SEPTEMBER 2025

HAINBUCH

REPORT

ISSUE 41

THE MAGAZINE FOR CUSTOMERS, EMPLOYEES AND FRIENDS

THUMBS UP for CLEVER SOLUTIONS

FACTS & FIGURES

5 GERMAN LOCATIONS

11 INTERNATIONAL SUBSIDIARIES

WORLDWIDE MORE THAN **850** EMPLOYEES

OVER **1000** SPECIAL CLAMPING SOLUTIONS PER YEAR

15 YEARS EXPERIENCE IN AUTOMATION

FOUNDED IN **1951**

INDUSTRY **4.0** DIGITAL FUTURE SOLUTIONS

OVER **55** DESIGN ENGINEERS

SPANNTOP INVENTED IN **1977**

IQ CLAMPING DEVICES WITH INTELLIGENCE

LIGHTWEIGHT CLAMPING DEVICES **CFRP** MADE OF CARBON FIBER

MORE THAN **150** PATENTS

MEASURING DEVICES SINCE **2008**

IMPRINT

Editors: Christina Große Kathöfer, Cornelia Riek
Design: Anne Preuß
Printed by: Druckhaus Stil+Find, Felix-Wankel-Straße 2, 71397 Leutenbach-Nellmersbach

Picture credits
S. 1, 2, 6, 12–13, 16, 20–21, 30 Ralf Breitenbacher
S. 2, 8–9, 26–29 HAINBUCH
S. 2, 22–25 MTDCNC
S. 3 Andreas Dalferth
S. 4–5 #157168347 iStock
S. 10–11 Hota Industrial Mfg. Co., Ltd.
S. 14–15 / 18–19 BIS Specials
S. 30 #1064379906 iStock

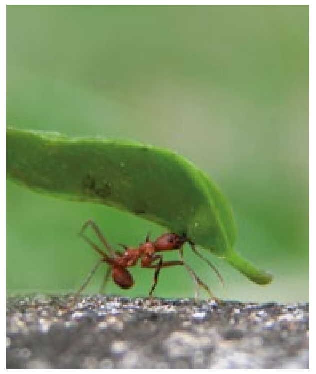
Although the masculine form is used throughout, this is only to make the text easier to read and is not meant to exclude the feminine gender or others.

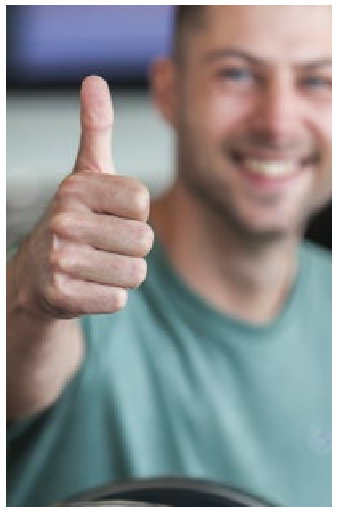
HAINBUCH GMBH
WORKHOLDING TECHNOLOGY
Erdmannhäuser Straße 57, 71672 Marbach
Germany

Phone +49 7144.907-0, Fax +49 7144.18826
info@hainbuch.de, www.hainbuch.com

CONTENT

REPORT 41 | SEPTEMBER 2025





Dear customers, dear employees, and dear friends,

Sometimes that's exactly what it takes: real fine-tuning that makes all the difference. A seemingly small change – in workholding technology, for example – can have a big impact. And suddenly it works: faster, more flexible, more reliable.

For us, optimization does not mean turning everything upside down. Instead, it means taking a close look, thinking ahead cleverly – and making precise improvements. With the right solution at the right time, set-up times can be reduced, machining processes streamlined, part ranges expanded and scrap reduced. Without a huge investment, but with an immense effect.

In this issue, we show you how you can achieve more with less – thanks to intelligent workholding technology, creative minds and a dash of courage to think things differently.

We hope you enjoy reading – and optimizing!

Sincerely,
HAINBUCH Executive Board

Sylvia Rall **Dr. Achim Feinauer** **Gerhard Rall**

MAXIMUM EFFICIENCY & PRODUCTIVITY –

WITH CLEVER SOLUTIONS

Because a clever approach can make a big difference.

Sometimes the goal seems far away: more output, higher productivity, leaner processes – but without major investment.

But it is possible. Analyzing processes, exploiting hidden potential, turning the right screws – if you do this skillfully, you can make a big difference.

