



driven by technology

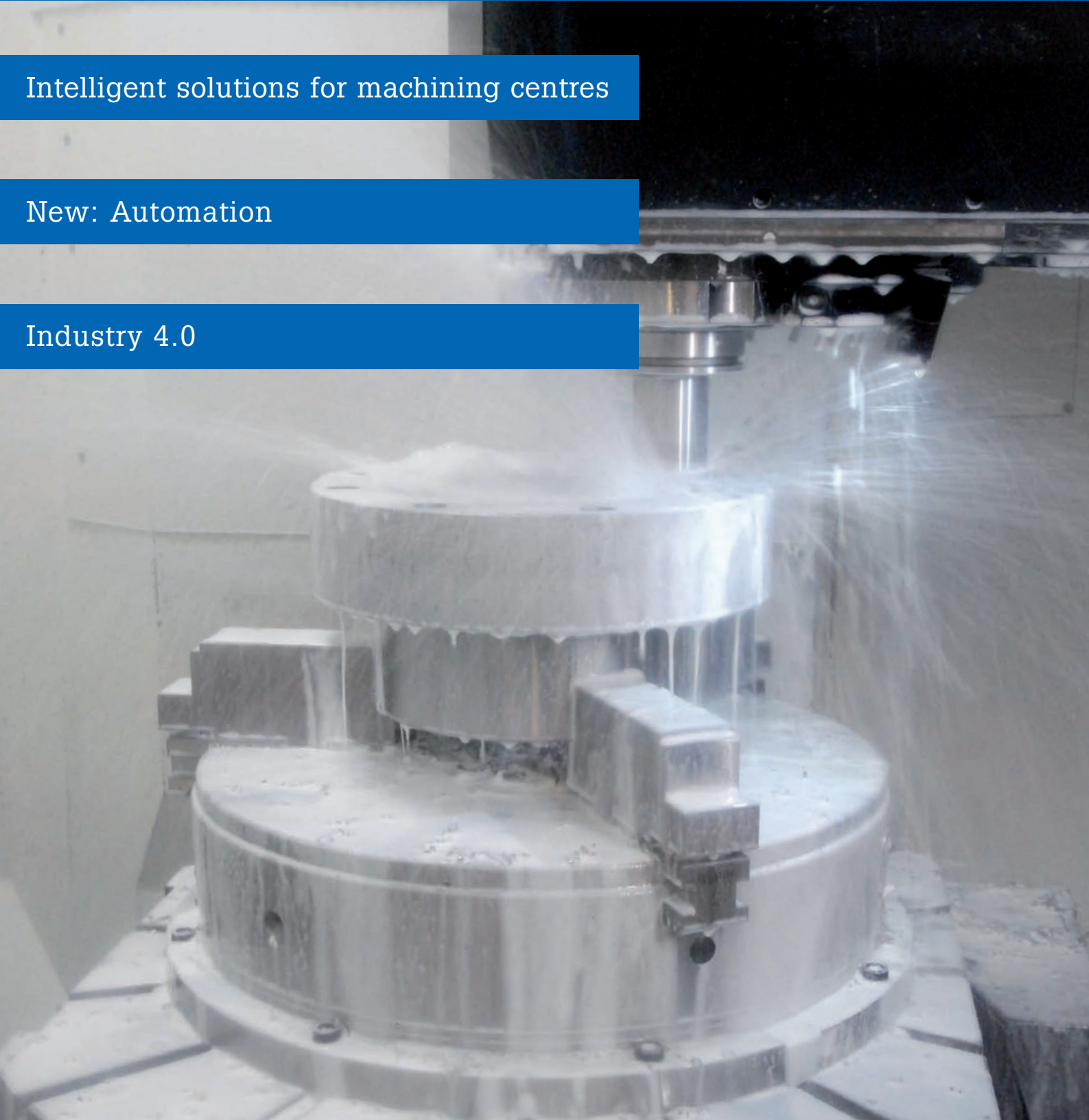
News

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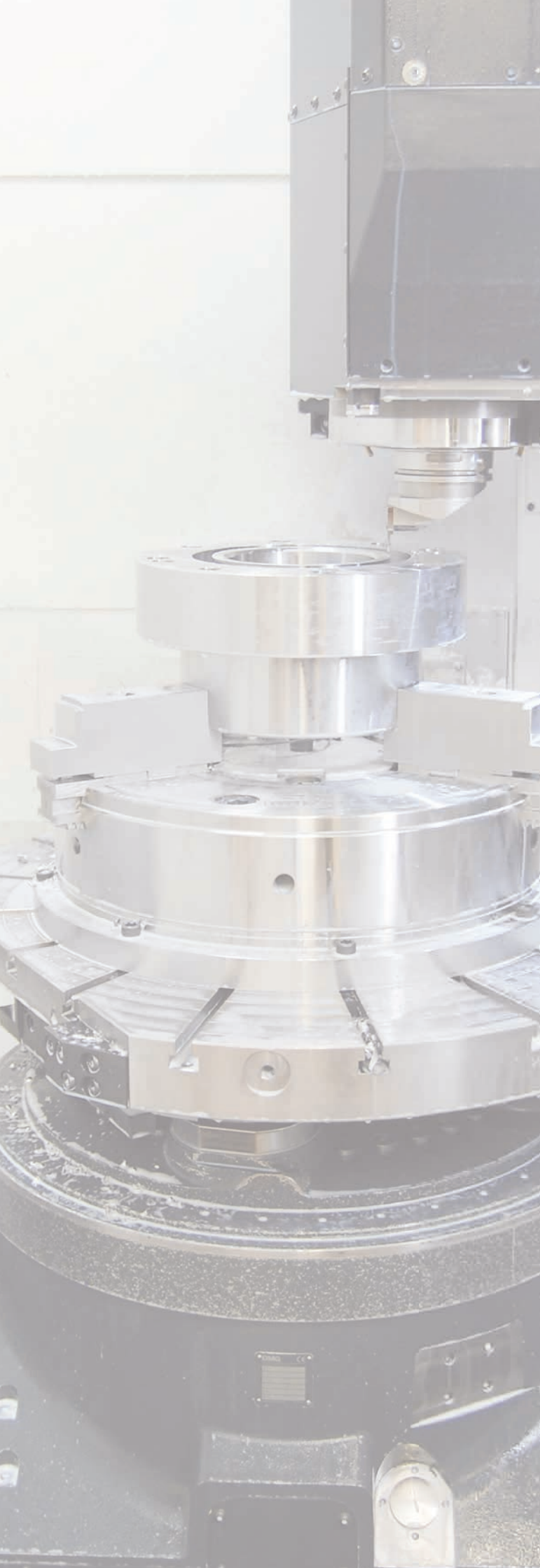
Intelligent solutions for machining centres

New: Automation

Industry 4.0



The Customer Magazine of the RÖHM Group



Dear Readers,

When you are thoroughly familiar with the needs of your customers, you are in a position to come up with the perfect solution. This consistent customer focus is one of our most important guiding principles. We offer our customers individual consulting, customised products and service, all from a single source. Our well trained staff are always available to advise and assist them – all the way from project planning through to after sales service.

We have a range of first-class clamping tools of unparalleled breadth – supplemented by new and innovative products which all have one thing in common: they are economical, reliable, flexible and efficient. These qualities could not have been achieved without the success story of the RÖHM Group, which goes back for more than a hundred years. Our synthetic gripper, which can be adapted quite specifically to the given workpiece, is just one topical illustration of this.

We have also been active internationally in the past year. A new branch in China and an agency in Vietnam have been set up, and for the first time we were represented by a stand of our own at the Jimtof trade fair in Tokyo. Next year we will be treading new paths in other countries. We are planning to strengthen our presence in Portugal and Turkey, for instance.

Of course this depends on our having highly qualified and motivated employees who are committed to ongoing professional development, with a view to maintaining our position as a top-of-the-range supplier. The performance of our staff is always crucially important.

With the aim of continuing this success story, we are always adapting to changed requirements. One example of this is Industry 4.0. This government initiative is aimed at the far-reaching restructuring of German industry. Workpieces will become information carriers, capable of being uniquely identified and located wherever they are. They will store their own history, their current status and any other relevant data. This digital product memory makes the product at once an information vehicle, an observer and an actor in the industrial process – and we are looking forward to this new challenge.

On the subject of the economy, it may be stated that German industry is currently benefiting from growing sales in countries outside the eurozone. Companies within Germany, on the other hand, are increasingly cutting back their orders. This applies above all to the demand for investment goods. The thoroughly optimistic mood of consumers however suggests that private consumption will provide support for the development of the German economy.

