

SEPTEMBER 2021

**HAINBUCH**

REPORT

ISSUE 37

THE MAGAZINE FOR CUSTOMERS,
EMPLOYEES, AND FRIENDS

**MAY THE
FLEXIBILITY
BE WITH
YOU!**

Amazingly flexible processes
with the HAINBUCH SYSTEM.

LIKE MAGIC

Automated change-over of clamping
devices with centroteX AC

AUTOMATION

Get started with the robot
loader ROBILO

FACTS & FIGURES

INTERNATIONAL **12** SUBSIDIARIESWORLDWIDE MORE THAN **850** EMPLOYEES**1000** SPECIAL SOLUTIONS EVERY YEARFOUNDED IN **1951**INDUSTRY **4.0** DIGITAL FUTURE SOLUTIONS**45** DESIGN ENGINEERSSPANNTOP INVENTED IN **1977****IQ** CLAMPING DEVICES WITH INTELLIGENCE**CFRP** LIGHTWEIGHT CLAMPING DEVICES
MADE OF CARBON FIBERMORE THAN **150** PATENTS

IMPRINT

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 3D graphics: Felizia Rommel
 Printed by: Übelmesser, Freibergstraße 90,
 70376 Stuttgart, Germany

Picture credits
 p. 1, 2, 4-10, 18-19, 23,36 R. Breitenbacher,
 p. 2, 16-19, 24-25 iStock.com,
 p. 12-15 x-technik IT & Medien GmbH,
 p. 20, 32-33, 34-45 Shutterstock,
 p. 28-31, 33 Vischer & Bolli Automation GmbH

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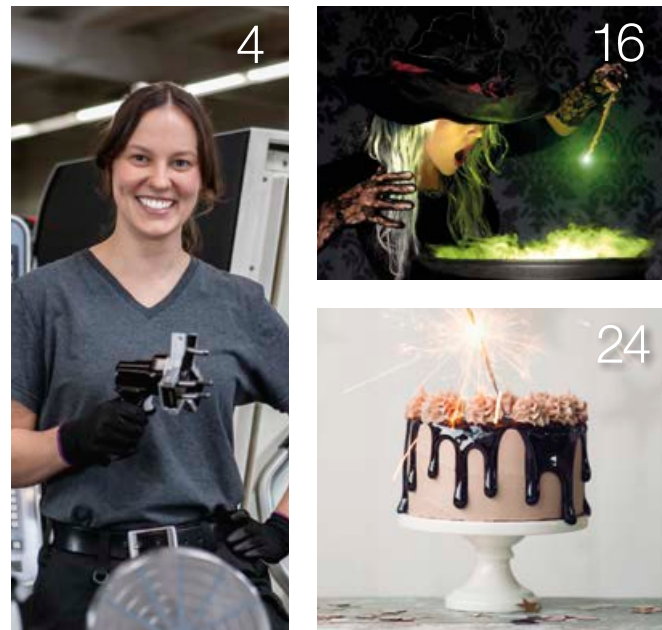
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Printed on FSC®
 certified paper

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FULL
OF
IDEAS

Dear customers, dear employees, and dear friends,

Covid-19 has made this an extraordinary year for all of us – with many ups and downs, changes and uncertainties, together with new challenges on a daily basis. The times certainly have not gotten easier.

But a crisis can also be a very creative time – as is the case at our company. We have made many changes, done away with old processes, turned others upside down – and put a lot of energy into development. The result is nothing less than the beginning of a new era. Now a robot can be used for automated change-over of entire clamping devices, with our new centroteX AC quick change-over system – with accuracies of $\leq 3 \mu\text{m}$ and a cleanliness concept. You don't believe us? We will be glad to prove it: Scan the QR Code in the article and be amazed! Without a doubt we are the right partner for your next automation project. You purchase the machine, we do the rest.

Sincerely,
 HAINBUCH Executive Board

Sylvia Rall

Gerhard Rall



We also have news regarding the HAINBUCH SYSTEM. After introducing the first adaptations for our clamping devices about 18 years ago, we have continuously expanded the HAINBUCH SYSTEM from year to year. It has been met with enthusiasm around the world and has regularly wowed users with change-over requirements. Because we want you to always use the optimal clamping device – but without wasting time for change-over. Fast, precise and flexible production has never been easier. You can read all about it in a report from an Austrian company that knows why the HAINBUCH SYSTEM is so valuable.

Joyful occasions included a milestone birthday and our company anniversary. But don't worry, you don't have to give us any gifts. Instead, we want to give you something: Many new products & services, with bright prospects for the future. We never run out of ideas. That's a promise!

MAY THE FLEXIBILITY BE WITH YOU!

Amazing flexibility with the HAINBUCH SYSTEM.

Numerous different machining tasks, parts variety and complex workpiece clamping set-ups can create stressful situations for machine operators. We have a solution. Join us in the battle against the forces of parts variety and be the winner in every manufacturing process.

The HAINBUCH SYSTEM will not leave your side. You will therefore be optimally prepared for every clamping situation – whether in turning, milling or grinding.

No matter how complex and varying the workpieces may be, whether thin-walled or massive, whether prototypes, one-off or series production, you can always adapt the right clamping device in record time.





CLAMPING HEAD FOR O.D. CLAMPING



The basic clamping device – the TOPlus mini chuck – has already been mounted onto the machine. I grab my changing fixture with the clamping head and insert it securely into the chuck.



Not only is the system very fast, but requires no alignment. Now I can clamp the workpiece to be machined from the outside and start the machine. One more tip: High machining parameters are no problem thanks to the unique rigidity of the system.

ADAPTS TO YOUR WORKPIECE.

Our HAINBUCH SYSTEM is truly a quick-change artist that adapts to your workpiece. It allows you to clamp 1,000 different workpieces and gives you everything you need for complete machining.

