER was also able to celebrate another success at SwissSkills: Noah Rossel won the silver medal in the "Automation specialist EFZ" category.

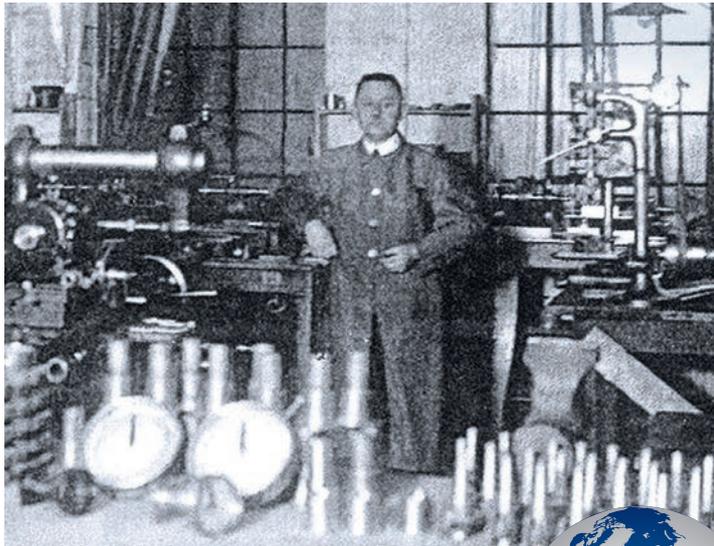


SWITZERLAND

FRITZ STUDER AWARD PRESENTED

Emil Sauter from the Institute for Machine Tools and Manufacture at ETH Zurich is the winner of the "Fritz Studer Award 2023". His research work on the development of an innovative condition monitoring system for external cylindrical grinding with metal-bonded CBN tools convinced the entire jury, said Frank Fiebelkorn, Head of Research and Technology at STUDER. The new method can detect thermal damage in situ and predict the remaining service life of grinding tools relatively precisely. For this purpose, the method developed by Sauter measures numerous process variables such as structure-borne noise, spindle current, or force parameters. By using time-frequency transformations, the process characteristics of a grinding process are generated for the predictions. In general, the work shows that machine learning methods also lead to higher productivity and improved component quality in grinding practice, as the jury explained. The "Fritz Studer Award" is associated with prize money in the amount of 10,000 Swiss francs.

Photo: SwissSkills; illustration: iStockphoto/jack0m



GERMANY

BLOHM CELEBRATES 100TH ANNIVERSARY

The long-established manufacturer BLOHM is turning 100 this year. In 1924, Robert Blohm founded a factory for measuring instruments and equipment engineering in Hamburg, where the legendary WURI II machine tool was built. In the following decades, the name BLOHM developed internationally to become synonymous with high-quality surface and profile grinding machines with the best precision, power, and productivity. BLOHM is now part of the UNITED GRINDING Group after a merger with JUNG, which is also over 100 years old. To celebrate the anniversary, a special fair was held on the company premises in Hamburg for employees, their families, customers and other visitors. They enjoyed live music, fun and games as well as regional cuisine such as fish buns and fried pastries.



SINGAPORE

UNITED GRINDING GROUP ESTABLISHES BRANCH IN SOUTHEAST ASIA



With its own branch, the UNITED GRINDING Group is intensifying its business activities in Southeast Asia. "Southeast Asia is a strategically very important region for us. The establishment of a branch is the logical step to further strengthen our activities there," said Stephan Nell, CEO of the UNITED GRINDING Group. The group has already been present in the region for many years through WALTER EWAG Asia Pacific. This will now be incorporated into the new branch in Singapore. "We can combine the strengths of our powerful team in the joint Group branch and provide even better service to our customers. In the future, we will offer all three technologies of the Group – surface and profile grinding, cylindrical grinding, and tool processing – under one roof," said Michael Schmid, who has been responsible for the Southeast Asia business of WALTER EWAG for over 20 years and is managing the new branch as CEO.

GERMANY

20 YEARS OF HELITRONIC VISION



WALTER celebrates the 20th anniversary of its successful HELITRONIC VISION range. It was first presented at the EMO 2003 trade show and was a world first at the time: the first tool grinding machine with a mineral cast machine base and three-axis linear drive technology. "That was a technological milestone for precision and surface quality and a new benchmark in the entire tool manufacturing industry," according to Siegfried Hegele, Head of Strategic Product Management at WALTER. Since then, the subsequent machine generations have been continuously improved and equipped with innovative features such as laser-based measurement or extensive automation options. The actual model is the high-precision HELITRONIC VISION 400 L for rotationally symmetrical tools and production parts with complex geometries. Among other things, it features C.O.R.E., the UNITED GRINDING Group's revolutionary hardware and software architecture. "Thanks to consistent further development, the HELITRONIC VISION is also our high-end solution for highly precise tool grinding 20 years later," Hegele emphasized.



CAREER IS JUST A WORD

Many people don't know exactly what happens in the production of high-precision machine tools and therefore have no idea of the jobs and career opportunities for young people and career starters.

On the following pages, Motion shows careers in the UNITED GRINDING Group that convey a realistic impression of the variety of jobs and opportunities, the company's international nature, and its networking with other industries. Examples that may embolden one to enter an industry where passion plays a much bigger role than can be seen at first glance.

Text: Michael Hopp

TAO ZHANG

UNITED GRINDING CHINA, CTO

"OKAY, I'M GOING TO INTRODUCE MYSELF." In a video interview, Tao Zhang visibly enjoys talking to Motion about his career at UNITED GRINDING China. "I was born in Xinjiang, Uyghurs. You know that Xinjiang is very far from Shanghai." To study, Tao left his home and went to Xián, a 14th-century city in the middle of China that is guarded by the Terracotta Army. Its university offers a four-year degree in mechanical engineering. From there, he moved to Shanghai in 1996 at the age of 25 as a master's student to work for the state-owned transmission manufacturer SAIC. Five years later, he joined the Chinese company of the German automotive supplier ZF Friedrichshafen as service manager. "I then stayed as a service manager for about five years and gained my first experience with European culture. I liked it. People respect each other and are friendly."

The next friendly Europeans with whom Tao came into contact in 2008 were from the UNITED GRINDING Group. "I was lucky," laughs Tao, after the sound briefly cut out in the video, "because after I had barely started, the department grew to almost 70 people, was renamed Customer Care, and new areas were added. In 2021, my boss needed someone who could take care of more areas. In the end, that meant that additional technical areas became my responsibility." Today, Tao is Chief Technology Officer (CTO) and sees it as an important goal to allow techni-

cal professionals from different departments to work more closely together. "They now know the strategies that will help our business and can support me in my position."

CAREER CHART

- 2005 **Joined UNITED GRINDING China in Shanghai as Service Manager, responsible for machine acceptance, service and spare parts**
- 2011 **Director of Customer Care, responsible for all services in this area**
- 2021 **Chief Technology Officer (CTO), responsible for Customer Care, technology, application, and product quality management**

In his management philosophy, Tao distinguishes between management, leadership, and teaching, and sees the development of employees as the most important condition for success in cutting-edge technology. "In my opinion, the core of everything is the grinding experience," explains Tao. "We need to teach employees to gather more information and experience every day and that they need patience to move forward." Tao is convinced that only those who accept challenges can make a valuable contribution to the development of high-end technology in the long term. "In the end, you'll notice that these employees have developed." This corporate culture is also very attractive for new, young employees. "Employees develop pride in working in a company that is a leader in innovation. This positive feeling spreads among their friends, in their surroundings. That's the best employer branding." It really looks like Tao is right.

**"ONLY THOSE WHO ACCEPT CHALLENGES
WILL BE SUCCESSFUL IN THE END.
I THINK THAT'S A CULTURE THAT'S VERY
INTERESTING FOR YOUNG PEOPLE."**

Tao Zhang

JASON BARBER

UNITED GRINDING NORTH AMERICA, VICE PRESIDENT FINANCE AND IT

CAREER CHART

- 2010 Joined UNITED GRINDING North America as Business Unit Accountant for the Surface & Profile business unit
 - 2013 Manager of the IT infrastructure in the company in cooperation with the provider SAP
 - 2022 Promotion to Director of Finance
 - 2023 Vice President Finance and IT
-



"IN JULY OF THIS YEAR, IT WILL BE 14 YEARS since I accepted the offer to work at UNITED GRINDING Group," recalls Jason Barber, VP of Finance and IT at UNITED GRINDING North America, in his interview with Motion. He continues: After my bachelor's degree in accounting, I worked in the accounts receivable team of a national hotel chain and was looking for something less monotonous." As it turned out, it was that decision that paved the way for almost a decade and a half of continuous professional development, and there's no end in sight.

Barber first joined the company as a business unit accountant for the sales team of the technology group "Surface and Profile Grinding". "It was my job to take care of all accounting tasks for this technology group, including annual budgeting, accounts receivable, accounts payable, and monthly reporting requirements." During this time, Barber excelled at implementing SAP's global Enterprise Resource Planning (ERP)

system. That experience and his knowledge of business information technology qualified him for his next role as Manager of Information Systems. "In my first year in IT, I had to cope with a steep learning curve. I am grateful that my employer invested in the development of the team and helped me acquire the necessary qualifications to succeed in this new role," he says. Over the next eight years, Barber earned half a dozen IT certifications and a Master of Business Administration (MBA) while working.

In 2022, Markus Stolmar, President and CEO of UNITED GRINDING North America,

asked him to lead the IT and finance departments. "Given his experience in many areas of the company and his high level of performance, Jason seemed like the right person to lead both teams," says Stolmar about the decision to offer him the dual role.

When asked what surprises him most about his career development, Barber says: "I couldn't have predicted how much I would learn and grow at each stage of my career. But for me, the most important thing was to always be ready to learn something new and take on additional challenges."

"I'VE BEEN ALLOWED TO TAKE DIFFERENT PATHS TO REACH THE GOAL. TODAY, I'M CONFIDENT IN MY ROLE AND ENJOY IT VERY MUCH."

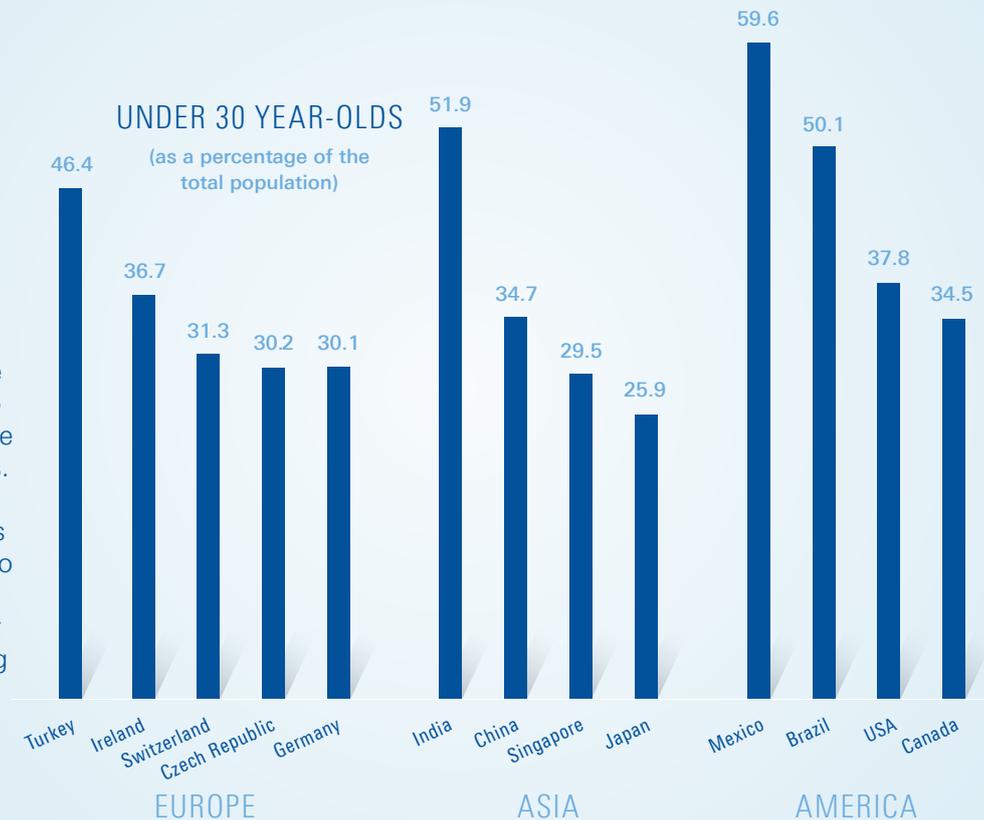
Jason Barber

BRING ON THE YOUNG ENGINEERS AND MECHANTRONIC SPECIALISTS!