So with these prospects in view for 2013, we would like to express our warmest thanks for your partnership and collaboration in the past year. We continue to be your first point of contact in future for all questions relating to clamping and gripping technology.

We wish you and your families a merry Christmas and a happy and healthy New Year.

Yours sincerely,



Michael Fried, Dr.-Ing.

CEO

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The whole world of automation

RÖHM offers flexible solutions for quick and dynamic gripping in the re-structured product group Automation Technology. The clamping and gripping specialist presents customers with solutions for the sectors of Gripping Technology, Swivel Technology and Robotic Accessories.

RÖHM presents the new program for this product group on more than 140 pages of a new catalogue. The existing product portfolio was expanded by numerous grippers, such as, for example, angular grippers, sealed grippers and grippers for small parts. The category of swivel technology was also completely revised. The swivel units from RÖHM enable the customer to implement two damping areas with one swivel unit. Another new entry in the catalogue is the sector of robotic accessories. The corporate group rounds off the sector of automation technology with a large selection of tool changers, rotary distributors, axis compensation modules and a crash protection. The optimised catalogue design takes care of a clearly arranged range.

Another new addition to the catalogue is the electric gripper REPG. Energy efficiency and maximum flexibility are its outstanding characteristics – and this with gripping forces of 10 N to 400 N. It can be employed as flexible robotic gripper or as economic servo axis with integrated drive and stable roller guide. At RÖHM one is also proud of the synthetic gripper RRMP with individually adjustable jaw shapes. All one needs is a 3D model of the work piece to produce an accurately fitting gripper. The RRMP is then individually tailored for each customer within a short time.

To be able to offer the customers an even broader service spectrum in future, RÖHM will cooperate with the industry specialist Sommer-automatic GmbH from Ettlingen in future. The collaboration is conducted under the motto of „Two strong partners complement each other“. With the cooperation, both companies are aiming at a stronger worldwide growth and additional synergy effects for the customers.