So thumbs up for...

1. Shorter machining time	**2.** Wider part range
3. Reduced set-up times	**4.** Less scrap

1.

THUMBS UP FOR...

SHORTER MACHINING TIMES

– UP TO 75 % LESS

More output thanks to efficient processes

Shorter processing times without new machines? It is possible! By using modern clamping devices, workpieces can be clamped more efficiently, safely and accurately. Stable processes and faster set-ups or change-overs shorten cycle times – and make production more cost-effective overall.

From real life →

75 % SHORTER MACHINING TIME

thanks to rigid I.D. clamping

SUCCESS STORY

Customer: MBS from Germany

Manufacturing heavy stainless steel housings efficiently – this challenge presented MBS CNC-Technologie & Engineering with a tricky task. The planned milling of the inner contour was uneconomical and an alternative had to be found.

Task

- Stainless steel housing weighing up to 46 kg and 325 mm long
- Originally planned machining: 3D milling with 204 min. machine runtime would have been uneconomical and would have involved changes to the component design

Solution by HAINBUCH

TOPlus chuck with MANDO Adapt T212 for powerful and rigid I.D. clamping and thus the switch from a milling machine to a lathe

- High rigidity and therefore low-vibration machining
- Clamping against the end-stop leads to increased stability

"Enormous forces act at these weight and length ratios. The workpiece is very large and long in relation to the clamping bore. In addition, eccentric clamping and high demands on the surface make machining difficult. Milling seemed the obvious choice – fortunately, we were able to switch to turning thanks to the powerful and rigid I.D. clamping."

Alexander Bergmann, Managing Director of MBS

Result

- Rigid clamping allows switch to turning with consistent quality
- Reduction of machining time **by 75%** [from 204 min. to 51 min.]

By switching from milling to turning, MBS can make optimum use of its production capacities and work very efficiently.

Read the full report here:

The HAINBUCH technical consultant with the MBS production foreman

SUCCESS STORY

20 % SHORTER MACHINING TIME
thanks to new workholding technology

Customer: HOTA Industrial from Taiwan

HOTA Industrial, Taiwan's largest manufacturer of drive components, was looking for a way to optimize machining times in the production of transmission parts for electric cars. With a production volume of 20,000 parts per month and high demands on precision and repeatability, more efficient clamping devices were required.

Task

- Conversion of the previous clamping situation for all process steps before hardening with the aim of increasing process reliability and production quality.
- Previous clamping device: HOTA collet
- Material used for the components: Low-alloy case-hardening steel

Read the full report here:

Solution by HAINBUCH

Mandrel MANDO G211

- Rigid, radial I.D. clamping
- Pull-back effect for reliable clamping
- Vulcanized segmented clamping bushings for tolerance compensation without manual adjustment
- Integrated flushing channels [reduces chip deposits and cleaning times]

Result

- Set-up and machining time reduced each by 20 %
- Repeatability and process reliability improved
- Longer tool life thanks to reduced vibrations
- Easy compensation of workpiece diameter tolerances in work preparation

By reducing machining times, HOTA was able to make the entire production process more efficient – with higher capacity utilization, improved quality and an economical solution for series production.

The drive wheels are manufactured on a hobbing machine Hartech HGH-250.

The MANDO G211 mandrel clamps radially with a pull-back effect. Depending on the mandrel size, the radial clamping force is 42–150 kN.

THUMBS UP FOR...

2.

WIDER PART RANGE

Responding quickly to new requirements

Small batch sizes, varying workpieces, new requirements – today's production must be flexible. Our modular clamping devices make it possible. Quickly adaptable, easy to expand and ready for the challenges of tomorrow.

MORE PARTS through greater flexibility

Customer from the Netherlands

What was needed was an economical clamping solution for several different workpieces – ideally with existing clamping devices, but more flexibility.