But that doesn't mean you need many different clamping devices. Actually, you need only one basic clamping device – a chuck or a stationary chuck that remains on the machine. For O.D., I.D., jaw or magnetic clamping, or clamping between centers you then use adaptations – without having to accept any compromises.

The workpiece defines the adaptation and converts your basic clamping device for the particular application. This incredible solution reduces set-up time substantially, while increasing flexibility and making it possible to easily squeeze in short-term jobs.



The clamping head is available in various sizes and models to ensure that you always have the right clamping head for different workpieces. HAINBUCH offers an incredible range of products. The clamping heads are available with diverse profiles and serrations. The standard models are always in stock and ready for fast delivery.

WHAT ARE THE ADVANTAGES OF THE CLAMPING HEAD?

- Shorter machine downtimes due to very user friendly set-up [30 seconds]
- High rigidity and holding power enable high RPMs
- Minimal wear and tear reduce costs and prolong maintenance intervals
- Resistance to contamination ensures higher process reliability

MANDREL ADAPTATION FOR I.D. CLAMPING



As you can see, I have already removed the clamping head from the chuck. While holding the MANDO Adapt T211 adaptation in my hand, I insert the segmented clamping bushing and then tighten the draw bolt.



Inserting the adaptation in the chuck took less than a minute. Again, nothing needs to be aligned, so I can clamp my workpiece right away. And don't worry, even with a short clamping length you still have high holding power.



There are 3 different models of MANDO Adapt. In addition to the variant with draw bolts it is also available without draw bolts – MANDO Adapt T212. The clamping length therefore extends all the way to the front. And for gripping and pick off from the main spindle, the deadlength variant T812 without pull-back is ideal. So, nothing is impossible.

WHAT ARE THE ADVANTAGES OF MANDO ADAPT?

- Axial draw force ensures workpiece stabilization for high machining parameters
- Also suitable for small clamping diameters if the jaws of the 3-jaw chuck cannot move into the bore
- Minimal interference contour is ideal for 5-sided machining
- Ideal for grabbing and pick off in machines with sub spindles

JAW ADAPTATION FOR JAW CLAMPING



Now I need a larger clamping range that is not covered by the clamping head. No cause for alarm, I can simply fall back on the jaw module. The HAINBUCH SYSTEM with adaptations is absolutely amazing.



I insert the jaw module, secure it with a screw and it is already centered. Everything is ready in no more than 2 minutes. Clamp the workpiece and machine it from all sides, or between the jaws. But the best part: I don't have to change over to an entire jaw chuck.



It is available in 2 sizes. The smaller – size 145 – version allows me to machine 80 % of the components, and if the clamping range happens to be larger than 140 mm, then I use the size 215 jaw module. For cubic components there is even a 2-jaw module, which can be used on lathes in rotating operation.

WHAT ARE THE ADVANTAGES OF THE JAW MODULE?

- Coverage of a large clamping range without disassembling the basic clamping device
- Deadlength clamping with no pull-back effect
- Lubricating system ensures resistance to contamination and optimal lubrication
- Machining between the jaws is possible [milling and drilling]

FACE DRIVER ADAPTATION FOR CLAMPING BETWEEN CENTERS



Now let's take a look at two adaptations that can be very useful when it comes to hard-to-machine shafts. And I wouldn't want to omit them, because HAINBUCH really thought of everything in designing these adaptations.



If you have a part you want to machine over the entire length, for example, you can use the face driver for machining between centers. I know I have already mentioned this several times, but this too takes less than 1 minute, and no alignment is necessary.

MAGNET MODULE ADAPTATION FOR MAGNETIC CLAMPING



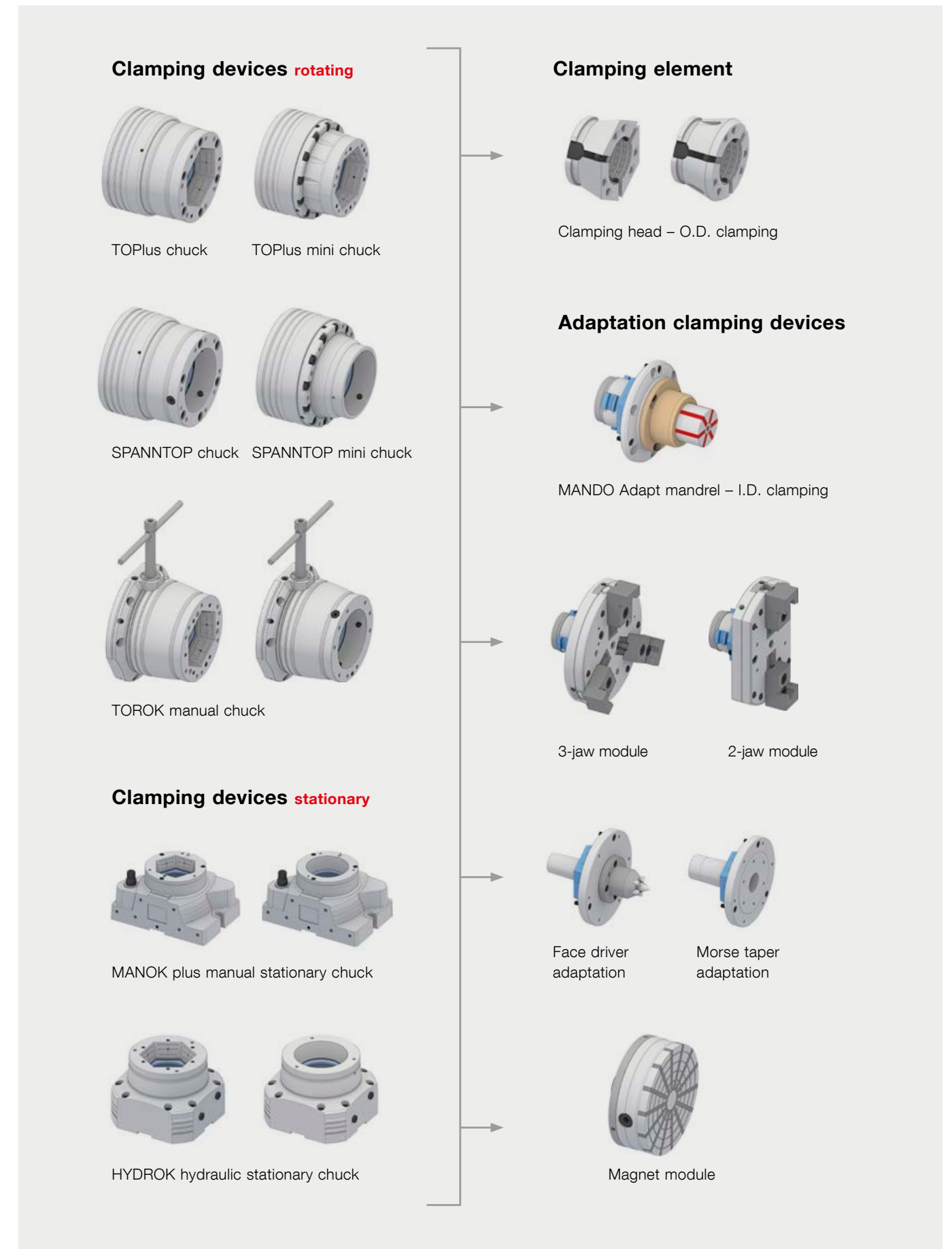
If the contour of the part makes it hard to machine or if it can be deformed from radial clamping, the magnet module with magnetic axial clamping is a good solution.