The full program on the subject of clamping tools can still be found in the company's comprehensive clamping technology catalogue.



RÖHM presents the whole world of automation technology on more than 140 pages of the new catalogue.

Highlights from the RÖHM Gripper Technology Program: the REPG electric gripper.



The RRMP synthetic gripper won the Schweizer Maschinenmarkt [Swiss Machine Market] Prodex Award.

Superior training

In the past weeks RÖHM has been giving presentations at various shows aimed at trainees and students, offering copious information about possible courses of study and career development paths. The exhibitions constituted an outstanding opportunity for school leavers to find out about future prospects by talking directly to trainers and trainees of the companies exhibiting.

In the course of numerous individual interviews RÖHM representatives told prospective candidates about the specifics of the different professions. 'This first-hand information is something the internet cannot compete with – as is made plain when you look at the throngs who visited our trade fair stands,' commented Training Director Uli Steeger and HR Officer Martin Kolb. Both were involved, along with trainees and students, in distributing comprehensive information materials illustrating the various possibilities on offer. RÖHM's many and varied opportunities of training and study met with a lively interest, as did the company's ultra-modern training centre.

'We are delighted that the many opportunities we offer to students and new recruits in the RÖHM group of companies has met with such a lot of interest. By successfully obtaining a qualification at our company young people can acquire a solid foundation for their future professional career,' the personnel officers added.

In detail, RÖHM offers the following training programmes and study courses: Cutting Machine Technician (m/f), Industrial Mechanic (m/f) specialising in machine and system engineering, Industrial Mechanic (m/f) specialising in the manufacture of precision instruments at the Dillingen plant, Industrial Sales Assistant (m/f), Bachelor of Arts in Business Management with an emphasis on industry (m/f), Bachelor of Engineering specialising in mechanical engineering (m/f), Bachelor of Engineering specialising in industrial engineering (m/f), Bachelor of Engineering on the Ulm Model.

The high quality of training at RÖHM recently received further confirmation from the Chamber of Industry and Commerce (IHK). Six trainees from the Sontheim and Dillingen works won prizes and special mentions from IHK as a result of their outstanding performance in examinations.

The trainers commented: 'The excellent examination results achieved by our trainees once again shows what a high priority training is for us. Our aspiring professionals showed great commitment and performed outstandingly right across the board.'

The company has always pursued a policy of recruiting qualified young professionals from its own ranks. At any time something like 60 young people are currently engaged in a course of study or training scheme at RÖHM. Further information may be found at: www.roehm.biz/karriere/?L=1



Study Information Day at DHBW (the Dual University of Baden-Württemberg), Heidenheim.



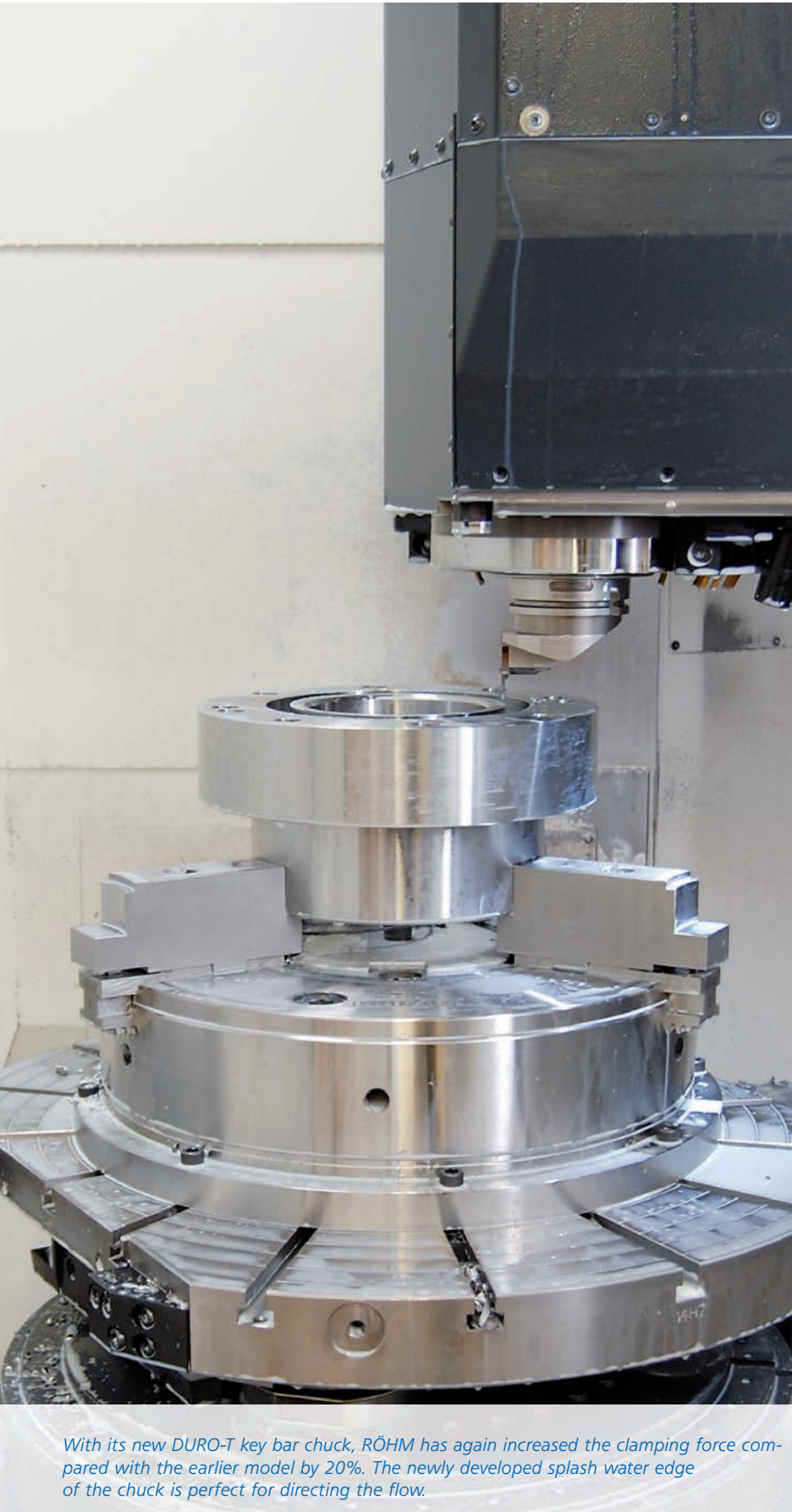
Meeting with a warm reception – the RÖHM stand at the AIM trade fair in Aalen.