Task

- Equip the machine with a flexible clamping system
- Use of existing clamping devices [chuck TOPlus mini size 65 with clamping heads]

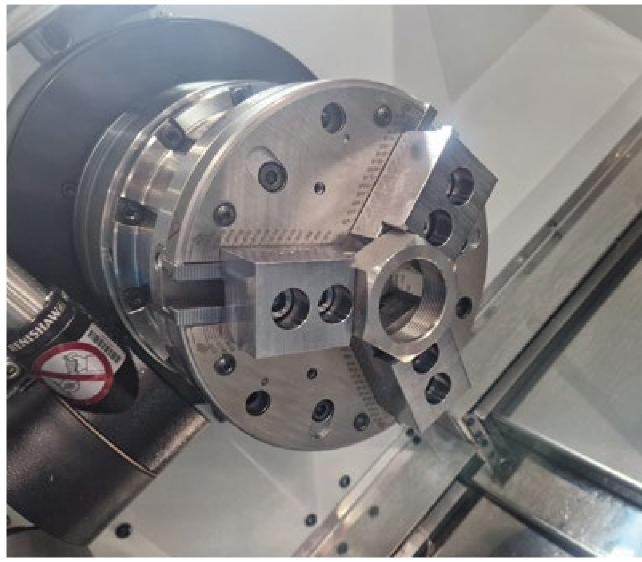
Solution by HAINBUCH

Main spindle:

- TOPlus mini size 100 with clamping head adapter
  → This means that the existing clamping heads size 65 can still be used
- Jaw module adaptation
  → Allows quick change-over between different clamping methods without changing the chuck

Sub spindle:

TOPlus mini deadlength size 65 ensures stable and reliable clamping



3-jaw module in TOPlus mini chuck

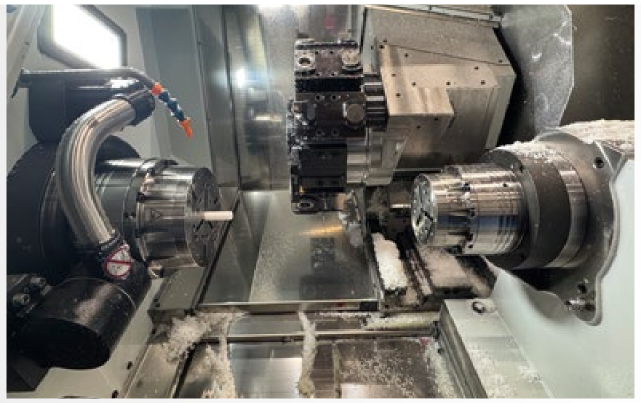
Clamping head adapter

Read the full report here:

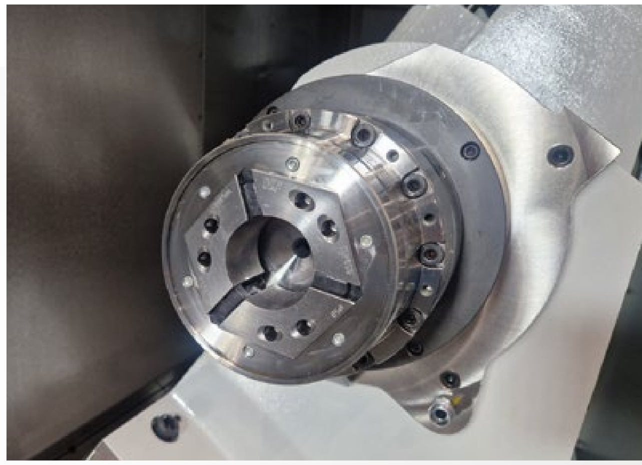
Result

- High flexibility for a wide range of workpieces
- Change-over < 2 min. thanks to simple adaptations
- Effective use of existing clamping devices and therefore an economical solution
- Standard components in use that allow future-proof production

The concept and implementation of the clamping solution were developed and realized by our Dutch representative BIS specials – a tailor-made solution for flexibility and maximum efficiency in production.



Main and sub spindle equipped with TOPlus mini chuck



TOPlus mini chuck with hexagonal clamping geometry – for maximum precision

THUMBS UP FOR...

3.

REDUCED SET-UP TIMES

Less downtime, more machining time

Every minute of downtime costs money. Reducing set-up times automatically increases productivity. With smart clamping solutions and quick change-over systems, change-over times can be drastically reduced – for more efficiency in your production.

From real life →

CHANGE-OVER TIMES DOWN, flexibility up

SUCCESS STORY

A contract manufacturer with a high degree of automation previously used conventional jaw chucks on the main and sub spindles of its DMG MORI NTX2000. The result: long set-up times, limited flexibility and unsatisfactory run-out.

"The centroteX quick change-over system has proven its worth for us. We have been using it on another machine for years – and now we are using it here too. It provides significantly higher flexibility and reduces set-up times to a minimum."