This allows axial machining of the part on a neodymium magnet, and the magnet module is pulled onto the flat contact face on the basic clamping device. You already know: 30 seconds, and no ...

THE HAINBUCH SYSTEM - A TRUE QUICK-CHANGE ARTIST THAT ADAPTS TO YOUR WORKPIECE.

THE HAINBUCH SYSTEM AT A GLANCE



HAINBUCH CLAMPING DEVICES ENTER THE VAPING SCENE

FIS Zerspanungstechnik GmbH in Innsbruck, Austria has a plant with an area of 2,000 m² for manufacturing complex turned and milled parts of the highest quality. Decisive factors in the company's success include a modern machine park and high-quality clamping devices from HAINBUCH, which ensure manufacturing processes of high precision and flexibility.

How it all started

The success story of FIS Holding GmbH started back in 2002. Franjo Stijepic laid the cornerstone with »Franky's Used Cars«. In 2009, his sons Stefan, Niko and Marijo, all three mechanical engineers with a passion for technology and product development, joined the company. They established the Vapor Giant brand, which marked the company's entry into the market for electronic cigarettes in 2014. »We were looking for an alternative to cigarettes, so we started vaping in 2011«, Marijo relates. But they were not satisfied with the e-cigarettes on the market at the time. With boring designs, a poor selection and long delivery times, not a single model could convince them. »We told ourselves we could do it better, and so we developed our first atomizer in 2013«, says Marijo.

That was the beginning of the V1, which at first was intended only for family and friends. With advanced technologies, high-quality stainless steel, a convincing design and good battery performance, they meanwhile made it among the top five in the high-end sector for e-cigarettes. They are the market leader in Germany and integral to the European vaping scene.

Founding of FIS Zerspanungstechnik GmbH

»Our first atomizer was manufactured in Tyrol, Austria. In 2014, we moved production to Croatia. The only processes still in Innsbruck were finishing, cleaning and final assembly«, says Ivan. »Last year we decided to bring production back to Austria and do everything ourselves. We just wanted to be faster and more flexible. For example, if we decided we wanted to mill a second profile, it was a lengthy process. Now we design the part, program it, send it to the machine, and we're done«, says Marijo. This decision also fired the starting shot for the newly founded FIS Zerspanungstechnik GmbH.

For the manufacture of the atomizers they purchased five Doosan Puma TT1800SY and one Doosan LYNX 2100 LY. The horizontal turning centers are designed for series production of high-precision parts, which makes them ideal for the parts spectrum. »The left and right spindles and the upper and lower turrets operate independently of each other, which doubles productivity. We also offer our ultra-modern machine park and expertise as a job shop for diverse industries, components, groups, large and small series production runs«, says Marijo.



Particularly in the case of limited installation space and series operation, the TOPlus mini chuck is ideal: Lower energy requirements, more dynamic spindle accelerations and shorter cycle times reduce the costs per workpiece.



The main spindle is equipped with a size 65 TOPlus mini deadlength and the sub spindle with a size 52 SPANNTOP mini deadlength.

» While the main spindle machines the front side, the rear side is simultaneously machined on the sub spindle. Without HAINBUCH we would not be able to manage all of these manufacturing steps, especially not with the required flexibility. «

Marijo Stijepic, Managing Director
FIS Zerspanungstechnik GmbH



The HAINBUCH SYSTEM.



A successful partnership [left to right]: Ivan and Marijo Stijepic of FIS Zerspanungstechnik with Jürgen Schmidhuber and Richard Gierlinger from HAINBUCH.



Vapor Giant atomizers convince with high quality and an elegant design.

The right clamping device is crucial

To ensure high precision and flexibility in manufacturing the parts, all six machines are equipped with HAINBUCH clamping devices. »We took a close look at the parts spectrum and then decided to use a size 65 TOPlus mini deadlength chuck for the main spindle and a size 52 SPANNTOP mini deadlength chuck for the sub spindle. For the main spindle we normally use a pull-back chuck. But in this case we chose a deadlength chuck due to the small and delicate parts being manufactured, which requires clamping without pull-back«, explains Jürgen Schmidhuber of Technical Sales at HAINBUCH Austria.