RÖHM trainees won awards from the Chamber of Industry and Commerce for their outstanding examination performance. On right of picture, Personnel Officer Martin Kolb.

The magic triangle

Ideal clamping solution from RÖHM forms part of the package along with processing centre



With its new DURO-T key bar chuck, RÖHM has again increased the clamping force compared with the earlier model by 20%. The newly developed splash water edge of the chuck is perfect for directing the flow.

When the Swiss market leader for powerful gear pumps plans the overhaul of its manufacturing operations, everything is going to be called in question. The production of high-pressure displacement pumps calls for maximum precision. At the same time the greatest possible flexibility needs to be maintained in the turning and milling of the various components for the different product variants. The combination of a DMG / MORI SEIKI processing centre with a powerful clamping chuck from RÖHM for high table loading was the solution chosen by Maag Pump Systems, and has been giving the company the desired flexibility and enhanced productivity since January. Up till the point of decision, the pump experts' deliberations had proceeded consistently on two parallel tracks.

'Critical for the decision in the last resort was the compact design of the machine, and the perfect dovetailing offered by the clamping chuck solution,' stresses Bruno Lutz, a programmer at Maag Pump Systems AG. Up till this point he and his brother Thomas Lutz had consistently investigated two possible options for transferring the manufacture of the pump components from the old processing centre, now more than 20 years old, to a new machine. 'Turning machines that can also perform milling operations came into consideration, as well as milling machines capable of turning,' explains team leader Thomas Lutz. Since January a DMC 80 FD duoBLOCK processing centre from DMG MORI SEIKI, capable of both turning and milling and equipped with 3-jaw Duro-T-500 key bar chucks from the clamping specialist RÖHM, has been giving the engineers in Oberglatt every cause for satisfaction. With just two easily effected clamping operations, unfinished parts weighing up to 550 kg can be processed into precise slide bearings, flanges and spiral gaskets for maximum-efficiency pumps. The processing time involved in turning, milling and drilling operations has been reduced by more than 30%. There is no longer any need to lose time in transferring the workpiece from one machine to another.

Pumping fluid also functions as a lubricant

The gear pumps of Maag Pump Systems optimise the thermoplastic extrusion process by ensuring

a constant material flow, supplying the required tool pressure and so taking the strain off the extruder unit. In this way the pumps can increase the pressure between inflow and outflow from 100 to 300 bar. They can be used both as feed pumps and in direct conjunction with the injection moulding machine. This boosts the performance of the production system, reduces the melting temperature and so improves the quality of the end product as well as prolonging the service life of the extruder. In addition, the pulsations and pressure peaks of the extruder are balanced out or eliminated altogether by the damping effect of the pump.

The special feature of the pumps, however, is to be seen in the lubrication of the slide bearings for the shafts with the toothed wheels. Because any risk of contaminating the pumping fluid would be unacceptable, no oil or grease can be used for lubricating purposes. So Maag Pump Systems has developed a solution whereby the bearings are lubricated by the pumping fluid, i.e. by the thermoplastic medium itself. An elaborately calculated and designed spiral oil groove distributes the plastic in the bearing, and so ensures the necessary lubrication. The geometry and sizing of the groove are crucial in this connection. If the groove is too large, too much lubricant will be supplied. This results in a 'dead circuit' and impairs the effectiveness of the pump. If the groove is too small, too little lubricant will be supplied to the bearing, and there is a risk that the shaft will seize up.



The concentric and axial runout accuracy of the DURO-T is twice as good as that required for DIN Accuracy Class 1.

Rapid change of the prepared workpiece

The bearings, flanges and spiral gaskets for these pumps are now being made by Maag Pump Systems on the compact DMC 80 FD processing centre from DMG MORI SEIKI. The table can be loaded with workpieces weighing up to 1200 kg. In Bruno Lutz's view, this is a convincing solution: 'The machine is very compact nonetheless, and needs little surface area. Moreover, the heavy workpieces can be more efficiently handled with the horizontal workpiece clamping system.' Another cause for satisfaction is the way in which the entire process of milling, turning and drilling can be carried out in just two clamping operations. 'Rapid all-round processing is also supported by the powerful tool changer, incorporating 120 tools,' stresses Patrick Tresch, Managing Director of DMG MORI SEIKI Switzerland. To do this, the tool measurements are passed to the machine with maximum precision, using the machine's own laser measuring system. In addition, the changing unit takes no more than 14 seconds to substitute a new tool, which has been got ready for action in parallel to the main processing time.