Careers are possible at the UNITED GRINDING Group on three continents, for nine brands, and at 21 locations.

The Group strives to attract young professionals worldwide – and in doing so encounters different regional requirements. For example: How many young people are there?



SANDRA SCHIESS MÄGERLE, HEAD OF HUMAN RESOURCES

Schiess is ideally qualified for the Motion interview. The commercial employee, who originally worked in Purchasing, was appointed Head of HR, which came as a surprise to her and is thus an impressive career example. Schiess also has experience with those who still have a career ahead of them: with applicants for vacancies at MÄGERLE. "Today," says the Head of HR, "companies have to sell themselves to the applicant – and not the other way around." Trained poly-mechanics are relatively easy to

find, as MÄGERLE is well known. "They may have already worked on one of our machines in a teaching program or in a company where they were or are employed," says Schiess. People who are unfamiliar with the industry, or people who do not know our industry, are less likely to apply to us. They often lack knowledge of how diverse and exciting the industry is. And hiring non-European talent is not easy due to the regulations in Switzerland.

On the other hand, the industry is quite attractive for women. "We have women polymechanics, designers, and buyers. And in HR, of course ...," laughs Schiess. She's convinced: "The goal must be to find the right person. Whether male, female or other – that doesn't play any role."

"TODAY, COMPANIES HAVE TO SELL THEMSELVES TO APPLICANTS – AND NOT THE OTHER WAY AROUND."

Sandra Schiess

DANIEL RENFER, STUDER, HEAD OF QUALITY CONTROL MANAGEMENT

"I started with an apprenticeship – although at 15, 16 you can't judge what you want in life." When Daniel Renfer talks about his career, it's fun to listen. "I was lucky that I still love the profession I was already enthusiastic about as a young person, namely, that of a designer. It was lucky that I found conditions at STUDER that were great and are still great today and that still ignite my inner fire." "That may all sound a bit like a picture book, but that's how it's been."

Other chapters of the picture book would be the mechanical engineering studies that Renfer completed while working, a one-year absence at another company, and returning home to STUDER. "I thought I was a little Gyro Gear-loose at the time," laughs Renfer, "until I was able to participate in the PULS talent program in 2017, which opened my horizons for

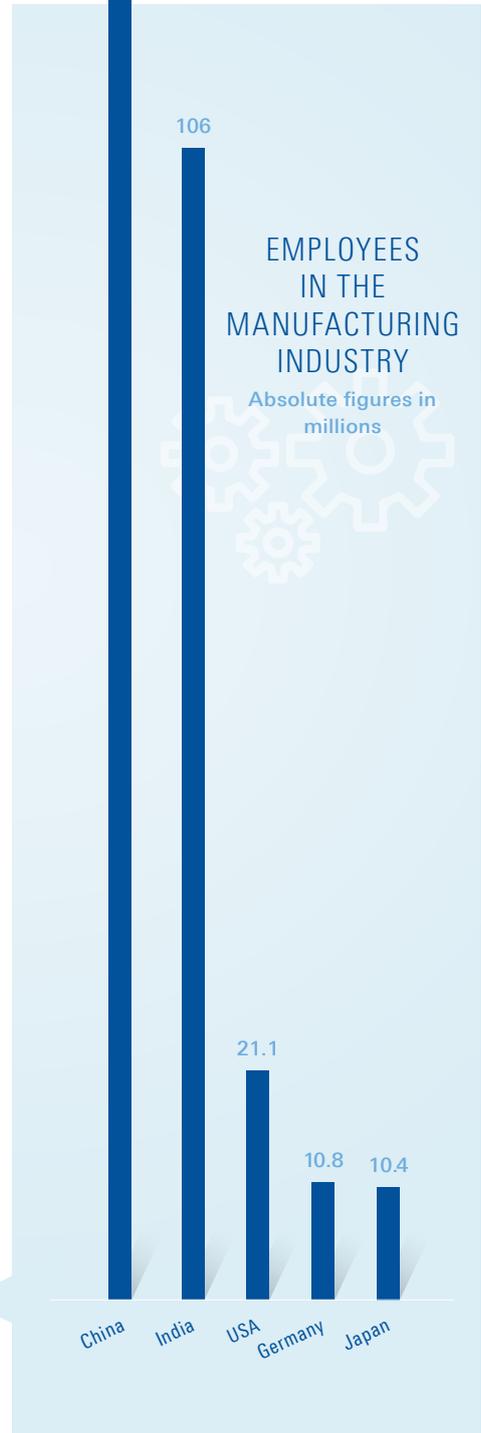
Operations. Leaving my comfort zone for the hard daily routine of Operations was a turning point in my career."

"WITH US, LEADERSHIP MEANS INSPIRATION, NOT INSTRUCTION. I'VE ALWAYS BENEFITED FROM THAT."

Daniel Renfer

Three years ago, the opportunity finally arose to take another step: as Head of Quality Management at STUDER and as organizer of the Quality Management working group at UNITED GRINDING Group.

Industrial job growth has slowed globally in the last decade in favor of trade and services. The lead of "workbench" China and India is the result of high population figures. In India, employment continues to increase in agriculture, which provides 40 per cent of jobs



CAREER CHART

- 1974 Apprenticeship at Montanwerke
Walter GmbH as an industrial mechanic
- 1978 Toolmaker for jigs and fixtures for special
machine construction
- 1983 Technical demonstrator
- 1988 Test technician
- 1989 Quotation administrator
- 1989 Technical sales
- 1996 Product Manager for saw blade grinding
machines at Walter AG Tübingen
- 2000 Engineering Manager Operations at
Walter Grinders INC. Fredericksburg,
Virginia USA
- 2002 Vice President Operations at Walter
Grinders INC. Fredericksburg, Virginia USA
- 2004 Return to Germany to Walter Maschinenbau
GmbH, Head of the Helitronic product line,
Division Manager Marketing and Sales
- 2008 Head of Application Technology, Engineering
- 2013 Managing Director Technology CTO
- 2021 Managing Director (Chair) CEO



HARRI REIN WALTER, CEO

“What AI is today, back then was CNC.” Harri Rein, a “veteran” at WALTER and thus the UNITED GRINDING Group, recalls an important stage in his career. “As a machine tool manufacturer, we were at the forefront because we introduced a completely new technology.” And did this also create anxiety, like AI today?

“We were very excited at the time that we could do things that were very complicated to do manually.”

It all began 50 years ago: Harri Rein trained as an industrial mechanic and, after his first experience in “special machine construction”, he joined the mechanical engineers at WALTER, while also completing his master’s degree at night school. At the beginning of the 80s, he moved to application technology and then to the test department. In terms of technology, he now felt that he knew what was important – but he

still lacked sales knowledge. With his “soft skills” (“approaching people and convincing them”), he switched to sales. There, he be-

**“AS AN INDUSTRY,
WE’RE INTERESTING
BECAUSE WE’VE
ALWAYS BEEN
PIONEERS. NO ONE
WANTS TO DO
THE DIRTY WORK
ANY LONGER. WE
HAVE SOLUTIONS
FOR THAT.”**

Harri Rein

came part of a historic project to make CNC machines easier and more economical for customers: the development of the “Helitronic Power”, a versatile five-axis machine that did not exist back then. “We didn’t sell the machine, but we distributed it. Because everyone wanted them,” he says.

Back then, Harri Rein was just in the middle of his career – and he wanted a change once again. He found it as a “Woodtronic” product manager and as an engineering and operations manager when he was deployed in the USA. In 2004, he moved back to Tübingen to take on the position of Division Manager of Sales. In 2008 he returned to Technology as Division Manager, followed by Managing Director Technology (CTO), and finally, he was appointed CEO. Now Harri Rein has one and a half years to train his successor and then bow out to enjoy his well-deserved retirement.

FABIAN LEUTENEGGER, STUDER, REGIONAL SALES MANAGER GERMANY

"I went to school in the countryside, three-quarters of an hour away from STUDER."

At the beginning of the Motion interview, Fabian Leutenegger wants to share an anecdote. "There were 23 students in the class. And in the end, when it came to vocational training, I was the only one who went into industry." Looking at Leutenegger's career, one has to say: 22 made a mistake.

The problem wasn't in the Leutenegger family. Craftsmen, business people. But then there was the trial apprenticeship program. "A small job shop, a few CNC machines were there," says Leutenegger, "but that was enough for me to feel that this is something for me. Without knowing exactly what my future would look like." The polymechanic's diverse professional profile brought clarity: "I saw that I had basic training in hydraulics, pneumatics, milling, CNC, control technology, and electrical engineering. The world opens up to you afterward."

After his apprenticeship, Leutenegger got a job in the prototype department at STUDER in the TechCenter: "During this time, I was deployed for three stays in China.

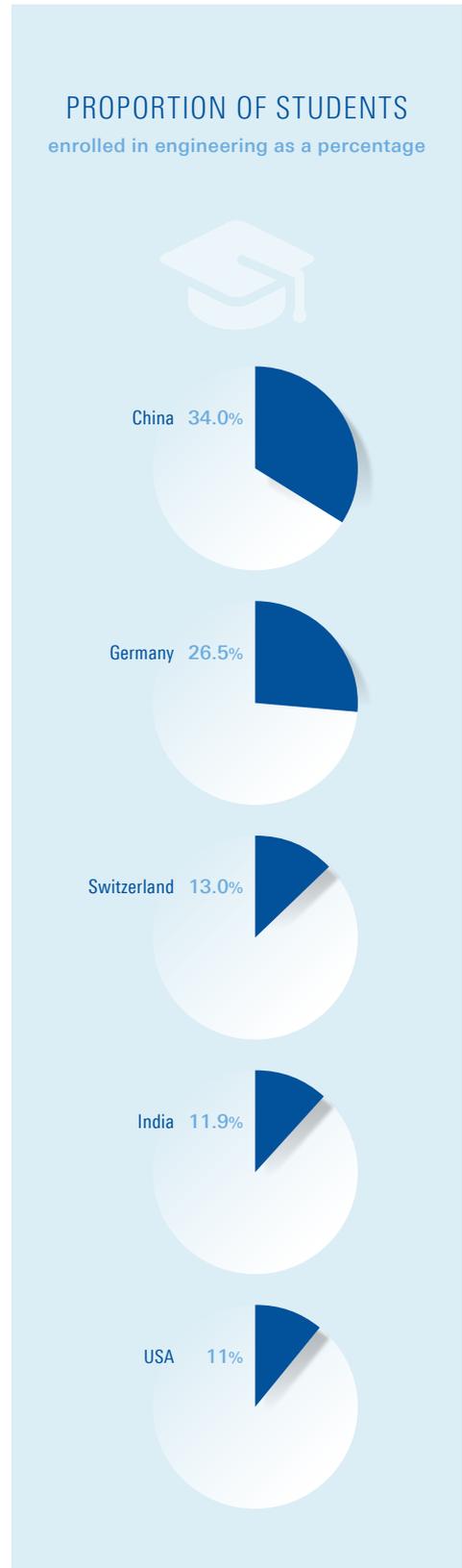
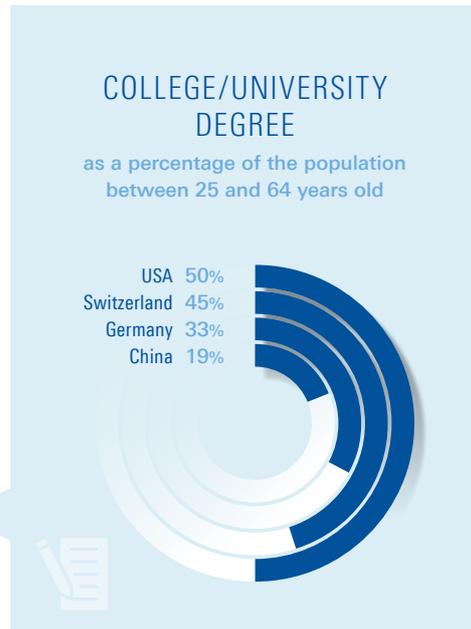
I went to Shanghai for the first time. I came from a village of 2,000 souls and was now in a metropolis of 21 million." After various technical assignments as a technician in China, Leutenegger moved to Sales and returned to Switzerland as Area Sales Manager for China.

"STARTING WITH AN APPRENTICESHIP – AND LIVING AND WORKING IN CHINA SOON AFTER. THAT'S INCREDIBLE."

Fabian Leutenegger

He is now responsible for an area in Germany as Area Sales Manager. And the better he gets to know the differences, the smaller he finds them: "Whether Americans, Europeans or Asians, they all have one thing in common: People buy from people. Everyone wants to be more successful by making the right decisions. Regardless of whether you hand over your business card with two hands in China or if you tap wheat beer differently in Bavaria. It's great to support people and win them over for us."