Richard Gierlinger, Managing Director of HAINBUCH Austria, adds: »One of our strengths is that we can implement such

clamping designs on the basis of drawings. We have a separate department just for this very purpose.« The »mini series« features up to a 30% reduction in mass, and a chuck diameter that is smaller by 1/3. This reduces energy consumption and improves tool accessibility. »On the main spindle we turn a part from PEEK 2 with a length of 1.0 mm, for example, then this part is grabbed by the sub spindle, cut off, moved back, face turned again and lowered. Clean and precise grabbing and pick off of such thinwalled parts is possible only with a deadlength chuck«, explains Marijo.

High holding power with HAINBUCH technology

In addition to the chucks, diverse mandrel adaptations from HAINBUCH are also in use. The central element is the vulcanized segmented clamping bushing. According to Schmidhuber, conventional clamping bushings made of spring steel are only annealed to spring hardness, which means they are soft and have to bend to clamp the workpiece. HAINBUCH segmented clamping bushings, on the other hand, are made of case-hardened chromium-nickel-steel, and the segments are extremely hard, wear resistant and rigid. All contact surfaces are ground completely in a single clamping set-up, which guarantees ideal run-out accuracy. »Complete machining often fails for lack of an effective I.D. clamping device. In many cases the jaw chuck is a makeshift solution, but even conventional mandrels with slotted clamping sleeves are limited with respect to accuracy, rigidity and the opening stroke. Exactly the opposite of our mandrels, which incorporate state-of-the-art workholding technology that performs convincingly even in very critical applications«, explains Schmidhuber.



Overview of the parts spectrum of an atomizer.

MANDO Adapt for fast I.D. clamping

For a high level of flexibility the mini series has its own clamping device adaptations. To switch from O.D. to I.D. clamping without changing the clamping device, the technicians use the HAINBUCH SYSTEM. »With MANDO Adapt all they have to do is position the mandrel adaptation on the mounted clamping device and tighten three screws. That not only saves time: MANDO Adapt also convinces with extreme rigidity and precision. It is possible to achieve run-out of 0.005 mm between the chuck and the mandrel taper in rotating products, and repeatability of 0.003 mm in stationary clamping devices. And best of all – no time-consuming alignment is necessary«, Schmidhuber adds.

Everything from a single source

»We can offer everything from a single source: from turning, milling, tapping, thread cutting, plungecutting, cutting off, etc. to lasing, engraving, coating and cleaning. Without HAINBUCH we would not be able to manage all of these manufacturing steps, especially not with the required flexibility«, the brothers conclude. Gierlinger adds: »Everyone is talking about medical technology. If you look at the Vapor Giant parts spectrum, some of the parts are more complex than those used in medical technology – and we are of course very pleased that we were able to contribute our solutions and our expertise to this application.«

Report by Christof Lampert, x-technik IT & Medien GmbH



CHANGE YOUR CLAMPING DEVICE LIKE MAGIC

No, we cannot cast spells, fly on broomsticks or concoct magic potions, but we can create world firsts in our magic kitchen. Abracadabra: An interface for automation of your clamping devices and unattended change-over on the machine. Take: A time-proven centroteX quick change-over system, convert it to a mini version and give it powers of automation.

Automated change-over of entire clamping devices with centroteX AC

If you like our centroteX quick change-over system, then you will be even more excited about this revolution. It allows you to change entire clamping devices just as fast, but in a fully automated and unattended process. We applied our existing knowledge of the quick change-over interface to automation and launched a spectacular and unique system: centroteX AC.

Automated clamping device change-over with centroteX AC is possible on machines with a horizontal or vertical rotating spindle, and also on stationary systems [machining centers & measuring machines]. The clamping device is pulled in via a bayonet mechanism using a mechanical actuator, such as a screwdriver or wrench.

What about contamination?

A cleanliness concept ensures the reliability of all processes. Chips and other contamination are blown out with air during assembly of the parts.

Cooling lubricant can be applied continuously during the machining process to prevent contamination from entering the area between the interface and the clamping device. Multiple air sensing controls check the change-over process between the machine adapter and the clamping adapter and send a signal to the controller upon completion of the process.

Benefits:

- Manufacturing of individual component parts from different workpieces with minimal set-up effort and no manual intervention
- Improved machine utilization due to process reliability also in unattended shifts
- Personnel can operate several machines simultaneously, since they are needed only for external preliminary set-up
- Run-out and production accuracy are identical to the clamping devices in use, in addition to change-over accuracy of the centroteX AC interface [≤ 0.003 mm]



centroteX AC in action:

LIKE MAGIC



NEW HIGHLIGHTS

... ensure brilliant results.
They make man and machine happy
and conjure up more money.

Universal manual changing fixture

Gets along with every clamping head – one for all

Thousands in use – our changing fixtures allow you to change your clamping heads in a flash. Only that in the past, the particular model [TOPlus or SPANNTOP] and a special extension length required the use of different changing fixtures. That is no longer necessary!

In 2022 we will launch the universal manual changing fixture – a small, versatile device that can change both TOPlus and SPANNTOP clamping heads. The new changing fixture can even handle a clamping head front nose extension of up to 19 mm.

This eliminates the bother of creating customized solutions. The pneumatic version of the universal changing fixture will follow.



Key advantages

- Only one changing fixture per size – for TOPlus and SPANNTOP
- Available for sizes 52, 65 and 80
- Also for clamping heads with front nose extension of up to 19 mm



Mandrel adaptation MANDO Adapt for the deadlength TOPlus chuck

New addition to the hexagonal HAINBUCH SYSTEM

Do you want to take advantage of the improved holding power and other features of the HAINBUCH SYSTEM with the TOPlus chuck? But you have hesitated so far due to the lack of a suitable MANDO Adapt T812 mandrel adaptation? Understandable – especially if this is exactly what you need to grab and pick off the workpiece from the main spindle.