Massively powerful 3-jaw Duro-T 500 key bar chucks are used to

clamp the workpieces, which are made of different materials and can weigh up to 550 kg. The chucks have a diameter of 500 mm, and with a 220-250 Nm tightening torque in the top jaws can apply a total clamping force of as much as 220 kN to the workpiece. As a result of various improvements, RÖHM has again increased the clamping force as compared with the earlier model by 20%. 'Which is more than enough,' declares Damiano Casafina, Deputy Managing Director of RÖHM Spanntechnik AG [RÖHM Clamping Technology plc] in Switzerland. 'With some clamping operations, we actually have to hold back and avoid unleashing the full clamping force available.'

Splash water edge is ideal for directing the flow of coolants and lubricants

The design of the statically balanced and user-friendly manual clamping chuck has also been improved. For example, RÖHM's designers have introduced a splash water edge, which is ideal for directing the

flow of cooling and lubricating media. The chuck works with extreme precision when it is a matter of repeating results after a change of jaw. And the concentric and axial runout accuracy is twice as good as required by DIN Accuracy Class 1. The rigid body of the chuck has a hardened surface overall, and its functionally optimised expendable parts (like the safety lock slide) promise a long service life with a high standard of precision. 'Rapidly and ease of operation are a priority for us,' says Thomas Lutz.

'As from a certain size up our pumps are practically unique specimens, specific to the customer or application, the flexibility of the machine and clamping tools used are crucial,' Bruno Lutz adds. The people at Maag Pump Systems also welcome the modest height of the chuck, which still allows enough air to pass upward even though it is mounted on a changing unit. The swivelling processing head of the machine has the free space required at all times.

If the combination of the machine and the clamping chuck works so well, that is not a coincidence – as is shown by RÖHM's longstanding and effective partnership with DMG MORI SEIKI in the design and installation of essential equipment. The DMC 80 FD at Maag Pump Systems, for instance, incorporates a RÖHM solution for the clamping of the tool pallets. The massive pull-in force makes it possible for prepared pallets to be clamped on the clamping cones with speed, safety and precision. The solution can be used even in a tightly confined space. The high degree of accuracy in the axial runout and positioning are the reasons why the system has become standard. Since 2005 every new series has been equipped with spring-activated

clamping cones developed by the clamping specialist RÖHM, so as to hold the pallets securely in place.

Trade fair contacts grew to become a partnership

Patrick Tresch and Damiano Casafina in Switzerland are committed to ensuring that users can always count on an ideal combination of the mechanical equipment and the clamping solution. First contacts with Maag Pump Systems meanwhile came about as a result of Casafina's meeting the Lutz brothers at the AMB trade fair in 2010. 'Just when we were in the throes of the decision process,' Bruno Lutz recalls. Casafina smiles: 'Sometimes it is just the lucky moment of an initial contact which is going to pave the way to a successful "three-way relationship".' If Maag Pump Systems is not just dependent on luck when it comes to the magic triangle of machine / clamping chuck / application, not to mention the excellent results it gives rise to, that has to be down to the skills and the expertise of all the companies and individuals involved.



The combination of a DMC processing centre, a DURO-T clamping chuck and the need for maximum precision at Maag Pump Systems called forth best performance from all concerned.



With just two easily effected clamping operations, unfinished parts weighing up to 550 kg can be processed into precise slide bearings, flanges and spiral gaskets for high-efficiency pumps.

Advantages of the Duro-T:

- 20% higher clamping forces
- Chuck body stiffer (guarantees precision at higher loads)
- Surface of chuck body completely hardened
- High operator friendly
- High jaw-changing repeatability
- Optimized wearing parts (i. e. safety lock)
- Enhanced life at higher precision
- Radial and axial run-out tolerances only half of the permitted values according to the DIN-accuracy class 1
- Base- and top-jaws of other manufacturers are compatible
- Superior design:
 - Indicator marks for quick jaw adjustment
 - Meaningful lettering engraved in body front face (i. e. chuck number, techn. details)
 - Attractive, tapered shape incl. drop-off wedge for water

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The new system for incoming goods brings benefits all round

More flexible, closer, user-friendlier... That just about sums up the positive points of our new incoming goods system. It is not only significantly more modern, it also offers numerous advantages from the point of view of the Incoming Goods department, as well as for associated divisions and the company as a whole.