Read the full report here:

Quick and easy set-up with the Monteq mounting aid

Task

- The machine tool should be equipped with a flexible clamping system that reduces set-up times to a minimum
- The run-out should be improved
- Clamping devices from other manufacturers should also be integrated easily – for an open choice of clamping devices

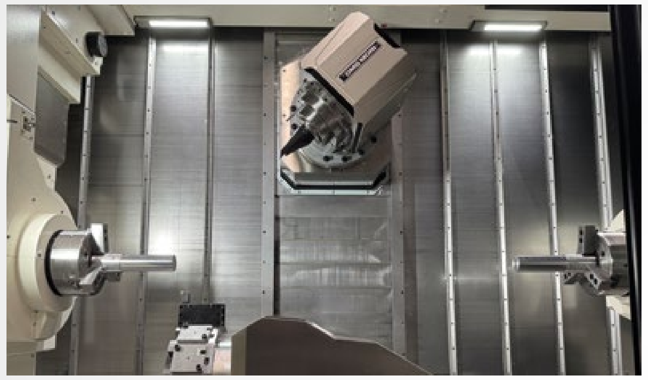
Solution by HAINBUCH

- Machine adapter centroteX S on main and sub spindle
- Clamping device adapter with TOPlus mini 65 deadlength and pull-back chuck, as well as lightweight jaw chuck from another manufacturer
- Expansion of the clamping device range to include a 2-jaw module adaptation is planned

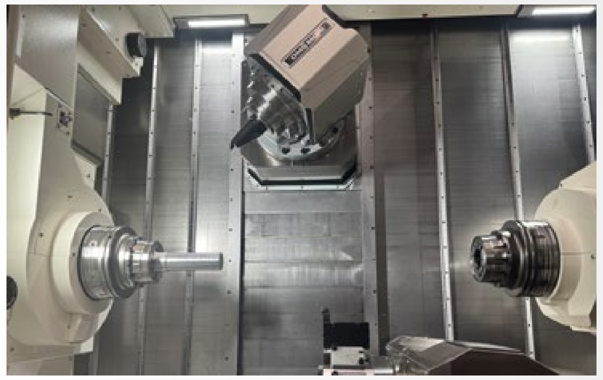
Result

- Reduction in set-up time from approx. 45 min. to approx. 2 min. per spindle
- Run-out improvement from 0.050 to up to 0.010 mm with pull-back chuck
- Very flexible use of clamping devices depending on the workpiece

centroteX S quick change-over system with light-weight jaw chuck from another manufacturer



Before



After

4.

LESS SCRAP

Every part counts

Scrap costs time, money and nerves. Modern workholding technology optimizes clamping, stabilizes the process and ensures more output in the end: in terms of quality, good parts and efficiency.

SUCCESS STORY

NO MORE SCRAP – thanks to reliable I.D. clamping

Customer:
Scot Bennett Engineering from Great Britain

Pick-up process

The contract manufacturer Scot Bennett produces large quantities of locking rings for shock absorbers, among other things. However, chips that got into the chuck during transfer to the sub spindle led to problems. 10 % scrap was standard. This meant that out of 2,000 produced parts, 200 were unusable.

Task

- Elimination of chips when picking up from the main spindle
- Bar loading of the main spindle and automatic ejection of the finished workpiece from the sub spindle
- Flexibility, as other components are also produced on the machine

Solution by HAINBUCH

Optimization of the clamping device on the sub spindle

- Standard mandrel adaptation MANDO Adapt T812 with customized workpiece end-stop with ejector function
- Existing SPANNTOP deadlength chuck

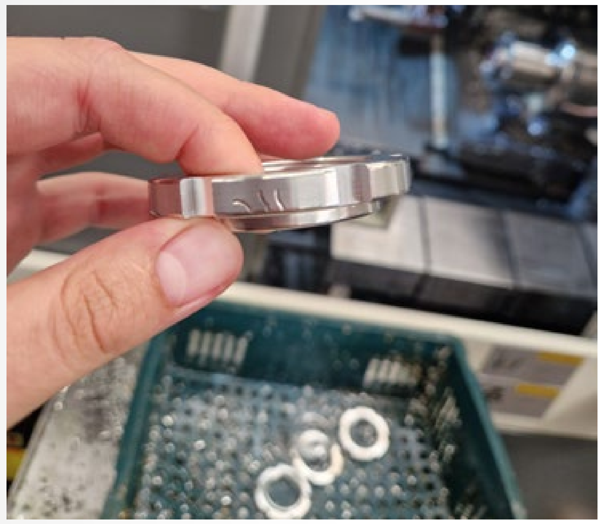
"The HAINBUCH solution is simple, effective and reliable! Since the implementation of the new clamping solution, the problems have been completely solved and everything is running smoothly."