Now MANDO Adapt T812 is also available in a version that fits TOPlus chucks.

Key advantages

- Mandrel adaptation – saves time when changing from O.D. to I.D. clamping [in 1 minute without disassembling the basic clamping device]
- Deadlength radial clamping – ideal for grabbing and pick off from the main spindle
- Clamping without draw bolts – optimal for blind bores

TOROK IQ / MANOK plus IQ

The »smart« clamping device – now also for stationary and manually actuated workholding solutions

Should one rely on »intuition only«? Although possible, it is not advisable. The reason: Not only do some DIN standards require specific measurements, but regular measurements also help you to reduce your costs. That is why our portfolio has long included both chucks and mandrels with integrated smart measuring functions.

But what about machining processes on milling machines, machining centers or lathes without a clamping cylinder? Now you can clamp and measure simultaneously in such processes as well. Because the TOROK manual chuck and the MANOK plus manual stationary chuck are now available as IQ variants.

And what exactly makes these two chucks so special? They eliminate manual measurement of the clamping force, the workpiece diameter, the workpiece contact on the end-stop and the temperature. This simplifies work immensely, prevents machining of rejects and allows demand- and condition-oriented maintenance intervals.

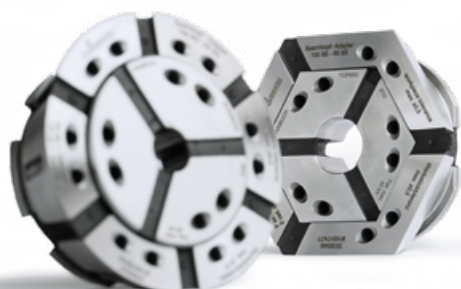


Key advantages

- IQ clamping devices are now also available for milling machines, machining centers or lathes with a clamping cylinder
- Simultaneous clamping and measuring
- Non-contact transmission of measurement data [workpiece diameter, contact, clamping force and temperature] directly to the machine controller – no cables needed
- Target/actual comparison of the measurement data including a message in the event of differences

Clamping head adapter

Presto – a large clamping head becomes a small clamping head



Key advantages

- Available for chuck sizes 100, 125 and 160
- Enables use of existing or in-stock clamping heads [size 65 and 100]
- Quick and easy change-over

Let us assume that you generally machine large workpieces and the machine is usually equipped with a size 100 chuck or larger. But what if you have to machine smaller workpieces in between? Until now there were only two options. Number 1: A large clamping head with a small clamping diameter – but they are not always in stock, and they are more expensive, for example, than size 65 clamping heads. Number 2 was to change over to a smaller chuck – which lengthens the set-up time.

Now there is a third option – the perfect solution! The new clamping head adapter »transforms« your size 100 chuck, for example, into a size 65. Simply insert the clamping head adapter in the size 100 chuck and then insert the »normal« size 65 clamping heads. This allows you to profit from the high in-stock availability and the low price of the smaller clamping heads, while saving you time – because no chuck has to be changed.



centroteX S

Amazingly fast – the **quick change-over interface** with a maximum capacity of 52 mm

Are you one of those customers who hate long set-up times, preferring efficiency and flexibility instead? Then our quick change-over systems are just the right choice for you. In addition to reducing your set-up times, they also ensure that you always use the perfect clamping device for the particular machining task at the right time.

The larger centroteX M quick change-over system has been in use by thousands of customers for many years already. Usually, it also fits on the machine. But what if that is not the case? No problem, just use the small centroteX S variant for a thru-hole capacity of up to 52 mm. The small version has all the features of the large one, is available in stock and offers many other advantages.

For use on:

- Machines with spindle nose A2-5, A2-6 AP140 & AP170
- Vertical lathes
- Grinding machines
- Measuring machines

Would you like more information about one of our highlights?

Then you should just give us a call or send us an e-mail:
+49 7144.907.333 | sales@hainbuch.de



Overview & benefits:

- Drastic reduction of clamping device change-over times – now possible in less than one minute
- Only one radial locking screw
- Possible change-over accuracy between the machine and the clamping device adapter: < 0.003 mm – and no alignment is necessary
- Universal use of clamping devices [TOPlus / SPANNTOP chuck up to size 65 and jaw chuck up to size 215, as well as MAXXOS and MANDO mandrels]
- Ideal quick change-over interface for deadlength [pressure actuated] clamping devices
- Power actuation or fluid actuation of the clamping devices

DOUBLE ANNIVERSARY:

70 years for
HAINBUCH
&
80 years for
Gerhard Rall

We remain curious, have dreams and the courage
to start new ventures again and again.



LOOKING BACK

AT THE BEGINNINGS OF HAINBUCH



1951 ● As with so many other companies, the HAINBUCH story started in a garage. Equipped with a lathe and a hacksaw, **Wilhelm Hainbuch and his wife Frida established** their own job shop **on February 1, 1951**.



1958 ● The first **collets** are manufactured.



1964 ● A **new workholding fixture** is the first patented HAINBUCH invention.



1966 ● Son-in-law **Gerhard Rall**, who joined the company in 1966 as its **Plant Manager**, has ambitious goals.



1977 ● The design of the **SPANNTOP** chuck is the invention and achievement of Gerhard Rall and revolutionizes workholding technology. Up until today it is **THE clamping device** in the machine tool industry worldwide and copied many times.



2003 ● The birth of the HAINBUCH SYSTEM – everything fits together. With the development of **MANDO Adapt** the chuck can be changed over from O.D. to I.D. clamping in a flash.



2006 ● Another milestone is the development of the award-winning **TOPlus** chuck with hexagonal clamping geometry, and one year later the intelligent version – **TOPlus IQ**.



2020 ● With the acquisition of Vischer & Bolli Automation in Lindau HAINBUCH enters into a new **era of automation** and becomes a general contractor for automation projects.