The proportion of the population with university degrees is increasing worldwide. Due to the dual system for the qualification of specialists, Germany and Switzerland have a lower proportion of students than, for example, the USA, where education is primarily provided at colleges and universities



Engineering fields such as mechanical engineering, electrical engineering, etc. are gaining in importance worldwide to varying extents. They require a broad basic knowledge of science and technology. China and Germany are clearly ahead when it comes to engineering



The UNITED GRINDING Group offers first-class training and further education worldwide



THE PERFECT CAREER START

With its worldwide training programs, the UNITED GRINDING Group enables young professionals to get an optimal start in their careers along with a wide range of development opportunities

FIRST-CLASS AND FUTURE-PROOF

The UNITED GRINDING Group offers young people first-class training in future-proof professions and also the opportunity to specialize in various fields

- Automation engineer (MÄGERLE, STUDER)
- Automation technician (STUDER)
- (Industrial) clerk (BLOHM JUNG, STUDER, WALTER)
- Designer (MÄGERLE, STUDER)
- Logistics specialist (STUDER)
- Mechatronics technician (BLOHM JUNG, WALTER)
- Polymechanic (MÄGERLE, STUDER)
- Production mechanic (STUDER)
- Grinding technologist (unique degree at STUDER)
- Cutting machine operator (BLOHM JUNG)

STRONG PARTNERS

First-class training requires the best partnerships: UNITED GRINDING Group works with renowned organizations from science and industry

- Baden-Wuerttemberg Cooperative State University: dual studies with WALTER (B.Eng., mechanical engineering, mechatronics or electrical engineering/B.A., BWL Digital Business Management)
- Hamburg University of Applied Sciences: dual studies with BLOHM JUNG (B.Sc., mechatronics specialist)
- Nordakademie University of Applied Sciences, Hamburg/Elmshorn: dual studies with BLOHM JUNG (B.Eng., industrial engineer)
- Master of Science and Bachelor of Science for engineers and technicians HF (work-study program at STUDER)
- Training partnership between BLOHM JUNG and Aurubis AG in Hamburg
- Support in the preparation of bachelor's and master's dissertations, student traineeships, technical work, and practical semesters
- Internship programs for apprentices at renowned industrial companies
- The joint Grinding Academy with TITANS of CNC is a freely accessible, multimedia online platform that teaches practical Grinding skills on machines from UNITED GRINDING Group

OPTIMAL LEARNING WITH MENTORING

Theoretical knowledge is important, but nothing can replace years of experience. Mentoring programs ensure that young people can benefit from the knowledge of an experienced workforce

- UNITED GRINDING North America welcomes young people to the four-year Apprenticeship Program after high school graduation. In addition to numerous certificates, the students also earn an Associate Degree in Automation and Control Technology with Robotics at Sinclair Community College in Ohio, USA. What's special: Students not only receive a salary but also benefit from on-the-job training at the Miamisburg location and mentors from the experienced staff
- The WALTER Future Program at the Czech location in Kuřim also relies on mentoring. It is aimed at young graduates from technical colleges who do not yet have practical professional experience. They receive a salary and get to know all the departments of the company gradually over the first six months. In the second part of the one-year program, they then deepen their knowledge in a selected workplace. With the successful completion of the Future Program, there is not only a certificate but also the offer of permanent employment and professional development

LYON, HERE WE COME

Text: Markus Huth — Photos: Thomas Eugster



Training manager Roger Leuenberger (left) and WorldSkills participant Luis Salzmann examine a component during training

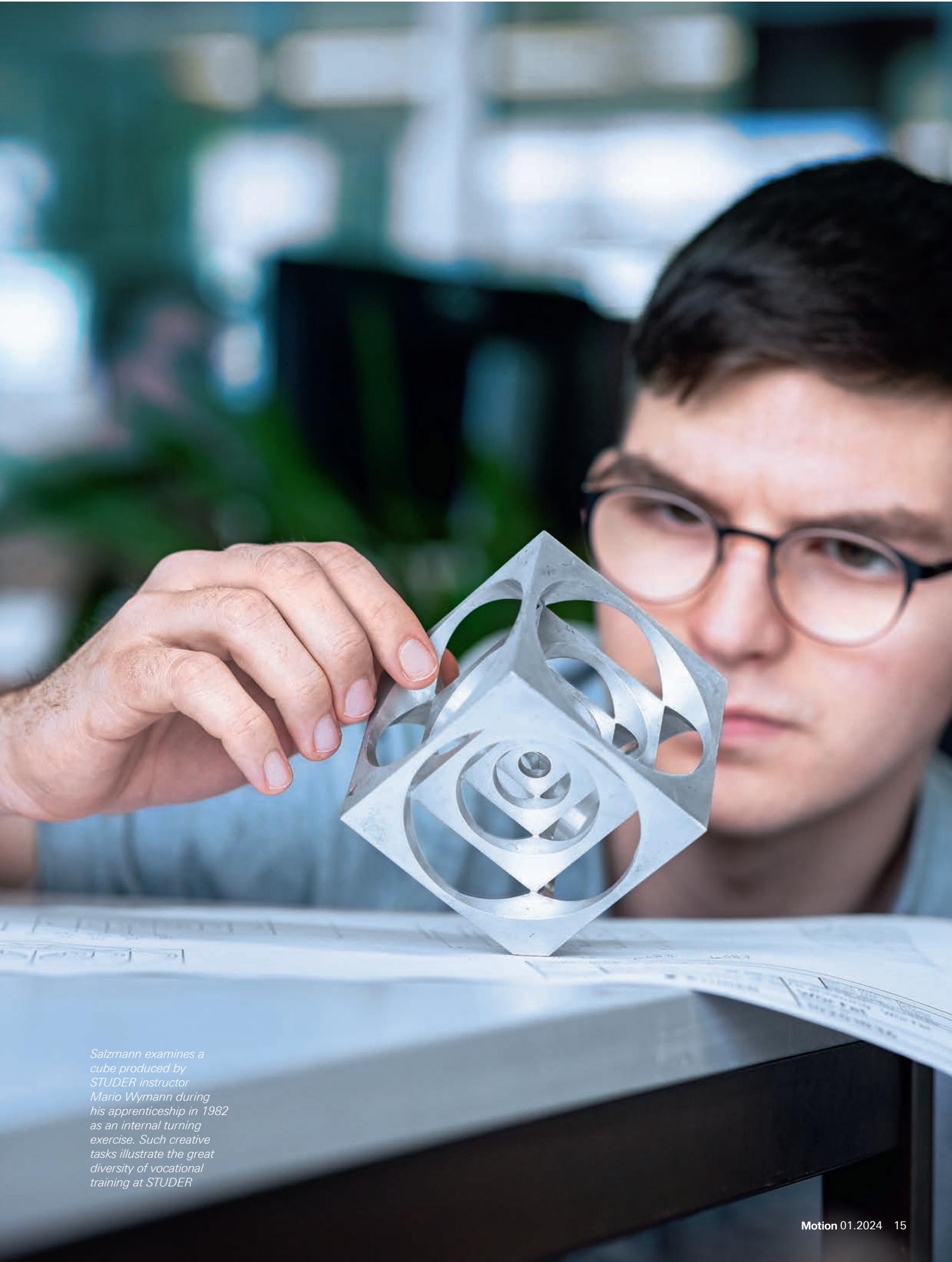
At prestigious professional championships, STUDER apprentices regularly take top positions and thus show that its vocational training is among the best in the world. Motion was present at the training for WorldSkills 2024

LIKE BEING IN THE MIDDLE OF A SWARM OF BEES was how Luis Salzmann said he felt. "There was an incredible noise in the hall, from the machines and the large audience," recalls the 19-year-old of the day he won the gold medal. He had to concentrate hard on his task to get the maximum number of points under competitive conditions. "My secret weapon was noise-canceling headphones," the young man says, laughing. That was last fall during the IndustrySkills|SwissSkills Championship 2023 at the BERNEXPO site, where the Swiss technology and machinery industry selected its best young professionals.

And Salzmann, who is in his fourth year of apprenticeship at STUDER, made it to the top of the podium in the Industrial Design/EFZ discipline. This automatically qualified him for WorldSkills 2024, which will take place from September 10 - 15 in Lyon, France. According to the organizers, around 1,500 young professionals from over 65 countries will be competing there on the Euroexpo site. The expected audience is estimated at a quarter of a million people. The more than 50 competition disciplines range from Aircraft Maintenance to Mobile Robotics and Web Technology – and the best in each case will receive a medal in front of thousands of applauding spectators at the final ceremony in France's third-largest football stadium (Groupama Stadium).

WITH CAD SOFTWARE AND PENCIL

But Salzmann doesn't want to think about that yet. He's in the middle of the training phase and needs to maintain a clear head. He's now sitting concentrated in front of a computer screen in the STUDER training workshop in Thun, Switzerland. The training machinery here is among the most modern in the country. In addition to conventional machines for basic training and production, there are also specialized devices for focused training and production. Salzmann is training for the profession of "Industrial Designer EFZ" and thus will be taking part in the discipline Mechanical Engineering CAD at WorldSkills. His most important tool is a computer with modern 3D CAD software.



Salzmann examines a cube produced by STUDER instructor Mario Wymann during his apprenticeship in 1982 as an internal turning exercise. Such creative tasks illustrate the great diversity of vocational training at STUDER

“But in our training, we also value working accurately with paper, pencil, ruler, compass, and vernier caliper gauges,” says Roger Leuenberger, Head of Vocational Training at STUDER. The company specializes in the manufacture of high-precision, high-tech cylindrical grinding machines and has with around ten percent, a high proportion of apprentices among its employees. “Because we train the majority of the staff we need ourselves, we are also well positioned in times of a shortage of skilled workers,” explains Leuenberger. The design specialists at STUDER, for example, design parts for the company’s production, parts which are later manufactured on cylindrical grinding machines by employees who are trained polymechanics.

Creating technical drawings or their precise dimensioning, transferring them to 3D CAD software, and recognizing technical interrelationships and functionalities: These are all typical tasks in this profession, both on a day-to-day basis and also at the championship. “But the big difference is that at WorldSkills, it’s all about time,” says Salzmann. As a rule, there is a specified number of hours during which the participants must complete a specific task. Whoever works more accurately, finishes faster,

or accomplishes more than the competitor also receives more points.

INTENSIVE TRAINING

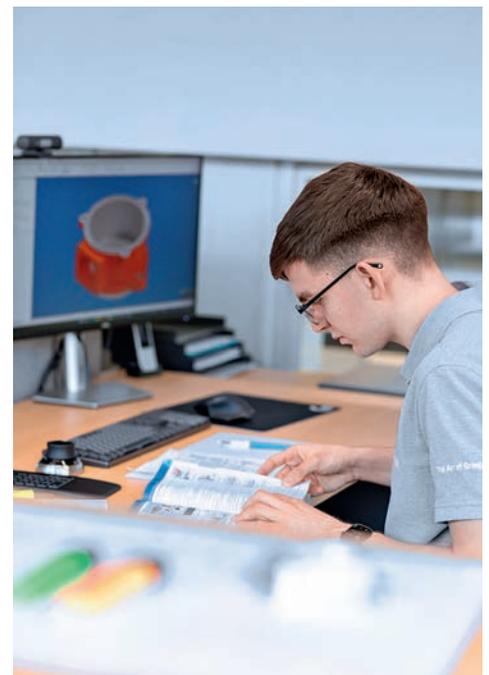
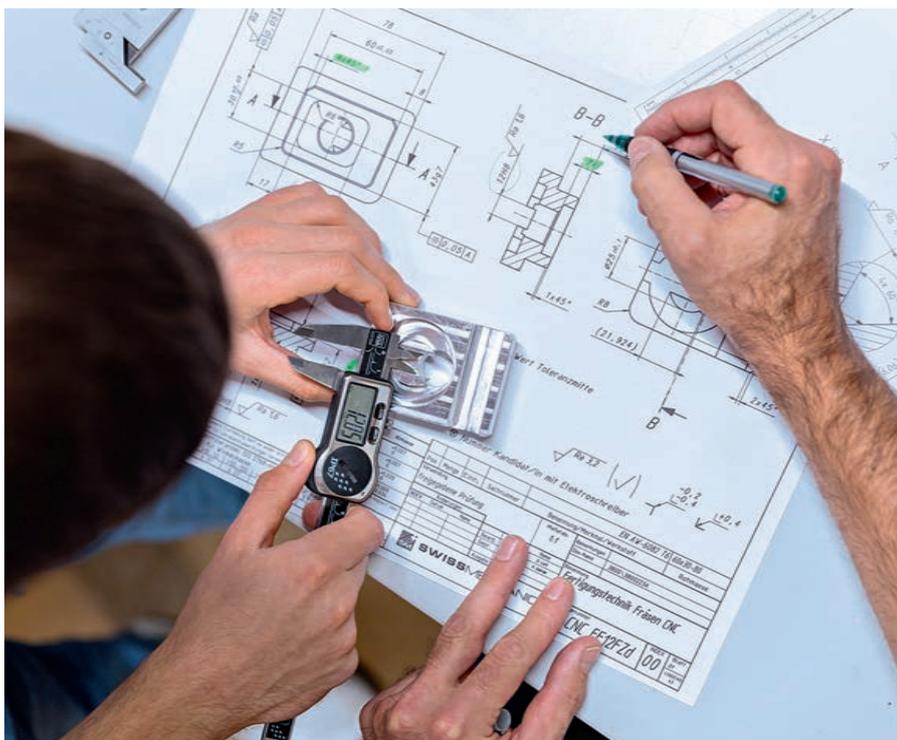
During training in the apprenticeship workshop, Salzmann repeatedly looks away from his computer screen and concentrates on a technical drawing on his desk. For non-professionals, the labyrinth of black and white lines, circles, angles, and units of measurement may be difficult to comprehend, but Salzmann quickly detects in it a pressure equalization cap for hydraulic systems. He now has to recreate this with high precision in 3D in the CAD software. Once this task has been solved, the next component follows. Be it a go-cart chassis, a valve spindle, or a swivel castor.