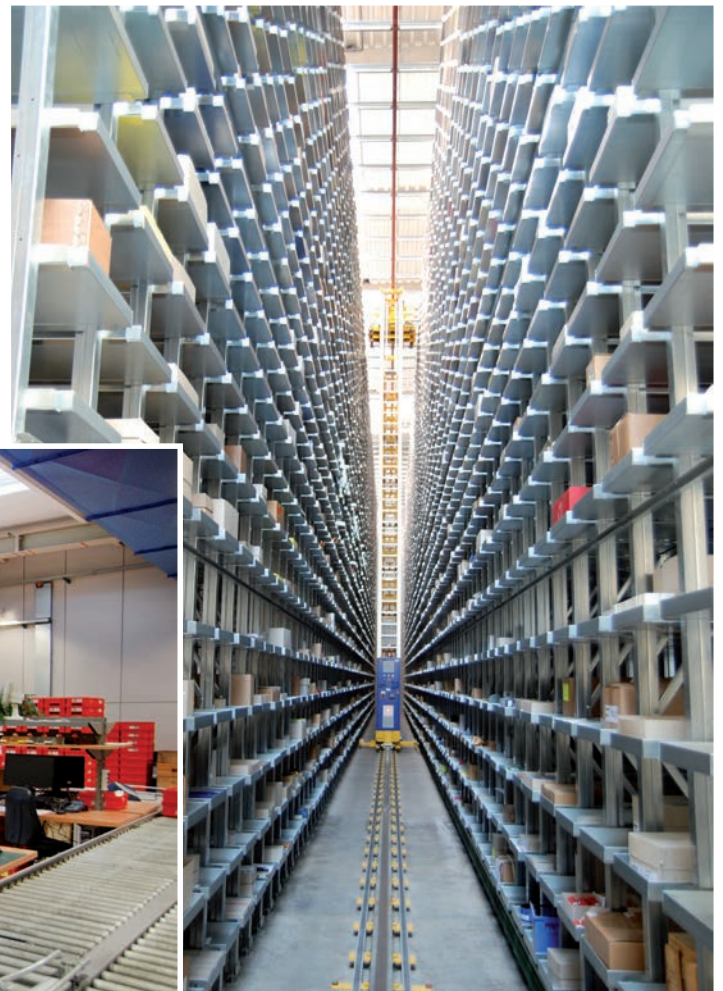
Improved connections with internal logistics, closeness to the Dispatch sector, better health and safety – all these featured on the bill of requirements for the new incoming goods system, and they have all been met up to the hilt.

The improvement in circulating transport operations was associated with a reduced number of process steps. This results in shortened throughput times for internal logistics. Efficiency levels have already been improved. Moreover, in future there will be the possibility of reassigning workers from Incoming Goods to Dispatch or vice versa for a temporary period, when there is a heavy load of work to be dealt with. This flexibility has been achieved by giving employees the necessary training.

Especially with an eye to the long-term benefits, health and safety considerations are extremely important. Working steps and workstations have been designed in such a way that there is very much less lifting to be done. The goods are now pushed directly across rollers to the train or inspection centre. When packages are

unpacked, a half-pallet can be hoisted with a lifting device – so it no longer needs to be raised manually onto the unpacking table. Particularly heavy loads can be lifted with a crane. In comparison with the facilities available to workers in Incoming Goods hitherto, these functional improvements reduce the strain considerably.

The new incoming goods system is an example of process optimisation at RÖHM. And the further planning of improvements in an area that has already been optimised is a sign of constant attention to quality standards.



From Incoming Goods (left) to Dispatch (high bay warehouse, right): internal logistics operations have been further optimised.

Asia, Europe and America: RÖHM is on the spot

RÖHM has been presenting its versatile processing solutions for the machine tools industry recently at a number of leading international trade fairs. At the IMTS in Chicago, the JIMTOF in Tokyo and the AMB in Stuttgart in particular, the RÖHM group of companies was represented by a wide exhibition area and met with a highly gratifying response from the trade public. CEO Michael Fried commented: 'Our innovative products have helped us to reach an outstanding market position. This has been shown by the feedback of trade visitors, who count on the quality and long life of the clamping and gripping technology supplied by RÖHM.'



RÖHM's trade fair stand at the AMB in Stuttgart was well received by the trade public.



For the first time RÖHM presented its clamping technology solutions in Tokyo at a stand of its own.



The RÖHM stand at the IMTS trade fair in Chicago

Trade fairs 2013

In 2013 RÖHM will be represented at the following trade fairs. Just pay us a visit!

- IMTEX, Bangalore – 24.01 to 30.01.2013
- MEDTEC, Stuttgart – 26.02 to 28.02.2013
- MAQUITEC, Barcelona – 12.03 to 16.03.2013
- Hannover Trade Fair, Hannover – 08.04 to 12.04.2013
- Industrie, Lyon – 16.04 to 19.04.2013
- CIMT, Beijing – 22.04 to 27.04.2013
- Metalloobrabotka, Moscow – 27.05 to 31.05.2013
- FEIMAFE, São Paulo – 03.06 to 08.06.2013
- Mach-Tool, Poland – 04.06 to 07.06.2013
- EMO, Hannover – 16.09 to 21.09.2013
- MSV, Brno – 07.10 to 11.10.2013
- Motek, Stuttgart – 07.10 to 10.10.2013

RÖHM Spain: a strong partner on the Iberian peninsula

RÖHM's products have been marketed since 1985 by the company's own Spanish branch. Since 2012 it also serves from there the Portuguese market. Closeness to the customer, technical and market-related specialist knowledge and a high standard of service are the things which make the RÖHM Ibérica branch so indispensable, knows Alejandro Carrasco, Managing Director and from 01 August officially CEO of RÖHM Ibérica S.A. Here he reports on the situation of the branch.