2021 ● The **AC [automated change]** line is launched – a world first! The system enables automated change-over of entire clamping devices on the lathe.



Gerhard and Hildegard Rall

GERHARD RALL

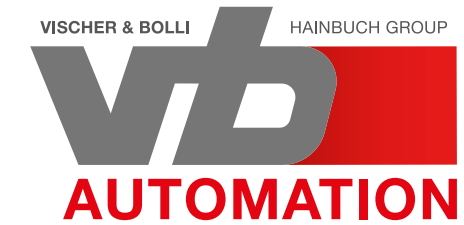
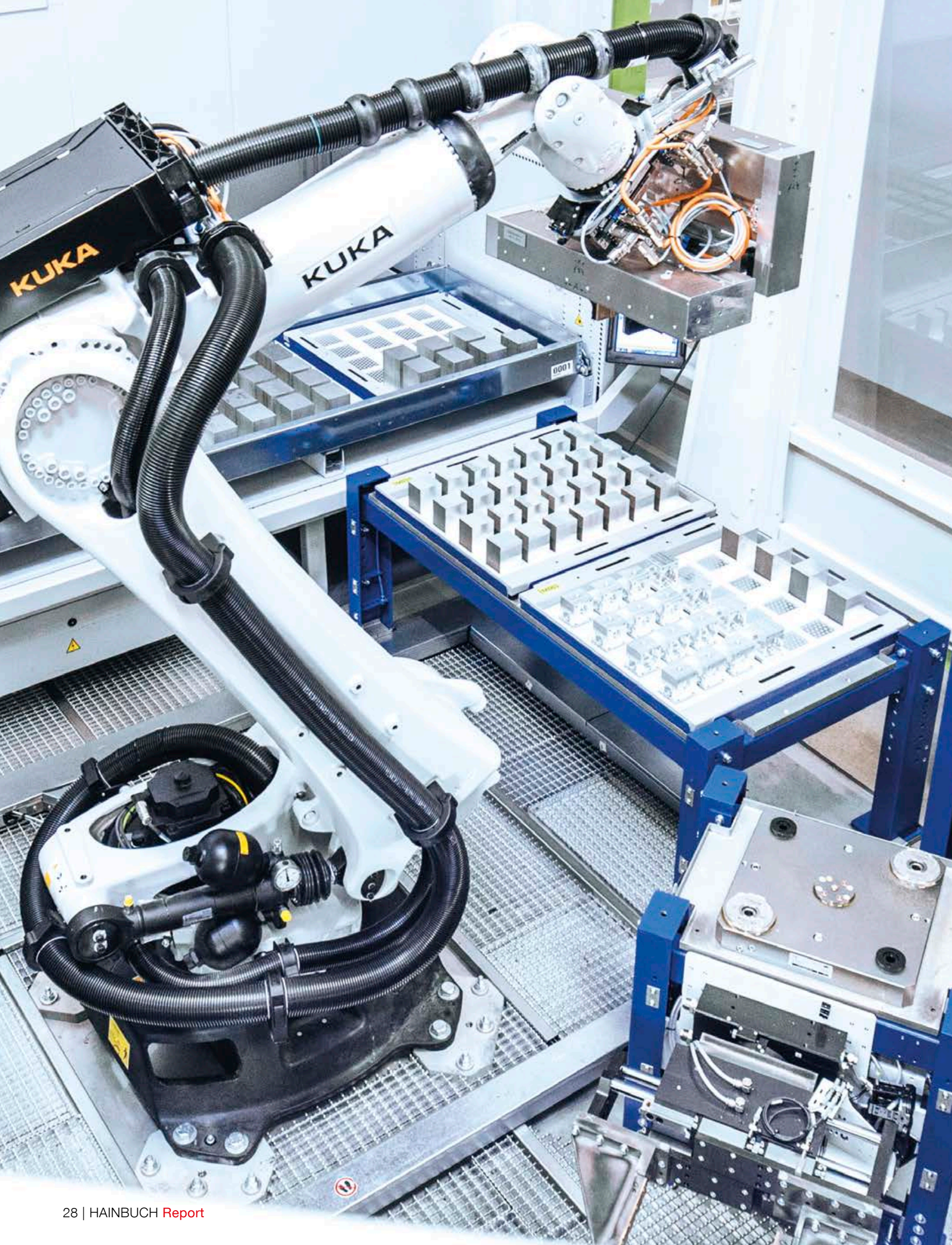
80 YEARS OLD AND 63 YEARS AT HAINBUCH

Managing Director Gerhard Rall doesn't understand all the excitement about his birthday and his anniversary of employment. »Our marketing department wanted to publish a big story about it in our magazine«, he said in amazement. »For me, it's not such a big deal; I just love the daily challenges and I am fascinated by the bustling activity. Besides, it keeps me young«, he says, winking.

Visions, diligence and unbridled passion

His career started in 1958 with an apprenticeship as a mechanic at HAINBUCH. However, it soon became obvious that he wanted more than to just operate machines. His talents lay elsewhere. He is a visionary tinkerer. His dream was to invent his own products and have his own company. After the apprenticeship he became a technician, then plant manager in 1966, and a few years later completed a part-time degree in business administration. During an especially boring lecture in 1977 he invented the »SPANNTOP« clamping system. This pioneering invention really got the stone rolling and is still the standard in the industry. It was followed by many other ideas that were patented, contributing to the success of HAINBUCH.

He is proud not only of the awards presented to the company, but also his individual awards for outstanding personal and entrepreneurial achievements. In 2010 his career was crowned by his appointment as honorary senator h. c. by the Economic Committee of Germany and in 2012 by the award of the Enterprise Medal of the state of Baden-Württemberg. And his dedication does not stop at the factory gates. He displays a high level of commitment in cultural and social matters, not only in the Marbach region. For example, he is the 1st Chairman of the aid association »Stückchen Himmel e. V.«, which supports a day care center at the edge of a favela in northern Brazil.