During training, he has two coaches who assist him: Mario Wymann is a professional vocational trainer at STUDER for the field of design and evaluates and advises Salzmann primarily on technical drawings. A trainer from the SwissSkills national team with the necessary knowledge of the international evaluation system is responsible for working with the CAD software. “So far, we have worked with the NX CAD software from Siemens for SwissSkills. But with Inventor from Autodesk, a different program



“OUR TRAINING IS AMONG THE BEST IN THE WORLD.”

Roger Leuenberger, Head of Vocational Training at STUDER



During WorldSkills training, Salzmann measures or creates numerous design drawings and models components in the CAD software

is required for WorldSkills," says Salzmann. This adjustment already demands a lot of familiarization and training time from him.

The closer WorldSkills gets, the more time Salzmann has to spend on preparing to fight through decades of archives of competition tasks day after day. Whereas at the beginning there were only one and a half work days per week, the training has gradually become a real full-time job. The personnel costs associated with this are also a major investment for STUDER. Why is the company doing it? "We have great training, and it naturally brings a great deal of renown when our apprentices win medals," says Coach Wymann. Such success also opens up many career doors for the young people themselves.

LOTS OF MEDALS FOR STUDER

It is a fact that STUDER is regularly represented in the top positions. When Salzmann took first place at SwissSkills last year, his colleague Noah Rossel won the silver medal in the "Automation specialist EFZ" category. And then there's polymechanic Gil Beutler, who won a whole set of precious metals for STUDER in the Swiss, Euro, and WorldSkills with gold, silver, and bronze from 2020 on. "Our medalists are ambassadors for the training as a whole," explains training manager Leuenberger. The reason is simple, such successes make STUDER a particularly attractive training facility for young professionals who want to acquire their know-how from the best in the world. STUDER also continuously invests in state-of-the-art training machines for the training center. "As just recently with two new CNC machines," adds Leuenberger.

Finally, there's just one more question left: How does Salzmann rate his chances for Lyon? "It certainly won't be easy. Switzerland hasn't won any medals in my discipline for a long time, and the results from the past show that only a few points will make the difference," he says. A slightly better CAD animation, a more precise detail shown, or a more accurate dimensioning: These things ultimately determine a place on the podium. Nevertheless, he's confident. "In comparison to other countries, vocational training at STUDER and in Switzerland as a whole places a great deal of importance on a broader understanding of technical relationships from different fields – this is certainly an advantage," he says, adding: "But being part of the Swiss national team alone is a great honor, and I'm already looking forward to the opening ceremony in Lyon."



Luis Salzmann (right) in conversation with Noah Rossel, who won the silver medal in "Automation specialist EFZ" at the SwissSkills

"I'M PROUD TO BE PART OF THE SWISS NATIONAL TEAM."

Luis Salzmann, SwissSkills Gold Medal Winner and STUDER apprentice



FROM APPRENTICE TO MANAGER

The UNITED GRINDING Group not only offers talented young people a long-term and attractive professional home but also numerous opportunities for further development and a great career – Four employees report

“MY EMPLOYER HAS PROVIDED ME WITH OPTIMAL SUPPORT”

 **DOMINIK REBER**

POSITION: Head of the Service Academy, STUDER, Thun

CONTACT: Dominik.Reber@studer.com

“I STARTED my professional journey 15 years ago with an apprenticeship as a polymechnic EFZ (Swiss Federal Proficiency Certificate) at STUDER, and today I’m managing the Service Academy at one of the most respected companies in our region,” reports Dominik Reber proudly. The “STUDER Service Academy” trains in-house specialists for technical customer care. Early in his career, Reber knew he wanted to expand his skills and develop professionally. “And my employer provided me with optimal support here,” he says. As a result, Reber gained more and more responsibility within the company – initially as a grinding technician and instructor in the Customer Center – and was later able to complete further training to become a qualified mechanical engineer HF. Finally, he took over as Head of the Service Academy in 2020. Today, Reber and his team are planning and coordinating specialist training courses and structuring training plans in the Service Academy. A particularly important project for him currently is the work on a digital multimedia knowledge platform and the development of a long-term strategy so that the knowledge available in the company can be transferred through the service specialists to the customers as quickly as possible in every situation.



“WE’RE LIKE A FAMILY”

 **SIEGFRIED HEGELE**

POSITION: Head of Strategic Product Management, WALTER, Tübingen

CONTACT: Siegfried.Hegele@walter-machines.de

“MY CAREER AT WALTER shows that you can progress from trainee to a managerial position step by step,” says Siegfried Hegele. He started his professional career here in 2000 with an apprenticeship as a mechatronics technician. After many years in production as an application engineer for eroding and grinding and as a product manager, he has been responsible since last year for the entire strategic product management of WALTER. “It never gets boring, thanks to the varied day-to-day business and the wide range of issues,” he says. Whether it’s a customer presentation in China, trade show visits in the USA, organizing a workshop, or creating strategies as a basis for decision-making for management. Hegele sees his employer’s further training offerings, which are always aligned with the individual abilities and wishes of the employees, as the key to his success. In his case, it was an additional two-year vocational training to become a state-certified technician for automation technology and mechatronics. The possibility of flexible working hours and international experience also make WALTER an exceptional employer, says Hegele, adding: “However, best of all I like the interdepartmental, collegial, even friendly approach among employees.” In addition to the official events, many activities are planned privately with colleagues, such as a 100-kilometer relay race of the WALTER running group. It’s no coincidence that there are many longtime colleagues in the “WALTER family”.

"I'M LIVING MY DREAM"



JAN LUKAS BREDEHÖFT

POSITION: Service Engineer Surface & Profile,
WALTER EWAG, Anjō

CONTACT: Jan-Lukas.Bredehoeft@blohmjung.com

HAVING A GREAT CAREER and at the same time seeing the world was an unbeatable offer for Jan Lukas Bredehöft. He started with vocational training as a mechatronics engineer at BLOHM JUNG in 2015 and after completing this, he worked as a service technician at the Hamburg location. But Bredehöft could never let go of one thought. He wanted to live outside Europe and gain international experience. In most other companies, what would have meant the end of his dream or employment, was in his case the start of a dialog with the HR department. This is because the UNITED GRINDING Group is globally positioned, and the affiliated companies cooperate in terms of personnel. "Only one year after I expressed my wish, I got an offer to go to Japan," recalls Bredehöft. Being there now as a service technician, he is responsible for the BLOHM JUNG machines at WALTER EWAG's Japanese location in Anjō. He travels to the office or directly to customers on the famous Shinkansen express train and then sometimes even further in a rental car. Bredehöft is enthusiastic about the high-tech country: "Our machines are universally usable and are for that very reason used for many intermediate products here in industry. Through my work with customers, I see many different processes and areas of application, for example, in automotive or aerospace."



"PERSONAL DEVELOPMENT IS IMPORTANT"



SANDRA SCHIESS

POSITION: Head of HR, MÄGERLE, Fehrltorf

CONTACT: Sandra.Schiess@maegerle.com

"IT IS IMPORTANT TO ME to promote the personal development of our employees and to be open to individual wishes," says Sandra Schiess. She herself is the best example of the success of this personal development strategy. She started training as a commercial employee at MÄGERLE in 2002 and then developed from a receptionist to positions in Purchasing up to HR manager. "After the birth of my two children, I worked as a family manager for a few years and then started working part-time again in Purchasing at MÄGERLE," she recalls. In May 2023 she eventually took on a management position within the company as Head of HR. She is responsible, among other things, for the entire HR life cycle, advising employees and managers on HR issues and recruiting new specialists. For Schiess, MÄGERLE is one of the best employers in the region. This is due to factors such as family-friendly working hours, attractive conditions, and an exciting product as well as the pleasant work environment: "The basic human principle applies here, and employees are given the necessary room to develop according to their abilities and wishes."



The three participants, Karen Bauder-Zilly, Gero Hesse and Stephan Nell (from left to right), meet in a hotel in Cologne

HUNTERS OF LOST

How do industrial companies attract young professionals today? How much has the attitude of applicants really changed?

What are the regional differences? What are the opportunities for data-driven recruiting and for which companies is it possible? And how is the UNITED GRINDING Group positioned in this competition for the future?

Experts **Karin Bauder-Zilly** and **Gero Hesse**
talk with **Stephan Nell**, CEO of UNITED GRINDING Group

PROFESSIONALS

Has it become more difficult to recruit young professionals for industrial companies? And if so, what changes can be identified here?

HESSE Clearly, yes. It's also not surprising when you think of issues such as demography, digitalization or changes in values. This certainly does not apply equally in all countries, but it does apply in many. We have digitalization everywhere. We've been experiencing a paradigm shift on a broad front since around 2018. I've been working on this issue for 25 years. And I've never experienced such a high labor shortage in Germany. It turns everything on its head. The backwards way in which companies have dealt with personnel in the last 50, 60 years, is simply no longer tenable. We have a loss of power on the employer side and a significant increase in power among workers.



The discussion is about how crucial it is for the future of a company to recruit the right young professionals today. The hotel, which serves as the location, also plays with the theme of the future – in the variant of “retro futurism” in its design

“IT’S NOW PROVEN THAT THE GREATEST DIFFERENCES DEPEND ON STAGES OF LIFE AND NOT ON GENERATIONS.”

Karin Bauder-Zilly

You're talking about Germany ...

BAUDER-ZILLY Yes, but I would also agree with the description globally. Robert Bosch GmbH faces greater challenges globally when it comes to hiring than in Germany, because the brand is not as well known abroad. In Germany, we have an awareness of over 90 percent. But generally speaking, the market is picking up. Companies need to come up with more and more ideas so that campaign budgets grow. Of course, there are professionals out there. We just have to be attractive enough for them. That applies to all generations.

NELL We're finding young professionals. It has become more difficult, but we are still finding them. Our training rate in Europe is over ten percent, which is a lot. What you describe applies to us in Germany and Switzerland. In the USA, for example, we offer training based on the dual system of Switzerland or Germany. That makes us an attractive employer for young people in the USA.

HESSE I can imagine that. But you're also taking the path of offering something interesting that has the interests of the target group in mind.



NELL Yes, certainly. And in China, we're also finding people without any problem. But the situation is also different in other parts of Europe than in Germany and Switzerland. Let's look at Italy, at Spain, how high youth unemployment is there. I'm always hearing: Companies need to. However, companies must also be able to do so. Because we can only be fair to everyone if we ourselves are competitive and successful – and in the long term. And the global competition we face does not always allow everything that employees and we ourselves would like.

HESSE I'm not so sure. It's a question of the market. If the labor market is good, they do not have to do anything at all. But the market is not good. I know what's going on

in the companies. Today, people are sitting together discussing the topic on the Board of Management, earlier it was at the head of division level.

NELL If this is no longer possible here, companies will have to move to countries where it is possible. And where people don't just ask "What can the company do for me", but also "What can I do for the company". We try to meet the needs of our employees as much as possible. But not all wishes can be fulfilled. For example, you cannot complete vocational training part-time. We've already been asked this question.

HESSE I'm not saying that we always have to focus entirely on the needs of the employees. Sometimes you first have to create a feeling for work. What does that actu-

ally mean? That there's no wish list for every position. But you have to pay attention to the point of view from which you're arguing.

BAUDER-ZILLY I have really great people on my team who have just graduated from a university, who want something and have a lot of drive. Of course, they're also asking for something from me, but they can do that too. I'm also asking for something.