Anton Clarke, product manager

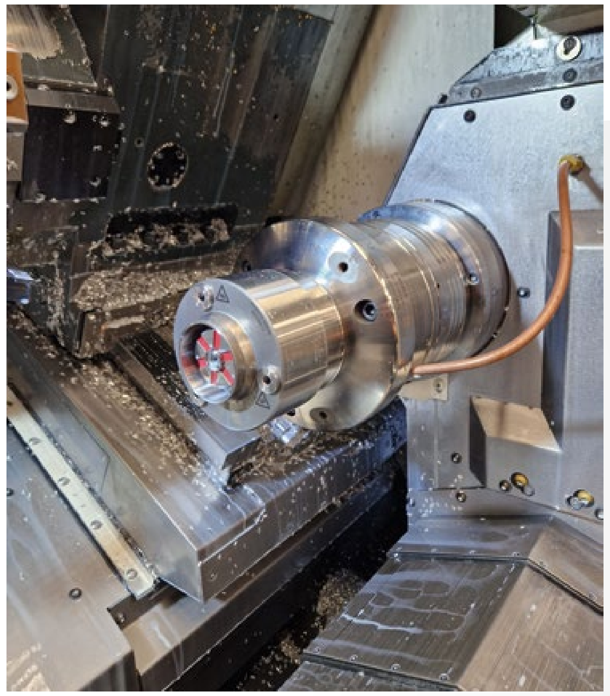
Result

- Long-term solution to the basic problem: Scrap reduced from 10 % to almost zero
- Continued high flexibility by using the mandrel adaptation in the chuck [chuck remains on the machine and can be used for other jobs. The mandrel adaptation can be mounted within 1–2 minutes.]

Here is a full report video:



Damaged parts before optimizing the clamping situation



New clamping solution on the sub spindle

SUCCESS STORY

SCRAP ELIMINATED
– even with very thin-walled pipes

Customer: SilencerCo from the USA

SilencerCo is one of the leading manufacturers of silencers in the USA. In West Valley City [Utah], the company employs around 200 people and manufactures more than 15 model series – from small caliber to shotgun. The components are technically demanding, extremely thin-walled and require the highest precision.


A silencer typically consists of 11 individual parts


Automated unloading of the workpiece


Standard mandrel MANDO T812 on an Okuma machine

Task

Optimization of a critical production step:

- I.D. clamping of thin-walled pipes [wall thickness 0.127 cm] with a high scap rate

Solution by HAINBUCH

Mandrel MANDO T812

- High process reliability for sensitive geometries – precise, stable and repeatable


Standard mandrel MANDO T812 without draw bolt with radial clamping

Result

- Process-reliable clamping with low wall thicknesses
- Scrap rate for I.D. machining reduced to almost zero
- Unloading could be automated
- Less tool wear, shorter set-up times

Here is the full report and a video:

“In the past, this critical process regularly resulted in breakage problems. Since we started using the HAINBUCH mandrel for I.D. clamping, the process has been running smoothly – including automated unloading.”


Tyler Burningham, CNC programmer at SilencerCo

OUR NEW PRODUCTS

Large clamping heads in a new variant

Smaller clamping heads can be easily and effortlessly inserted and replaced by hand. The situation is somewhat different for clamping heads from size 125 upwards. Their increased weight makes handling without a crane virtually impossible.

In future, there will be two variants for all clamping heads sizes 125, 160, and 200:

Variant 1: classic, as known

Variant 2: clamping head body with »changeable« insert jaws

The segments in variant 2 are significantly lighter, guaranteeing easier handling and less strain on the back.

INSERT JAWS

centroteX & MANDO Adapt

Small installation space and I.D. clamping on a quick change-over interface – in future, this can be implemented in an even more compact and shorter form.

The new clamping device adapter **with minimized installation height** is combined with the MANDO Adapt mandrel adaptation. This variant saves installation space, allows longer workpieces to be machined, and existing adaptation mandrels can be set up in less than two minutes.