Mr Carrasco, RÖHM Ibérica has been around now for more than 27 years. What, in your view, has helped to safe your market position in Spain?

An important factor, undoubtedly, is the company location. Both geographically and strategically Madrid enjoys a very central position. We can serve the entire country with relatively low costs and in the shortest space of time. When you add to this the specialist knowledge that is required, and the high quality of RÖHM's products, we have the best conditions for business success.

And yet you and your staff must undoubtedly often be faced with major challenges. What kind of problems do you face on a daily basis?

Of course there are some things that require attention if we are to be able to do our work well. We focus very intensively on the needs of our customers. We sell our customers solutions for their problems. They expect our products to yield improvements for their production processes, increased productivity and of course also quality assurance. And that is what we guarantee to give them. Our internal motto is 'RÖHM sells solutions!'

In order to sell customers the right products, in keeping with their expectations, you need to know a fair amount about them. Who are your customers, actually?

That's right, every type of customer calls for a suitably customised service. This enables us to meet the needs of customers better and fulfil their expectations in the best possible way. And a high level of customer satisfaction is our declared goal. Since 2012 we have been serving the Spanish and Portuguese markets directly. With our customers from the dealer (trade), mechanical engineers and manufacturers and users, we cover the area from all sales channels. A majority of our customers come from the automotive industry, railways and rail transport, oil industry and aerospace. This flagship industries rely on

all our products. But even with renowned manufacturers of machine tools we have a presence in the global market with RÖHM products.

How many customers does RÖHM Spain have at the moment?

We currently have around 500 customers, and we are proud of being able to offer every single one of them exactly what they are looking for.

And how many employees do you have working here?

We are 13 people in total, according to the organization chart. Moreover, we can all count on here of the invaluable assistance of Mr. Juan Jose Atienza, who goes into retirement after 28 years as managing director of the RÖHM Ibérica in July 2013.

He stands with his long experience and excellent contacts as a consultant and technical trainer on hand. Mr Atienza helps us, partly in an advisory capacity and partly as a technical trainer. The greater part of the staff, too, consists of technical specialists.

Let's take a look at future prospects. What challenges can you see coming up in the future?

With the great technical expertise put at our disposal by RÖHM's head office in Germany, our service to customers is improving constantly. We are confident that we will find ourselves in a position to approach the future with optimism. The current difficult situation in Spain, we meet with our strengths as service orientation and technical know-how.



The RÖHM Ibérica team with Alejandro Carrasco, the Managing Director of the branch (front row, second from the right).

Industry 4.0 – the fourth industrial revolution

The economy stands on the threshold of the fourth industrial revolution. Driven by the internet, the real and virtual worlds are increasingly converging to create an internet of things. Characteristic features of this future form of industrial production are the following:

1. the increasing individualisation of the product, based on a highly flexible form of production (including large-scale serial production),
2. the far-ranging integration of customers and business partners in business and value creation processes and
3. the combination of production with top-quality services, issuing in so-called hybrid products.

German industry now has the opportunity of making an active contribution to the fourth industrial revolution – by taking part in the futuristic Industrie 4.0 [Industry 4.0] project currently being promoted by the federal government.

The convergence of the real and virtual worlds brought about by **Cyber-Physical Systems (CPS)** – i.e. the mutual networking of embedded information and communication technology by means of the internet – offers industry new possibilities of intelligent production systems based on the realisation of networked production processes, linked in with top-level logistics and value creation chains. This goes hand in hand with significant advances in engineering, in the execution of industrial processes, in resource efficiency and environmental friendliness as well as in connection with the management of supply chains and life cycles.

This revolutionary transformation can be seen as the fourth phase of the process of industrialisation. Industrialisation started at the end of the 18th century with the introduction of mechanical production facilities, which revolutionised the manufacture of goods. This was followed by the second **industrial revolution** – the mass production of goods based on division of labour with the help of electrical power – around the beginning of the twentieth century. These two revolutions issued, from the mid-1970s on, in the third industrial revolution which has continued to the present day. This involved the use of electronics and IT to increase the degree of automation and allow the machine to take over part of the thinking process. The vertical networking of embedded systems with business management processes in factories and companies – these being at the same time networked horizontally with distributed value creation chains which are controllable in

real time – is now leading, as stated earlier, to the fourth phase of the industrial revolution – Industry 4.0.

A key element for Industry 4.0 is the **'smart factory'**. This is characterised by a new intensity of human-machine interaction, embracing all the persons and resources that are involved in the production process. Centrally important is an ensemble of independent production machines (including robots, conveyor and warehousing systems and other operating resources), all of which are self-controlling, self-configuring, knowledge-based, sensor-supported and distributed in space, together with the associated planning and control systems. The smart factory is notable for end-to-end engineering, comprising both production processes and the final product, as a result of which the digital and the physical worlds can meld seamlessly. Moreover, the smart factory is itself embedded in cross-corporate value creation chains.

Alongside the potential for technological development, **human beings** are a central and indispensable part of the changes heralded by Industry 4.0 – not just as customers, but as a crucial variable in the design and engineering of Cyber-Physical Production Systems (CPPS), and as managers and technicians in a production that relies on new forms of collaboration and multiple processes of human to human (social-network-based) and human to machine interaction. The workforce controls, regulates and shapes the intelligently networked production resources and the steps of the production process, based on objectives defined in relation to the situation and the context. In the smart factory, they thus play a decisive part for quality assurance purposes. The smart factory makes the increasing complexity of production manageable. While maintaining the highest standards of quality and productivity, it offers a significantly higher degree of flexibility and resilience and so ensures the best possible use of resources. As an essential component of Industry 4.0, the smart factory supports the manufacture of customised products and can be counted on to give German industry a competitive edge in a globalised world.