Can't we already demystify Generation Z? Perhaps it's more of a German feature article topic. There are also many studies that show that this generation's needs are not that different. A secure job continues to be the most important desire ...

BAUDER-ZILLY It's been proven in the meantime that the greatest differences depend on stages of life and not generations. I can also see this from my personal experience as a mother of three children. People are driven by the fact that they are at a certain stage of their lives. Perhaps they give a lot because they are coming straight from graduating and the job can take up a lot of room in their lives. And in another phase, when they build a house or they have children, that changes again. It has nothing to do with whether I was born in 1978 or 1998. In a survey, we found that working remotely is even more important for older professionals than for students. Perhaps because they need more flexibility due to their stage of life.

HESSE Anyone who is 16 years old today and grows up with climate change and the war in Ukraine will have a different feeling than someone who was in this phase of life ten years ago. But I wouldn't overstate it. In the end, people want to know their needs



“PEOPLE WANT TO SEE THEIR NEEDS TAKEN INTO ACCOUNT – AND THE MARKET GIVES THEM THE PREREQUISITES TO DO SO TODAY.”

Gero Hesse

are being taken into account – and the market shows that they have better conditions than ever to impose that. I don't link that with generations. Today, people who have an office job simply say to themselves: Why should I come to the office every day when I can do it from home? But 50-year-olds say that just as much as 25-year-olds.



Gero Hesse, Head of Recruiting, believes that companies need to be more creative in order to be attractive to young professionals. Karen Bauder-Zilly and Stephan Nell point out that conditions are very different internationally (from left)



NELL Many of the young people who are with us today are no different than in the past. And hasn't it always been the parents' generation that is more concerned about the future? And our experience with the topic of working from home is that this option is not used at all by many employees. An enthusiasm for the job, the company, and the team develops on site in the company. A relationship can't be built through video alone.

HESSE I'm hesitant to agree with you. In the working world of our own company with 550 people, it is my experience that a whole lot is done virtually and digitally because the business model allows it. And of course, personal contact is important. But we are very much thinking about how to create certain moments that are suitable for identification and motivation in order to then digitally depict normal work in most cases.

NELL We have a larger group of people who have to be in the plant because someone has to assemble the machines. That doesn't work from home. These employees, in turn, need support from upstream and downstream activities or jobs. This reduces the issue of working from home to a few where it's even possible without affecting the efficiency of the work processes.

HESSE Jobs are simply not all the same. Working from home is often perceived as unfair. But what was it like in the past when

you worked in a factory from seven to three, and the salesperson had to leave at seven in the morning and only came home at nine in the evening. That was also not fair.

The recruitment market that has changed in many respects has also led to the further development of recruiting methods. Ms. Bauder-Zilly, what is the approach at Bosch?

BAUDER-ZILLY We're a big company. Globally speaking, we're filling many thousands of positions. There are many hundreds of thousands of applications coming in every year. Therefore, the processes must be as efficient as possible. We analyze what data is generated along the entire hiring funnel – from attraction to the time when we make the commitment and issue the contract. That allows us to optimize our processes and identify how and where specific content can best be conveyed: for example, at a local event, an Instagram campaign or a Google search campaign. We can then track

exactly which target groups we are addressing with the measure or at which funnel step we may lose them. What is the quality of the applicants and where is the appointment ultimately made?

You have automated the application and selection process, so to speak ...

BAUDER-ZILLY It's not about a machine taking over the staffing process. We're far from that, and I never want to go there. But let's take the issue of hard-to-fill positions. Why is a position considered difficult to fill? Because this has been someone's experience. But another recruiter may have had a completely different personal experience. In the case of such questions, we no longer settle for subjective impressions, but instead say: Okay, let's look at the numbers. How long has the job been online? Is it sufficiently well described? Are there too many internal terms that are not understood outside? Is the list of requirements much too long, and do people feel overwhelmed? Is the text



“TECHNICAL THINGS CAN BE LEARNED. IF A PERSON FITS INTO THE TEAM, THAT’S USUALLY NOT A PROBLEM.”

Stephan Nell

too complex? Is the ad gender-specific? We have a tool to help us identify that. We’ve seen that more men apply for jobs that have more complex descriptions. If we want to hire more women, we need to pay attention to the wording. And then we see how the ad performs after the optimization. With such approaches, we can double conversion rates.

How long can such a recruiting process last?

NELL We have to link people to us in advance. For example, we may have met someone at an event, or perhaps the person has also applied to us. If we were not able to offer suitable candidates a job at the moment, we would still make contact. By this I don’t mean sending newsletters, but calling them personally. What is their situation? What stage of life are they in? Maybe their partner also needs a job in the region to make it work? And when we have all the specific information, we can fill the position identified as “hard to fill”.

HE SSE Recruiting analytics are definitely the way to go now. Around half of the companies with more than 1,000 employees are already using it. However, this requires the appropriate staff department or external support.

BAUDER-ZILLY We’ve already had phases when we hired many external employees. At the moment, we’re more in the consolidation phase and are focusing on real hard-to-fill positions. These include, for example, experts in the areas of cyber security, semiconductors or artificial intelligence. These are specialists that we still need to bring in from outside. Otherwise, we also have a huge internal labor market with 130,000 employees in Germany who also want to develop further.

The profiles we’re looking for are very, very difficult to find. This is a tough business, and we’re pulling out all the stops. We also do suitability diagnostics – a topic we have just implemented in our bundled expert service, the People Acquisition Campus. Ultimately,

we want to increasingly move away from gut feelings and make truly informed decisions.

NELL We’re struggling in Germany to find service technicians. Traveling, being on the go, not being at home anymore: Most people don’t want that. We’ve therefore decided to take the matter into our own hands and to train or develop our existing employees locally on site – in our own service academies.

HE SSE Could this job be partially digitalized, for example, with remote maintenance?

NELL To some extent, yes. Digital solutions such as remote service are on the way, and we’re also continuously developing new digital assistance systems. Our C.O.R.E. panels can even be used for video conferencing directly on the machine. And the system is intelligent enough to provide the most important data directly for quick debugging, if the customer allows it. This way, our customers and our Customer Care team can definitely save a few trips.

But at the end of the day, it's mechanical engineering with tons of machines that contain a lot of high-tech and where not all work can be done remotely.

HESSE That's a problem in many industries, including the care sector. There are so many examples where working from home doesn't work. What can employers do? They can work on their corporate culture and address their target group precisely. To do this, they need to know the exact needs of their target groups and make suitable offers accordingly. In the coming years, the labor market situation will increasingly force companies to adapt in one way or another.

NELL What we're trying to do is train our young professionals ourselves. If I look at the machine tool manufacturers, mostly medium-sized companies who are struggling to find people, then they probably don't train enough. It's going well for us. And among those who do the training, there may also be service technicians.

BAUDY-ZILLY I think it's really good to tackle such issues in the long term and not just shut the stable door after the horse has bolted. If you start with training, you really have the people you need.

HESSE Many technologies and mechanisms that have actually been common in marketing for years have now arrived in recruiting. Instead of the gut feeling of experienced recruiters who roughly knew who fit where, campaign-oriented work is now being carried out with figures, data and specific target group approaches. Someone who works in IT wants to experience completely different things than someone in logistics, who may be primarily concerned with salary. Cents in hourly wages often make the difference. The old idea that we have a career website where candidates can find what suits them is increasingly a thing of the past. And that is not a German phenomenon. That's international. Because we are experiencing digitalization everywhere, how we shop, how we watch TV, how we listen to music. Individualization is increasing everywhere, and this does not stop with the HR issue.

BAUDER-ZILLY To a certain degree, it doesn't matter to me whether I'm selling a job or strawberry yogurt. Of course, it makes a difference whether someone buys yogurt in the supermarket or makes a life-changing decision for a new job. But the marketing mechanisms behind them are no different. That's also something that I first had to understand and that has now slowly arrived in the HR departments.

HESSE For me, recruiting today is a triad of technology, data-driven work – and ultimately the question: Why should I work for this employer? And that has to be answered individually for each person.

NELL One challenge in machine tools is our image. Many people don't even know what we do and what our plants look like. They still have the outdated idea in mind that the production hall smells of oil, and hands are dirty. In reality, you can eat off the floor.

TAKING PART IN THE DISCUSSION

KARIN BAUDER-ZILLY

Head of HR Marketing and Analytics Germany (People Acquisition Campus), Robert Bosch GmbH. She has worked in various positions in HR for 20 years and in Talent Acquisition for ten years. Since 2022, she has been responsible for HR Marketing Germany at Robert Bosch GmbH.

GERO HESSE

CEO of Embrace, a group of agencies providing recruitment and human resources services in Gütersloh. After studying business and law and with a degree in business, he worked in the areas of human resources and employer branding at the media and services group Bertelsmann and then at the content marketing agency Territory before becoming self-employed in 2009.

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.



“TO A CERTAIN DEGREE, IT DOESN'T MATTER WHETHER I'M SELLING A JOB OR STRAWBERRY YOGURT. THE MECHANISMS BEHIND THEM ARE NO DIFFERENT.”

Karin Bauder-Zilly



“WE’RE FINDING YOUNG PROFESSIONALS. IT’S BEEN MORE DIFFICULT, BUT WE’RE STILL FINDING THEM.”

Stephan Nell

The work is no longer just about assembling something with your hands. It’s about high tech at the highest level. Otherwise, we couldn’t possibly produce machines with this level of high precision. And of course, that also includes sophisticated software. That’s why we’re now employing more and more software engineers. And people are often not even aware of what machine tools can do. As a medium-sized company, we operate in a wide range of industries. From automotive, aircraft or shipbuilding to the energy industry, packaging, medicine and many other things – including those that are not yet available and are only just entering the market. Someone has to produce it all. First and foremost, we’re trying to show what we do. The effort to find the next generation of talent is taking place at a very local level. If we’re looking for young professionals in Tübingen, we have to be active in Tübingen, just like in Thun. People are not mobile, they want to stay in their region. And we’re looking for people in more than 20 locations. Sometimes we also try to transfer

professionals between locations. But that’s difficult. There are few who are willing to do so. Extremely long periods of employment at a company are very positive. We have people who have been with the company for over 50 years and employees who are already working for us in the second generation. And we have low staff turnover rates. And our goals? We want people to go the extra mile. Because I can copy everything in the company, except for two things. One is the image, the good reputation of the brand, which you have to develop. The second thing you can’t copy is a motivated team that does a little more than the others.

BAYDER-ZILLY Actually, all companies want employees who go the extra mile. I think the question is, how do I get there? And there are probably different answers. And my personal answer would be that as a large corporation, like the one I work for, I can also respond individually to the needs of people in their respective phases of life.

HESSE And Mr. Nell, how do you ensure that this extra mile will be walked?

NELL We have a lot to offer as an employer. We’re an internationally active and technologically leading company. That offers a wide range of professional opportunities. We attach great importance to promoting our employees – whether through experience abroad, training and further education or assuming more responsibility, i.e., making a career – regardless of certifications or certificates of employment. We give people who want it and can do it a real chance. And that’s why we’re also looking primarily for people and not just their training.

HESSE So their attitude?

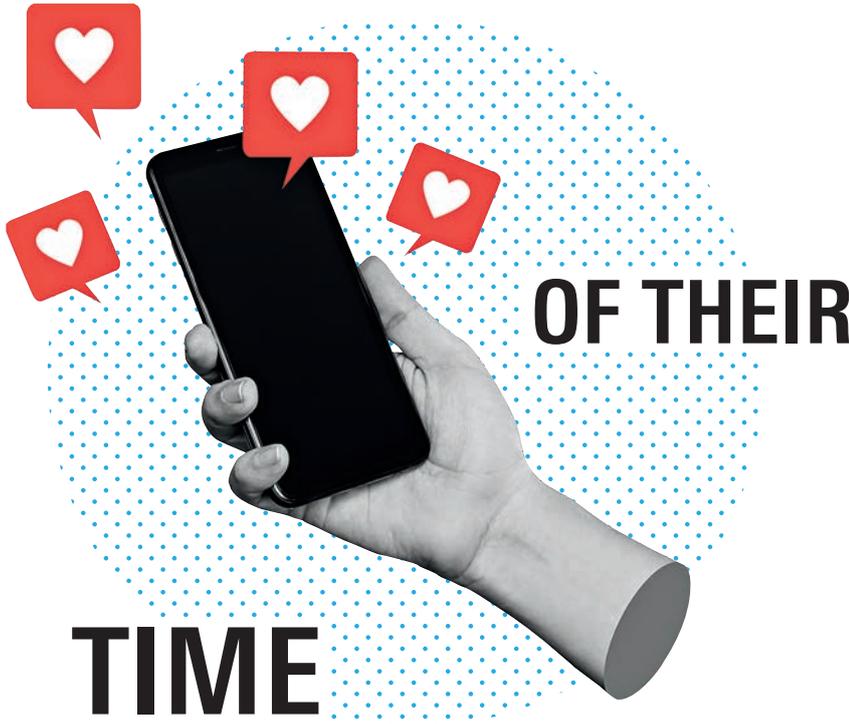
NELL Well, the person has to fit. Of course, they should have as a prerequisite that they can do the job afterward. But I can learn technical things. If the person fits into the team, then the rest will come. If they’re fantastic professionally, but don’t fit as a person, then it won’t work.