VISCHER & BOLLI AUTOMATION IS NOW PART OF THE HAINBUCH GROUP

For almost a year now Vischer & Bolli Automation [VBA] in Lindau, Germany is one of our subsidiaries.

VBA, established in 1994, specializes in the automation of complete manufacturing cells and customized solutions for stationary workholding technology.

VBA attaches great importance to smooth processes, maximum functionality and productivity – all at a fair price. The company's extensive partner and service network allows them to offer everything from a single source in order to fulfill the customer's individual requirements. No matter how complex and technically challenging the task may seem – VBA is certain to have a solution at the ready. One of their most important priorities: Sustainable implementation of projects for both the customer and the environment.

Would you like to learn more? Then turn the page to read about what VBA can offer you. There are many options for optimizing and even automating workholding technology and manufacturing processes.

The staff at Vischer & Bolli Automation looks forward to help you coordinate your next project:



+49 8382 96 19-0

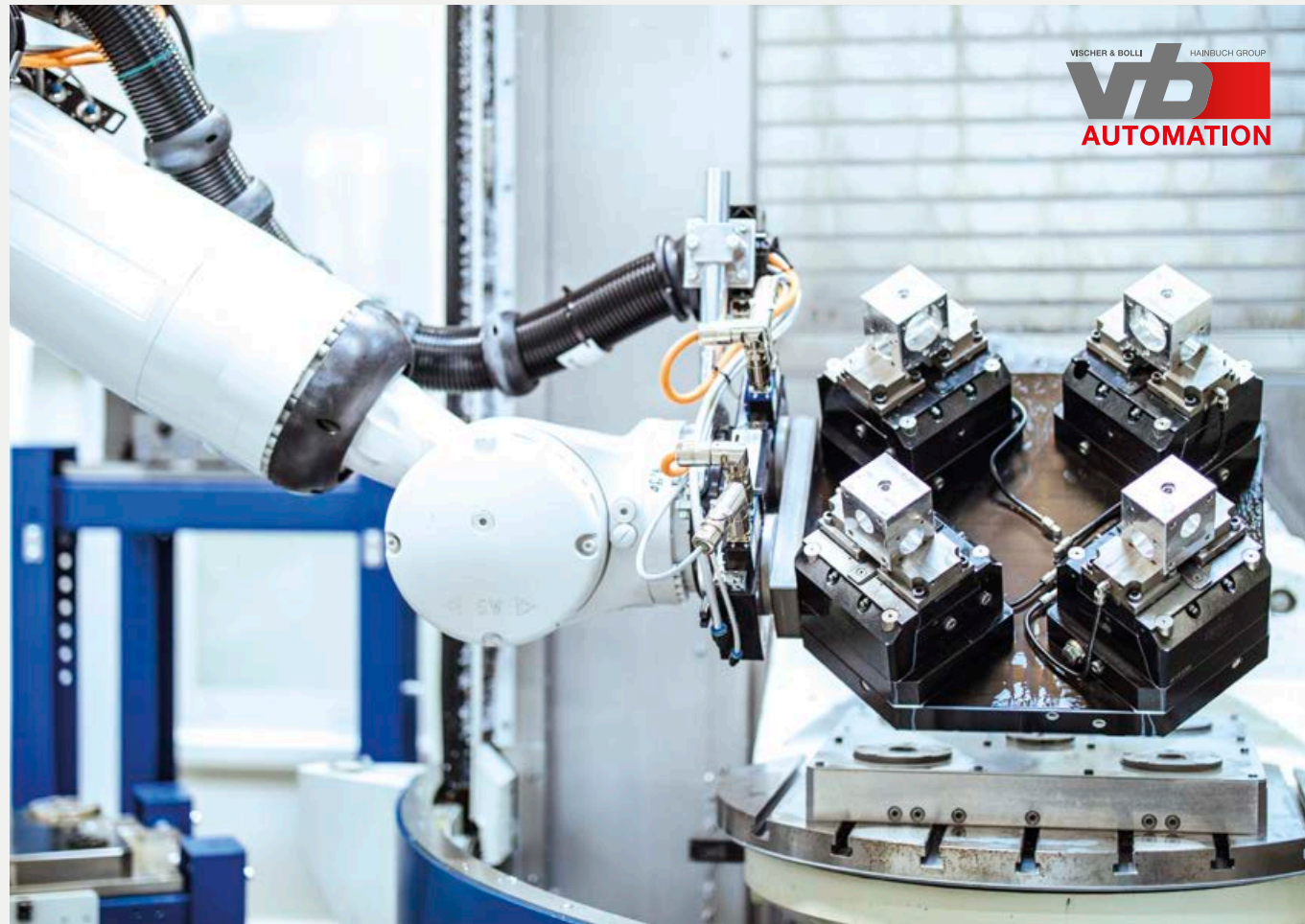


verkauf@vb-automation.com



www.vb-automation.com

VBA – THE COMPANY TO CONTACT FOR AUTOMATION PROJECTS!



YOU BUY THE MACHINE, WE DO THE REST!

The focus in industry is shifting more and more toward automation and digitization of processes, due to the huge potential for savings. But implementation of such changes is much easier with the right partner. And that is where Vischer & Bolli Automation [VBA] enters the picture.

VBA develops overall automation concepts for milling, turning, grinding and assembly, providing support from the very beginning. You get everything from a single source – from the clamping device, robot cell, mounting fixture and grippers to the storage solution, sensors and software. In other words: **You buy the machine, we do the rest.**

VBA also shows you how you can integrate additional automated processes such as measuring, cleaning and deburring.