Take advantage of the benefits of the centroteX interface and change over clamping devices in no time.

QUICK CHANGE-OVER

Change-over of segmented clamping bushings and jaws

Automated clamping head and clamping head / end-stop change-over are well known. But what about other clamping elements such as segmented clamping bushings and jaws? Until now, the entire mandrel or jaw chuck had to be changed. That is now a thing of the past!

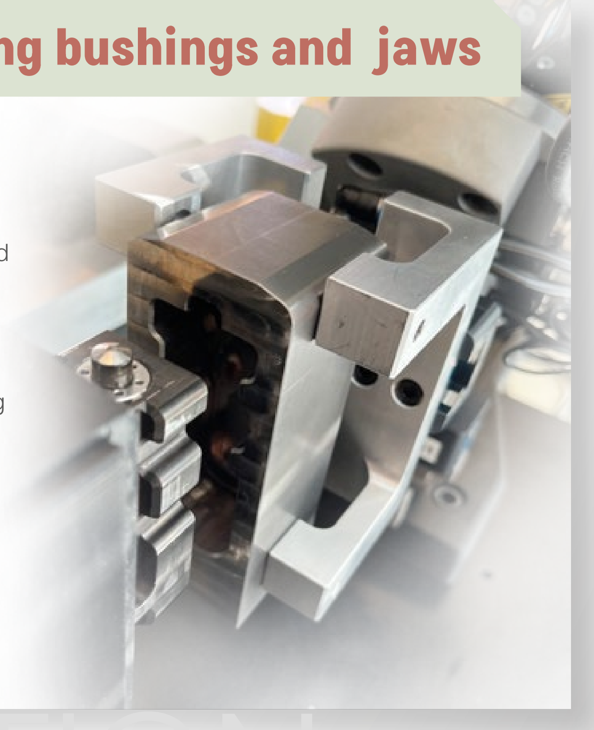
In the future:

I.D. clamping: automated change-over of the segmented clamping bushing incl. end-stop

Jaw clamping: automated change-over of the clamping jaws

This saves time and money.

The next step for you towards full automation.



AUTOMATION

HAINBUCH international

EUROPEAN SALES MEETING in Marbach

In dialogue

Almost 40 sales experts from across Europe gathered at HAINBUCH headquarters.

The focus was on personal exchange, sharing experiences, and developing joint ideas and solutions — for greater customer focus, more practical relevance, and added value for you.

CHINA

Gaining momentum

Since the beginning of the year, Eric Hu has been strengthening our team in China as the new managing director with his many years of sales experience – and with great success!

Shortly after joining us, he worked with our local team at the largest trade fair, CIMT in Beijing, to inspire numerous customers and establish valuable contacts. His market knowledge and commitment are bringing fresh momentum to our activities on the ground.

USA

25 years of success in the USA

Our subsidiary in the USA is celebrating its 25th anniversary – a milestone we can look back on with pride!

What once began with a small team has developed into a real success story over the past two and a half decades: Today, the team in Germantown, Wisconsin, consists of 30 dedicated employees who contribute their expertise and commitment to our success in North America.

We say: Happy Anniversary – here's to the next 25 years!

INDIA

Market presence in India further strengthened

We are continuing to expand our commitment to the Indian market! An important milestone was our presence at the renowned IMTEX trade fair. There, we had numerous inspiring discussions with existing and potential customers and gained new impetus for joint projects.

Since the summer, two employees have been supporting us directly on site in India. They provide our customers with personal assistance, ensuring even greater proximity, service, and responsiveness.

Of course, our trusted agencies in India remain on board and, together with our team, guarantee a strong, reliable representation.

50 YEARS FULL OF INNOVATION

Gerhard Rall celebrates 50 years as CEO of HAINBUCH

Half a century as CEO – that's more than just a number. For Gerhard Rall, who celebrated this special anniversary at HAINBUCH at the end of last year, it is above all the result of passion, courage to innovate, and a great deal of dedication.