HESSE I wouldn’t say that the gut doesn’t matter either. But I would say that a gut decision shouldn’t be at the forefront, but rather the methodology should be at the forefront, supplemented by the gut. Reaching out to target groups of the right age regionally with a specific story is possible today, but wasn’t five years ago.

NELL For example, we let our learners tell their own story, which is the most authentic. They set up the stand themselves at local trade shows and make videos and entire social media campaigns. We don’t prescribe what they should say. And when professionals are with us for the first time, we try to keep them. Most of them are passionate about their work. Not 100 percent, we can’t manage that. But a large proportion of our employees are enthusiastic about the company they work for.



CHILDREN



Between cliché and reality: What about the idea that “Generation Z” is too demanding and doesn’t really get involved?

Research shows that while young people are very concerned about the future today, their personal desires do not differ much from those of previous generations. Criteria such as the work environment, salary, security, and exciting and interesting tasks are at the top of the list – and this is the case across all generations worldwide

Text: Stefan Grötzschel

THE SO-CALLED “GENERATION Z” is in the middle of hot debates. It is often discussed negatively in the public media and characterized as comfortable or poorly performing. But is there any truth to the clichés? And what does this mean for recruiting young professionals, which is becoming increasingly important due to the growing shortage of skilled workers, and also for companies in the machine tool industry?

Generation Z – people born between the mid-1990s and early 2010s – is the first to grow up in a fully digitalized world. At the same time, their youth is characterized by global challenges. In Germany, research such as “Youth in Germany” shows that this generation is worried. This is primarily due to inflation (71%), war in Europe (64%) and climate change (55%).

Add to this the pandemic that has been largely overcome, it seems logical that the major youth studies (Shell and SINUS) corroborate a longing for stability and security among young people and a certain desire to return to more traditional values.

VALUE COMPARISON OF GENERATIONS

The “Youth in Germany” study compares the generations (14-29 years, 30-49 years, 50-69 years) and finds surprisingly few differences, even when it comes to supposedly sensitive issues such as working from home or work-life balance. The most important values and virtues are the same across generations, including family, health, freedom, honesty, reliability, and willingness to help.

Martin Schröder, Professor of Sociology at the University of Saarland, has an explanation for this: He has analyzed surveys from around four decades and found that attitudes toward work do not necessarily depend on the year of birth, but rather on the stage of life someone is in.

In Schröder’s view, differences in attitudes toward work are due more to the respective phase of life and temporal circumstances than belonging to a specific generation. For example, Schröder found that different generations surveyed in comparable phases of life have almost identical views toward work.

In other words, one could say, for example: The demand for an improved work-life balance does not come specifically from “Gen Z” but rather corresponds to the cur-

rent spirit of the times. This desire is probably equally important for all generations.

The results of a current survey by the German Engineering Federation (VDMA) are consistent with this interpretation. The survey asked about the top factors of young people in choosing a career. The top five places were: Work environment, salary, security, and exciting and interesting tasks. So quite normal desires. Who doesn't want that?

Upcoming generations (such as the current generation Z) are simply children of their time. Like all young people before them, they face certain challenges. Particularly relevant in our context: Students are quite overwhelmed when it comes to career orientation. No wonder: There are 350 training professions and thousands of bachelor's degree programs. This challenge for young people is also an opportunity for companies to recruit young professionals.

RECRUITMENT OF YOUNG PROFESSIONALS THAT WORKS EVERYWHERE

The top goal for companies must be to develop great appeal in their region as a prime address for young professionals. To this end, it is important to establish contact points with the relevant target groups. The first point of contact for this is the school. For schools and teachers, the topic of career orientation is becoming increasingly important, and they could use support with it. An ideal place to make contact, for the mutual benefit of the company and school.

Many teachers are not career counseling professionals, and students know it. That's why they want companies to take on this task. For example, by coming to class and introducing professions. Or even better: bringing students into the companies and making professions tangible there. Ideally with the help of young people from their own company, such as apprentices or dual study students, as these are authentic and trustworthy role models.

In line with this, it is important to offer school internships. Research shows that many apprentices chose their apprenticeship profession because they found out during their internship that they enjoyed the job. This means that companies should invest in the quality of internships. Because when students come out of the internship frustrated, it's a missed opportunity.

Whoever can offer an exciting, meaningful internship has direct access to potential specialists. Interns who prove themselves can be offered training directly at the company, even if the end of their school courses is one or two years in the future. This has been well received by students and parents. Companies can note good interns and think about retention strategies for them.

LOCAL NEEDS AND GLOBAL TRENDS

Young people around the world have both common and region-specific expectations of employment and employers. Of key importance are expectations of working conditions, development opportunities, and corporate culture. The nature of these may vary depending on the country or region.

Issues such as sustainability or CO₂ reduction, on the other hand, are internation-

ally relevant. But from my point of view, the following applies here: The key expectations of the applicants come first, and single-issue topics are just the icing on the cake for most target groups. Here, companies have to find the right mix by finding out the needs of the target group on site.

Young people are used to the professional internet and therefore have certain expectations of websites and digital communication. This is particularly relevant for companies in two respects: They need modern career web pages and dynamic application processes.

Career web pages are often confusing and require many clicks. By contrast, relevant information should be quick to find and understand. The rule-of-thumb is to use as little text as possible. Using short videos with role models scores points with young people.

During the application process, companies that manage to communicate quickly and respectfully with applicants have an advantage. Nobody can afford weeks of automated, impersonal responses anymore. That will drive young people to the faster, friendlier competition next door.

An Instagram channel is like an outsourced career website of the company. Here is an opportunity to present the corporate culture. In doing so, authenticity is important, because the right people should be attracted to it. As with most recruitment activities for young professionals, it's also advisable to give priority to young employees. This is because they are closer to the target group and closer to the medium.

But from my point of view, the classic measures – school partnerships, internships, employing young employees – are the central building blocks of a young professional strategy for machine tool companies. A modern career website and fast, respectful application processes are the additional homework that must be addressed. If companies have modernized their career web pages and application processes accordingly and also have young employees who enjoy Instagram or TikTok, the use of social media can also be worthwhile. Ultimately, companies need a work environment that values and encourages young people and can qualify them with enthusiasm for their activities. Then it will also work with Generation Z.



Stefan Grötzschel is a speaker for education policy at the German Engineering Federation (VDMA) and has been active in the field of recruiting young professionals for years



7:20 A.M.

TRIP TO DAYCARE

Before the workday begins, Streit brings his little son Aron to the daycare center. Balancing his family life and work is important to him



EXPERIENCE AND A BREATH OF FRESH AIR

Lars Streit completed vocational training at STUDER and is now COO of WALTER EWAG and Managing Director of the WALTER location in Kuřim, Czech Republic. This is how his day looks

Text: Markus Huth — Photos: Stanislav Krupar

“MY FATHER WAS A MASTER MECHANIC, and I feel at home wherever it smells like oil,” says Lars Streit. So the Swiss young man didn’t have to think long when STUDER offered him an apprenticeship as a polymechanic with a focus on grinding technology. That was more than 20 years ago. Today, Streit is COO of WALTER EWAG and Managing Director of the WALTER location in Kuřim, Czech Republic, and responsible for around 300 employees. The modern and clean plant produces high-precision CNC machines for grinding, eroding, and contactless measurement of tools for which WALTER is known

worldwide. The qualified technician and industrial engineer is currently working with his team on optimizing all processes and introducing state-of-the-art infrastructure at the Kuřim location. A driverless transport system, a new paint shop, and further digitalization – these and many other projects are on his current agenda. “Kuřim is one of the most modern plants of its kind, and we have only recently renewed our machinery,” he says. But for him, people remain the most important resource: “We have a very good mix of longtime employees with a lot of experience and young people who bring in

10:00 A.M.
PRODUCTION MEETING
Today there will be a discussion with the heads of all departments about the status of important current projects

a breath of fresh air and innovation.” One particularly important project for him was therefore the introduction of the WALTER Future Program, which is aimed at young people with technical professional qualifications who have little or no practical work experience. “When our trainees ask me for career advice, I say: If you know what you want, then you have every possibility at the UNITED GRINDING Group.”

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“THE WALTER LOCATION IN KUŘIM IS ONE OF THE MOST MODERN MACHINE TOOL PLANTS.”

Lars Streit



8:15 A.M.

REGULAR COMMUNICATION

The shopfloor management meeting (regular communication) takes place every day and ensures an optimal exchange of information during daily operations

11:00 A.M.

PRE-ASSEMBLY

The WALTER plant in Kuřim is one of the most modern in the Czech Republic and holds its own internationally, says Lars Streit, who is standing right above pre-assembly. Some component groups are already assembled there before the continuous flow assembly



1:30 P.M.

HELLO TO TÜBINGEN

Streit also acts as COO of WALTER EWAG and holds regular meetings with colleagues in Tübingen via video call



“UNITED GRINDING GROUP OFFERS EVERY POSSIBILITY FOR A GREAT CAREER.”

Lars Streit

2:45 P.M.

MECHANICAL PRODUCTION

Important components such as the base of a WALTER machine are manufactured in mechanical production. Here, Streit checks quality together with department head Petr Konečný



3:30 P.M.

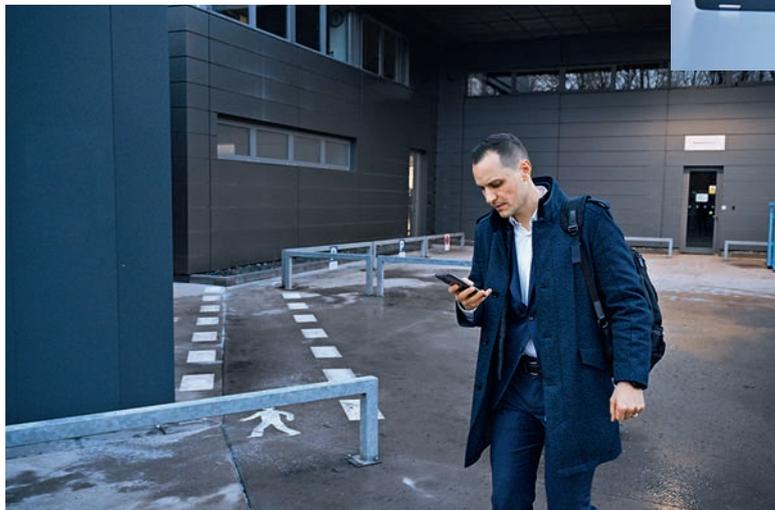
WALTER FUTURE PROGRAM

Young professionals are among the most important investments in the future. Discussion with participants in the WALTER Future Program

4:00 P.M.

PERSONNEL MATTERS

Streit meets regularly with HR Manager Kateřina Hálová. For him, it is important that talents and skills are used optimally for the customers



5:45 P.M.

LAST CHECK BEFORE END OF WORK

On the way to his car, Streit checks his emails and the most important points for the next day. Then he looks forward to dinner together with his family

TOOLS & TECHNOLOGY

NEWS FROM THE UNITED GRINDING GROUP

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WALTER has developed an innovative automation solution

The "Laser Contour Check" measures a complex cutter

The S36 production external cylindrical grinding machine is now available with the HSG option



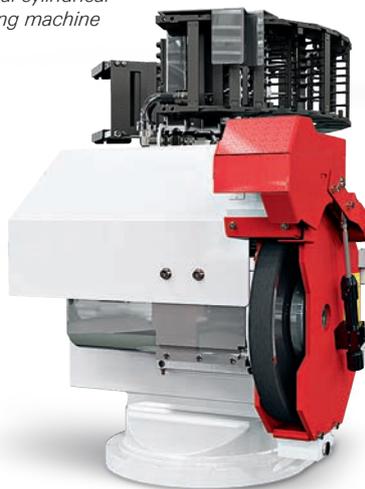
S36 WITH NEW MAXIMUM SPEED

High speed grinding is now available as an option for the S36 and offers customers significantly more productivity for optimized processes

High-speed grinding (HSG) involves a cutting speed of 80 to 140 meters per second. This enables higher productivity and faster machining of workpieces. "The removal rate is much higher than with conventional grinding, and this results in the ability to operate at higher feed rates," explains Sales Manager Martin Hofmann. This function is now optionally available to customers as part of the expansion package for the S36 production external cylindrical grinding machine. It is an economical HSG solution in the STUDER portfolio, which is also available in the S41 CNC universal cylindrical grinding machine and the S22 and S11 production external cylindrical grinding machines.