Capabilities

- Unattended 24/7 or > 48 hour manufacturing
- Handling weights from 10 grams to 3 tons
- Automated changing of fixtures, workpieces and tools even in one-off production
- Connection to any machine tool
- Master computer software available in all development stages, as well as connection to an ERP system

Your benefits

- Cost-effective solutions thanks to a modular concept
- Improved product quality as a result of consistent and repeatable processes
- Full utilization of your machines
- Potential cost reductions of € 200,000 per year or more

VBA – THE COMPANY TO CONTACT FOR STATIONARY WORKHOLDING TECHNOLOGY AND CONSTRUCTION OF FIXTURES!

Stationary workholding, especially in the case of small batches and large components, often requires a customized solution. Disadvantage: High costs and long delivery times – and most are not designed for user friendly set-up. But that is very important for optimal use of machining potentials and keeping the machine park in conformity with growing market requirements.

Preferable are customized solutions that can be implemented with standard products – which are substantially less expensive. In addition, the solutions should be designed for user friendly set-up. VBA offers an optimal and economical complete solution for every workpiece – regardless of the shape or size. Thanks to **high in-stock availability** of stationary clamping devices and the modular concept of the zero-point clamping system, VBA can implement many **fixtures using standard components**. If none of the standard products are suitable, a custom fixture is created based on customer requirements.

The basis for such a complete solution is the zero-point clamping system. It is bolted to the machine table **to enable fast change-over**. Depending on the requirement, workpiece clamping is achieved by means of a vise, a clamping tower, a modular clamping device or system, a magnetic clamping pallet or a custom fixture.

Capabilities

- Convenient retrofitting of existing clamping devices by means of inexpensive clamping bolts
- Complete solution for workpieces with a weight of up to 100 tons or a length of up to 20 meters
- The zero-point clamping system is available in a pneumatic or hydraulic version and can be used manually or in an automated process
- Mounting elements enable inexpensive direct installation on machine tables, pallets or fixtures

Your benefits with the zero-point clamping system

- Set-up parallel to production time reduces machine downtimes by up to 90 %
- Zero-point repeat accuracy < 0.005 mm
- Improved surface quality due to dynamic vibration-dampening positive locking and frictional clamping
- Designed for more than 1 million clamping cycles



Getting started with automation the easy way, at no risk:

ROBILO – the robot loader for your lathe and milling machine

Sales region:
Germany,
Austria and
Switzerland



Years of research and development produced an incredible number of automated clamping solutions, and our new AC line makes us experts in workholding automation. But we also think about the processes outside of the machine tool. After all, everything should be user-friendly and efficient – just as you have come to expect from HAINBUCH.

Our latest highlight: ROBILO, the robot for automated loading of your workpieces. This robot loader features an integrated camera and knows the exact location of your workpieces – a clever detail that gives you an enormous advantage. It is designed for use with diverse machine tools in turning, milling and grinding applications, etc.

Technical facts about ROBILO

The universal machine interface [field bus or I/O box] ensures compatibility of the robot with different machine types – including your existing machines. In case your machine is not equipped with automated door opening, ROBILO can do this for you, too. The optional electric torque drivers on the gripper enable actuation of mechanical clamping devices such as a MANOK stationary chuck or a centric clamping vise. This eliminates the need for a costly pneumatic system in a machining center or hydraulic lines at the machine table.

Optional workpiece buffer for storage

- If you are still looking for a storage solution for your workpiece supply system, we have a solution for that as well. A compact and practical box with an area the size of a Euro pallet gives you a total storage space of 6 m² for your workpieces.
- The box can easily be moved with a pallet truck enabling loading and unloading away from the machine.
- Additional inlays, metal sheets or magazines are superfluous.

Integrated camera for workpiece detection

- Your workpieces are easily detected – without having to be available at certain storage stations. It can even be used without mechanical end-stops.
- The user interface simplifies job set-up since no special programming skills are needed.
- Due to the use of laser measurement, your workpieces can be wherever there is room for them, such as on a transport cart, a table or simple wooden pallets.



NEWS

WORLDWIDE



Guafang Wang
National Sales Director

CHINA

NEW SALES OFFICES AND NEW DIRECTOR OF SALES

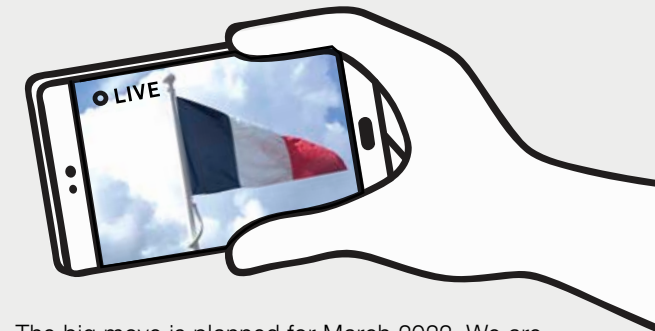
In 2020 we established two new sales offices in Dalian and Chongqing, due to the huge potential in the Asia-Pacific region. That not only puts us closer to the customer, allowing better local customer service, but also enables faster and more active sales. In May 2021 Guafang Wang joined HAINBUCH Shanghai as the new »National Sales Director«.



FRANCE

HAINBUCH FRANCE SHINES IN NEW SPLENDOR

Our site in France has undergone extensive makeover and refurbishment. In addition to a new facade, we also invested a good deal in the interior. Now the design of the manufacturing facilities and the office workplaces is new, modern and HAINBUCH like. A pleasant environment enhances creativity and produces better work results.



SLOVAKIA

NEW FACTORY FOR HS-TEC

In the autumn of 2021 we started construction on a new building in Dubnica. The big move is planned for March 2022. We are combining the two production sites in Trenčin and Banovce. This will allow us to improve spatial working conditions, optimize production processes and streamline the flow of materials and information. The extra space will make it possible to expand the machine park and other capacities. All employees – 180 from the two factories – are looking forward to the new location.





»LIVE & IN COLOR«
JUST FOR YOU!