» My motto has always been to do things differently from others – and to create something special in the process. «

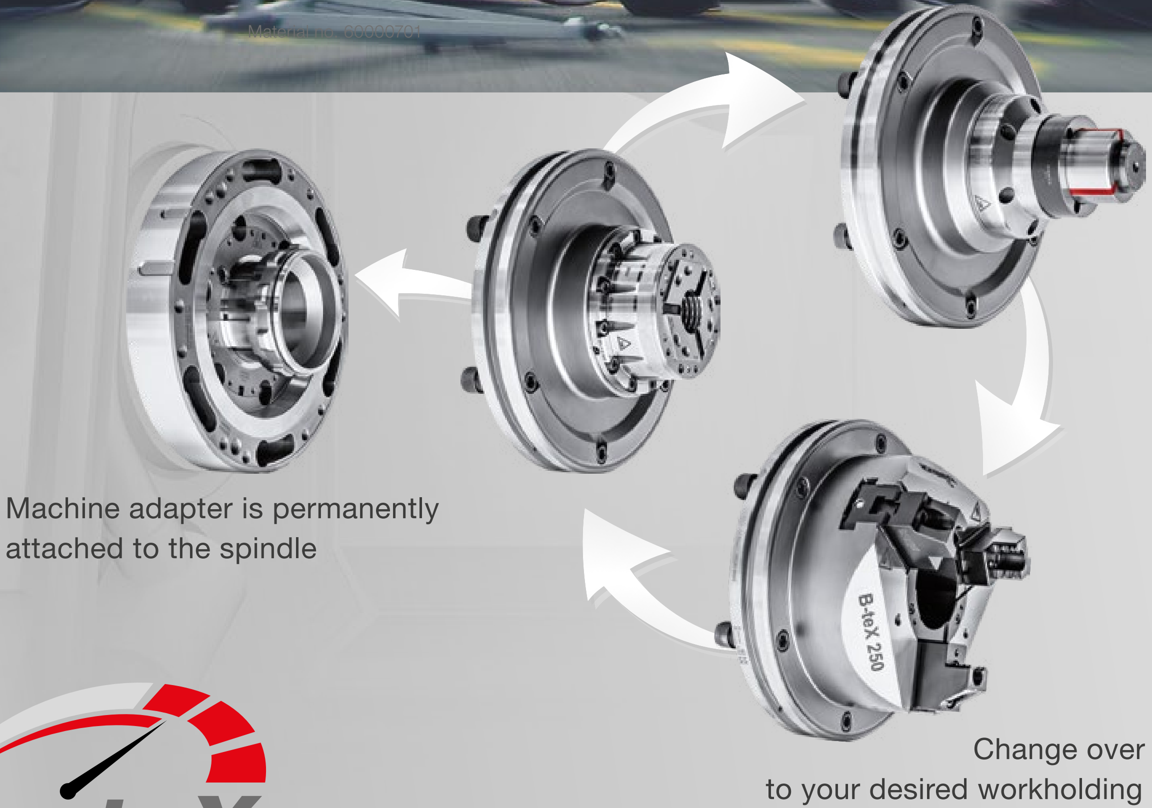
His career began in 1957 in a very down-to-earth manner with an apprenticeship as a mechanic at the »Wilhelm Hainbuch Präzisionsspannwerkzeugfabrik« in Marbach. But Gerhard Rall wanted more: after further training and gaining valuable experience, he returned in 1964 as plant manager – and at the same time completed his degree in business administration. In 1966, he not only married his wonderful wife Hildegard, the daughter of the company founder, but also the HAINBUCH company – as he himself says with a wink.

In 1974, he joined the management of HAINBUCH, which at that time had 55 employees. His goal: to move away from being a pure contract manufacturer and become an innovative product manufacturer. And he succeeded! In 1977, he invented the now world-famous SPANNTOP principle, which revolutionized workholding technology and made HAINBUCH the industry leader. Gerhard Rall's motto still applies today: »Better to fail with an innovation than to successfully copy.« It is precisely this attitude that has shaped the company.

But he doesn't just think about numbers and patents. His big heart is also evident in his long-standing commitment to the charity »Stückchen Himmel e.V.«, which supports a daycare center in a Brazilian slum.

He has received numerous awards for his services, including being named an honorary senator in 2010 and receiving the Baden-Württemberg Business Medal in 2012.

»No entrepreneur achieves success without luck — therefore for me gratitude and humility are essential,« says Gerhard Rall. He proudly looks back on 50 years and ahead with confidence: »I'm looking forward to everything that's still to come!«



centroteX

High-speed clamping device change-over < 2 minutes

Repeatability of ≤ 0.003 mm – without alignment

Want more action?
Scan here.

HAINBUCH
WORKHOLDING TECHNOLOGY