The HSG capability of the S36 is based on a high-speed spindle with an output of 18 kilowatts (24 hp). This allows cutting speeds of up to 140 meters per second and works with CBN and diamond grinding wheels with a diameter of 400 mm and up to 40 mm width. Configured in this way, the S36 is also equipped with a more powerful cooling unit, which is necessary for high-speed grinding. But here too, customers benefit from the patented SmartJet® coolant system from STUDER, which works significantly more energy efficiently than other solutions customary in the industry and requires much less coolant.

The HSG spindle for the S36 production external cylindrical grinding machine



TECHNICAL SPECIFICATIONS S36 WITH HSG OPTION

- HSG spindle with an output of 18 kW (24 hp)
- Cutting speed of up to 140 m/s)
- For CBN and diamond grinding wheels of 400 mm diameter and up to 40 mm width
- Distance between centers: 650 mm
- Center height: 225 mm
- Workpiece weight: 150 kg (max.)

INCREASED PROCESS RELIABILITY

Another advantage of HSG compared to conventional grinding is the lower wear of the grinding wheel. This means that it has to be dressed less frequently and has a longer service life. "The lower wear also leads to more constant grinding conditions over a longer period, as the dimensions of the grinding wheel and its grit quantity remain relatively constant," explains Hofmann. This makes high-speed grinding ideal for high-volume production with optimized processes.

This makes the HSG function an ideal feature for the highly accurate and powerful S36, which, thanks to its state-of-the-art equipment and smart technology such as the C.O.R.E. hardware and software architecture, is very well suited for the automation of processes. The S36 was developed for series production of precision components, especially in connection with e-mobility. In addition to the HSG, the expansion package also includes options for a higher-power spindle with 25 kilowatts (33 hp) as well as a wider grinding wheel (610 mm diameter, 160 mm width) for cutting speeds of up to 80 meters per second.

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The modernized spindle test benches are vibration-free, individually controllable, and feature precise sensor technology

A NEW LEVEL OF QUALITY ASSURANCE

With a newly developed test system for external motor grinding spindles, STUDER is further expanding its expertise to benefit its customers

As a manufacturer of high-precision cylindrical grinding machines, STUDER has relied on its development, manufacture, testing, and overhaul of spindles for decades. This know-how enables the best possible adaptation of the spindle characteristics profile to the very wide range of grinding applications of STUDER machines. The core elements such as the spindle shaft and housing are manufactured entirely in-house on modern machinery, but only the finished spindle shows the interaction of all tolerances. This direct influence on the grinding result and its demand for the highest quality standards motivate STUDER to test every spindle. The modernization of spindle testing by investing in a new spindle test bench for external motor grinding spindles expands this competence and enables quality that is above the industry level.

TESTING AT THE HIGHEST LEVEL

The new ten-ton system on a 25 square meter area was developed in-house with teamwork between mechanical, electrical, and software specialists and the people

working in the spindle assembly department. It consists of six independently controllable and loadable test stations, each with a GRANITAN® mineral cast base. This allows the decoupling of externally induced vibrations from adjacent test benches. Each test site is equipped with its sensor technology register for recording relevant parameters. An extensive characteristics profile ("fingerprint") is recorded, processed, and stored during startup, endurance test, and test run scenarios. Each test station even has its fluid cooling circuit, which ensures even better decoupling and meaningful data. Greater work safety and optimum ergonomics have also been considered.

Each test site automatically records different physical variables that can be signs of deviations or indicators of insufficient reliability. In several operating scenarios, electrical characteristic values, bearing temperatures, pressure, temperature, volume flow of cooling and purge air as well as vibration behavior are recorded. The sophisticated software displays live data and automatically

aborts the ongoing test process in the event of deviations from typical measurement and limit values. Only when everything meets the strict quality parameters is the spindle installed in a STUDER precision cylindrical grinding machine.

As one of the production sites of the UNITED GRINDING Group, STUDER specializes in the development and in-house production of grinding and workhead spindles and also produces these for affiliated companies. In addition to external motor grinding spindles, the company also manufactures internal grinding spindles, belt spindles, and workhead spindles. The investment in the spindle testing system is the largest part of the puzzle to date in the overall picture of the further expansion of competence for spindle development and manufacture.

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ADVANTAGES MODERNIZED SPINDLE TESTING

- Six vibration-free and individually controllable spindle test stations each with their own sensor system package
- Equipment for all current motor grinding spindles with potential for future products
- Acquisition of a comprehensive characteristics profile to expand the quality assurance program
- State-of-the-art user interface, data acquisition and preparation
- Digitalization of test reports with preparation for trend analysis

TWO BECOME ONE

The new software platform from BLOHM JUNG combines production and single-part production and simplifies many grinding operations

The previous software solutions from BLOHM JUNG consisted of different architectures for specialized target groups. For example, the BLOHM platform was primarily a production software. The strength of the JUNG software, on the other hand, was in the manufacturing of individual parts. Instead of developing both solutions in parallel, BLOHM JUNG has opted for a uniform platform that can do both. For this purpose, the original BLOHM grinding software, which is also the basis for C.O.R.E. further development, has been expanded to include the most important features for tool-and-die manufacturers as well as supplemental automation solutions.

Users of the J600 surface and profile grinding machine with head-mounted dresser in particular will benefit from the signifi-



ADVANTAGES BLOHM JUNG SOFTWARE PLATFORM

- New software platform for all BLOHM JUNG machines
- Combines production and single-part production
- JUNG customers in particular will benefit from the wider functional range
- Productive single-part and small-batch production
- Open for customer-specific uses

cantly larger functional range and the new user interface. These include process monitoring, automated grinding applications, implementation of customer-specific uses as well as additional grinding cycles for radius and angle grinding. In principle, any J600 system that is not older than five years can be retrofitted with the new software solution. The first J600 equipped with the new software was delivered in early 2024.

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NEW LOADING ROBOTS

With UNIMATE and UNIPAL, BLOHM JUNG and MÄGERLE offer compact loading robots for automated production

ADVANTAGES UNIMATE AND UNIPAL

- Compact loading robots for more efficient production
- Automation autonomy from a few hours to an entire shift
- UNIMATE for the PLANOMAT XT and PROFIMAT XT ranges from BLOHM JUNG
- UNIPAL for MÄGERLE's five- and six-axis grinding centers

In the surface and profile grinding sector, machines previously had to be loaded and unloaded primarily manually. With their new automation solutions, MÄGERLE and BLOHM JUNG now enable manufacturing in this sector with minimal human intervention. This means that machine operators can operate two or even three machines simultaneously. Depending on the storage autonomy, it is possible to produce automatically beyond a lunch break, end of the shift, or even a complete shift.

The first solution is called UNIMATE (Universal Automate) and was specially developed by BLOHM JUNG for its PLANOMAT XT and PROFIMAT XT ranges of surface and profile grinding machines. The retrofittable loading robot consists of a linear unit with a gripper and a single-part buffer for the workpieces to be ground or finished. The buffer

is designed specifically for each workpiece and according to requirements optionally with a rotary table, conveyor belt, or workpiece trolley as storage. Since the UNIMATE unit is positioned on the side, the machine can still be operated manually from the front if required.

The UNIPAL (Universal Pallet robot) is a loading robot with a pallet magazine. It can be configured with either 50 spaces for ITS 148 pallets or 16 spaces for UPC 320 pallets. The robot feeds the MÄGERLE five- and six-axis grinding centers with workpieces mounted on pallets and can now be considered in the planning of new projects.

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The PROFIMAT MC 610 XXL was specially developed by BLOHM JUNG for the grinding of industrial gas turbines



LARGER THAN ANYTHING ELSE

Industrial gas turbines are key components in numerous industrial applications. BLOHM JUNG has now specially developed a grinding machine for their processing, one which is unique in its size

Industrial gas turbines (IGTs) are increasingly being used in power generation plants in combination with renewable energy to compensate for power fluctuations. With a length of 1,000 mm and a width of up to 600 mm, their blades are significantly larger than those of aircraft turbines. The grinding machines for processing must be correspondingly larger and more stable. With the new PROFIMAT MC 610 XXL, BLOHM JUNG has now realized a productive machine specifically for the comprehensive grinding operation of IGT blades in one clamping – from the typical fir tree profile for these blades, through to the platform and groove. The new machine is unique in its size on the market. The flexible five-axis system with a head-mounted dresser is based on the proven PROFIMAT MC range and can process components with a maximum weight of 350 kg.

This high weight and the resulting grinding forces of over 14,000 N were a design challenge. This is because the MC 610 XXL processes each side of the blade profile individually. To do this, the indexing unit swivels the workpiece into position and sets it at the

ADVANTAGES PROFIMAT MC 610 XXL

- Optimized grinding angle, lower friction forces, and up to 50 percent shorter cycle times
- Flexible A/B axis combination and use of wheel sets in a CD (continuous dress) process for multiple grinding operations in one clamping
- Machining of turbine blades up to 1,000 mm length
- Zero-point clamping system with a hydraulic coupling system for high precision, maximum holding forces, and easy operation
- Comparatively low space requirement

optimal grinding angle. This reduces grinding allowances and friction forces, shortens cycle times, and allows efficient machining even of non-symmetrical fir tree profiles. The forces acting on the protruding workpiece also require particularly high holding forces of the indexing unit to ensure a precise grinding result. Depending on the grinding task and component, the indexing unit can

also be supplemented with holding fixtures for absorbing the grinding forces.

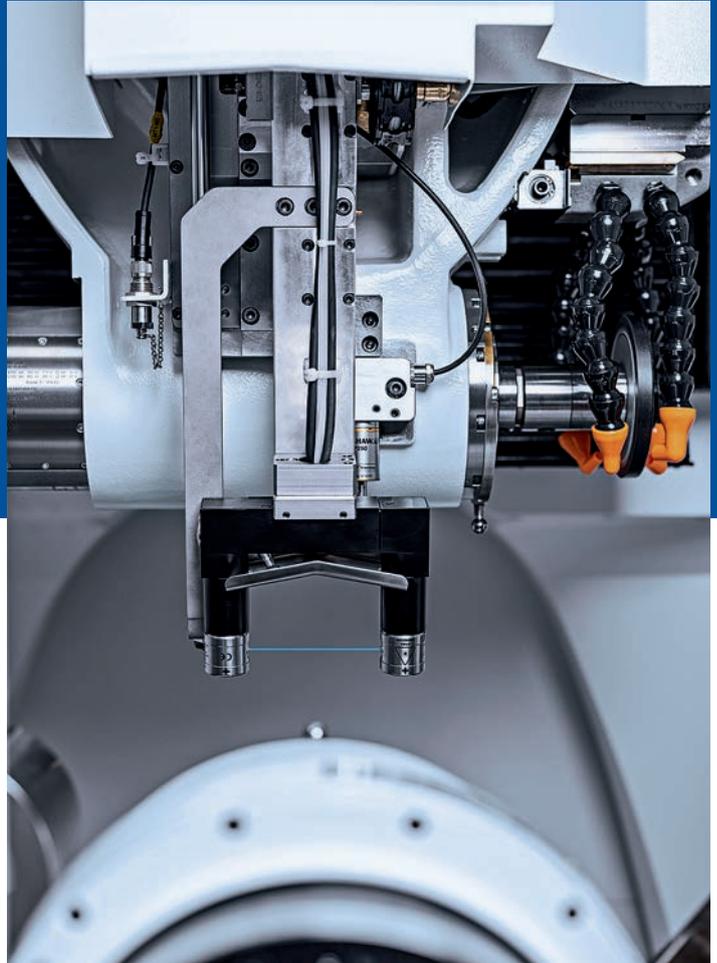
MAXIMUM FLEXIBILITY AND PRODUCTIVITY

Thanks to its special axis combination with multiple levels of flexibility, the PROFIMAT MC 610 XXL can be quickly and easily adapted to the special design features of IGT blades from different manufacturers. In addition, the new machine is not only more productive than a dual-head machine. With a drive power of only 62 kW/83 hp (instead of 220 kW/295 hp), it is also much more energy efficient. The size of the grinding wheels (diameter 500 mm), width 220 mm contributes significantly to the higher productivity. This ensures, especially in combination with the continuous dressing process developed for the turbine industry, which is particularly consumption-intensive due to the permanent dressing of the grinding wheel, for a high part output per wheel.

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The "Laser Contour Check" developed by WALTER uses a blue laser to measure without contact and with high precision



WITH THE POWER OF A LASER

With the "Laser Contour Check" measuring system from WALTER, even the most complex forming tools can be measured and corrected contactless, quickly, and automatically directly in the machine

The blue laser beam travels quickly and precisely up and down the contour of the fir tree cutter and traces the complete profile. This is an important tool for the turbine industry that can shape the base of a rotor blade with the highest precision. In just a few seconds, the analog laser light measures thousands of points on the part that has just been ground. The HELITRONIC TOOL STUDIO software of the WALTER grinding machine compares this data to the target parameters with an accuracy of one and a half micrometers. It then initiates a corrective grinding process that eliminates inaccuracies. This operation occurs contactless directly in the machine and fully automatically, which is a real revolution for customers.

Before WALTER presented the "Laser Contour Check" to the public for the first time at GrindingHub 2022, the workpieces to be ground usually had to be unclamped, measured separately, and clamped again for the corrective grinding process. "We now do this directly in the machine without re-clamping, without contact, and automatically," says Jochen Weiss, Head of Application Technology at WALTER. Even the necessary cleaning process, which removes coolant residues and other impurities from



The laser measures a milling cutter with a fir tree profile for the turbine industry

the workpiece before measuring is carried out by the laser measuring head using compressed air. Unlike tactile measuring probes, the laser cannot wear, eliminating measuring errors or damage to cutting edges.

ADVANTAGES "LASER CONTOUR CHECK"

- Contactless measurements of cylindrical tools from 1 mm to 52 mm
- Automatic in-process correction of tool diameter and profile
- Duration of measurement including cleaning not longer than 16 s (dependent on tool type)
- Software integration in HELITRONIC TOOL STUDIO
- Suitable for automated series production

FAST AND RELIABLE

For tool manufacturers, this provides numerous advantages: Less susceptibility to errors, significant time savings, and the possibility of maximum automation for series production. "The Laser Contour Check reduces the workload, and employees have more time to deal with other tasks in the company," says Weiss. This applies not only to tools for the turbine industry but also to high-quality and precise forming tools that are required, whether in mold manufacturing or dental laboratories.

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INNOVATIVE AUTOMATION

Increased efficiency, competition, and a shortage of skilled workers make a higher degree of automation in industrial production essential

With Automated Tool Production (ATP), WALTER has developed an innovative automation solution for tools with cylindrical shafts. It is suitable for networking its grinding, measuring, and eroding machines as well as the machines of other system partners upstream and downstream in the production process.

The ATP system requires no additional floor space, can be integrated into existing plant layouts, and is suitable as an interface for machines from other manufacturers. It consists of at least one ROBOT cell accessible from the front (ATP ROBOCELL) for automatic loading and unloading of the machines and at least one autonomous mobile transport ROBOT (ATP MOBILE ROBOT)

ADVANTAGES AUTOMATED TOOL PRODUCTION

- One system for all grinding, measuring, and eroding machines from WALTER
- Retrofittable without system layout modifications and independent of automation provider
- Front-accessible ATP ROBOCELL with 3 interfaces and buffer stations for production without downtime
- Separate pick-up station for in-process exchange of individual parts between measuring and processing machine
- Multi-range grippers and many other automation options

for transporting the workpiece pallets and single parts between the storage and processing stations. This also includes a standardized communication model between machines and ATP MOBILE ROBOT as well as a control system for higher-level data and process control.

MAXIMUM FLEXIBILITY

With the ATP solution from WALTER, customers can retrofit their existing production facilities. A multi-range gripper in the ATP ROBOCELL contributes to the high flexibility of the system. It covers a large workpiece diameter range without changing the gripper unit and can replace the collets at the same time. For the development of this technology, WALTER relied on cooperation with strong partners.

The control system of the overall system is based on the OPC-UA data model FLAMES. With its know-how in tool processing, WALTER developed the ATP ROBOCELL for unmanned loading and unloading of grinding, measuring, and eroding machines automatically. "In this way, each system partner contributes its core competencies, and the customer receives an automation solution that is state-of-the-art in every respect," explains Simon Kümmerle, Strategic Product Manager Grinding Technology at WALTER. The ATP system was first presented at GrindingHub in May 2024.

The ATP ROBOCELL is accessible from the front and can automatically load and unload the machine



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SMALL COUNTRY, BIG KNOW-HOW

Practically full employment in times of crisis.
How is this possible? The Czech Republic has a long
tradition in industry and machine tools,
and its specialists are therefore in high demand

Text: Markus Huth



*The Czech capital of
Prague and its
surrounding area are
among the most
important machine tool
regions in the country*

The automotive industry is one of the most important economic sectors in the Czech Republic and one of the largest users of machine tools and forming machines



WHAT DO CONTACT LENSES, one of the most important manufacturing facilities, and the ship's propeller have in common? These important inventions for our modern world originated in today's Czech Republic. It was chemist Otto Wichterle, born in the Moravian town of Prostějov, who used a self-built apparatus to make the first soft contact lens in 1961. And it was the engineer Emil Škoda, born in Pilsen in Bohemia, who built one of the largest and most modern industrial plants of his time there at the end of the 19th century and whose name the famous Czech automotive brand still bears today. And it was Josef Ressel, born in Chrudim in East Bohemia, who applied for a patent for a propeller in 1827 "for moving ships on the oceans, on lakes and even on rivers".

Back then, the Czech regions were part of the Habsburg monarchy, but this industrial tradition continues today. It is therefore not surprising that industrial manufacturing and, in particular, machine tools are among the most important economic sectors in today's Czech Republic. The country is not only a member of the European Union but, together with countries such as Germany, France, and Switzerland, also part of the renowned CECIMO community for the European economies, with a particular focus on the machine tool industry. Consequently, there are above all many skilled workers among the country's approximately 10.5 million inhabitants. Since their know-how is in demand, the unemployment rate was very low at the end of 2023, at only around 2.4 percent, the best figure of all EU countries and close to full employment.

HIGH PROPORTION OF INDUSTRY

Measured by gross domestic product – around USD 290.5 billion in 2022 – its economic power is only ranked 47th in the World Bank's international country ranking, right between Romania and Finland. However, in the Czech Republic, the contribution of industry is higher, at over 30 percent.



"CZECH MACHINE TOOLS HAVE A TRADITION THAT GOES BACK OVER 160 YEARS."

Oldřich Paclík, General Manager of the Czech industry association SST

"And in addition to the automotive sector, machine tools and forming machine manufacturing is one of the most important industries here," says Oldřich Paclík, General Manager of SST, the largest Czech industry association for manufacturers of machine tools and forming machines. The market is therefore characterized by competition from numerous companies.

Local machine manufacturers such as TOS Čelákovice, Fermat, TOS Hostivař, or Mikronex have a tradition that goes back over 160 years in some cases. According to Paclík, they now produce in smaller volumes but enjoy an excellent reputation around the world for their machines that are specialized for specific applications. "The market share of machines sold by Czech manufacturers based on the total volume of the country is about 20 percent," says Paclík. A much larger volume is produced by foreign companies that have production plants in the Czech Republic. And WALTER with its production plant in Kuřim is among the top 3.

FOCUS ON EXPORT AND AUTOMOTIVE

"We deliberately opted for the Czech Republic when choosing a production location because there are many people here who have great expertise and are accustomed to building machines due to the long tradition," says Lars Streit, Managing Director of the WALTER plant in Kuřim and COO of WALTER EWAG. The town in the south of the Czech Republic is situated in the traditional heart of the machine tool industry and not far from Brno, the country's second-largest city. The WALTER location was founded in the mid-90s and is today one of the leading machine tool plants in the Czech Republic with around 300 employees, about 7,000 square meters (75,200 sq feet) of floor space, and modern production equipment. "Our clean and modern plant would be something to be proud of even in high-tech countries such as Germany, Japan, or Switzerland," stresses Streit. This is the only way to produce

With its modern production facility in Kuřim, WALTER is one of the largest machine manufacturers in the country



“WE DELIBERATELY CHOSE THE CZECH REPUBLIC.”

*Lars Streit, Managing Director,
WALTER Kuřim and COO WALTER EWAG*



high-precision CNC machines for tool machining and contactless measurement in the high quality for which WALTER is well known internationally. The majority of the machines manufactured in Kuřim are delivered to customers abroad.

“The particular focus on export applies to machine manufacturers in the Czech Republic in general. Around 70 percent of the tool and forming machines produced in the country go abroad,” explains industry expert Paclík. The central location in the heart of Europe and the well-developed infrastructure makes the country ideal for this. The most important export market is Germany, followed by China and the USA as well as the neighboring countries of Slovakia and Poland. In Germany, the automotive industry and its suppliers are by far the most important customers for machine manufacturers. The largest automotive manufacturer in the country is Škoda, but large international brands such as Toyota or Hyundai also manufacture vehicles in the Czech Republic. There are also major automotive suppliers in the country, such as Bosch and ZF Friedrichshafen. The region around the capital of Prague is particularly important for this industry.

CRISIS DUE TO THE PANDEMIC

With its focus on export and the automotive industry, the Czech machine tool industry has been very successful for a long time

and has contributed significantly to the country’s prosperity, as Paclík says. However, the sector was also hit hard by the COVID-19 pandemic and its subsequent problems such as global supply chain disruptions, the lack of computer chips, and high inflation. Many vehicle manufacturers had to cut their production, which led to a decline in orders for machine manufacturers. And the geopolitical economic restrictions triggered by the war between Russia and Ukraine have also hit the Czech Republic particularly hard. Even during the Habsburg monarchy, the country saw itself as a bridge between East and West, and after the First World War as part of Czechoslovakia, it belonged to the economic area dominated by the Soviet Union.

WALTER LAUNCHES FUTURE PROGRAM

“Measured by the sales figures of our association members, we’re still below the level we were at before 2019 when the crises began,” summarizes Paclík. Nevertheless, he’s confident. On the one hand, there has been a slow but steady recovery in recent years. On the other hand, the graduate engineer relies on the skills and ingenuity of his compatriots. “Even after the turnaround in the 90s, Czech machine tools have finally managed to keep up with the Western high-tech countries through a great deal of hard work and innovation,” he says.

Lars Streit also has a positive outlook for the future at the WALTER location in Kuřim. “The most important resource in a company is its employees, and ours are among the most capable and most motivated,” he says. In addition, the managing director is currently struggling with a problem that normally only prevails in very good economic times: “There is almost full employment on the Czech labor market, which makes it even more difficult to find skilled workers.”

This is also why WALTER wants to establish itself as one of the most attractive employers for young professionals in the region. This strategy includes the WALTER Future Program launched last fall, which is aimed at graduates from technical colleges who have little or no practical professional experience. They receive a salary, get to know all the company’s departments within a year, and then have good prospects of a permanent position. “The program has been very well received in our region,” says Streit, adding: “Our team is very proud of what has been achieved and WALTER will continue to invest in the location.”

LATEST MANUFACTURING TECHNOLOGIES



Professionals from the manufacturing industry will again meet at this year's International Manufacturing Technology Show (IMTS) in Chicago. IMTS is one of the most important trade shows in the industry worldwide, where manufacturers present the latest technologies and innovations. Under the trade show motto "Inspiring the Extraordinary", this year for the first time there will be a dedicated exhibition area for automation solutions that can make production more efficient (Smart Production Solutions). However, visitors can also find out about the latest trends in categories such as metal processing, laser applications, tool manufacturing, or additive manufacturing.

The UNITED GRINDING Group is one of the technology leaders in many of the areas presented here and will be represented with its own booth. This 740 square meter (8,100 square feet) exhibition area will feature the latest machines and technologies from the current portfolio. "Visitors can

look forward to the latest developments in precision grinding, non-contact measurement, and the most advanced technologies such as smart automation, C.O.R.E., and digital solutions," according to Jacob Baldwin, Director of Corporate Marketing at UNITED GRINDING North America.



SEPTEMBER 9 - 14, 2024
**IMTS – INTERNATIONAL MANUFACTURING
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McCormick Place, Chicago IL
WWW.IMTS.COM

MAY 2025



MAY 6 - 9, 2025
CONTROL
Stuttgart, Germany



MAY 26 - 30, 2025
LIGNA
Hannover, Germany

**SAVE
THE
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OCTOBER 2024



OCTOBER 2 - 4, 2024
METALEX VIETNAM
Hanoi, Vietnam



OCTOBER 9 - 12, 2024
BIMU
Milan, Italy

NOVEMBER 2024



NOVEMBER 5 - 10, 2024
JIMTOF
Tokyo, Japan



OCTOBER 2 - 4, 2024
METALEX VIETNAM
Bangkok, Thailand

MARCH 2025



MARCH 5 - 7, 2025
MECSPE
Bologna, Italy



APRIL 12 - 17, 2025
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YOU CAN FIND THE LATEST TRADE SHOW DATES AT:
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