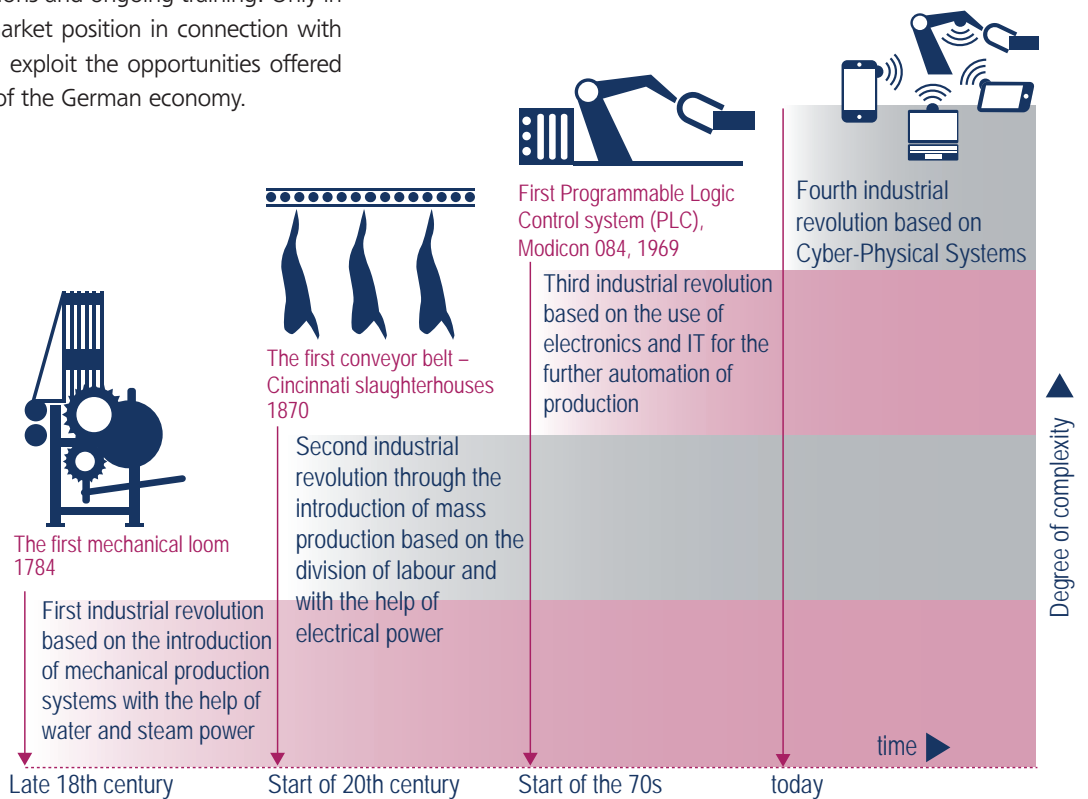
The **RÖHM group** is contributing to Industry 4.0, and so is helping to shape the industrial production of the future. Since September 2012 representatives of RÖHM GmbH have been involved in the Cyber-Physical Production Systems (CyProS) project. The objective of this research initiative is to improve productivity and flexibility through the networking of intelligent systems in the factory. A consortium of 20 partners coming from science, the universities or industry is developing a representative spectrum of cyber-physical modules, creating



Change is the only constant. A glimpse of production at , RÖHM in the late 1950s.

the technical and methodological foundations for the economic operation of cyber-physical systems in a real production environment, and providing universally applicable platforms and approaches for the introduction of cyber-physical production systems.

If Germany is to maintain itself and be successful in future as a centre of production, it is essential that we make an active contribution to this fourth industrial revolution – that we develop, market and distribute independent, self-controlling and knowledge-based production systems. The creation of an Industry 4.0 will also have effects on the economy and on society, which will likewise be linked in with the new systems. Germany will need to aim at shared norms and standards applicable to all industries and agree on an appropriate reference architecture, while adapting and modernising the existing ICT and production infrastructure. It is important to have regard to the security aspect and to protect intellectual property. At the same time innovations in the organisation of labour within the company are called for, especially in relation to worker qualifications and ongoing training. Only in this way can Germany secure its market position in connection with innovative production systems, and exploit the opportunities offered by Industry 4.0 in the best interest of the German economy.



Source: DFKI (2011)

Source: Forschungsunion 2012 [Research Union 2012], www.forschungsunion.de

An complete success: Family Day at the Dillingen plant

The family day of the RÖHM plant in Dillingen/Donau was an across the board success. Invited guests were the employees and their families as well as representatives of public life. The approximately 4,000 guests also included employees from the subsidiaries in France and Switzerland. They were able to get a first hand picture of the production sites and see how lathe chucks, power chucks, machine vices, robot grippers, large chucks and lots more are manufactured.

The visitors were impressed, among other things, by the dimensions of the two portal turning and milling machines for the processing of work pieces of up to 4 meters diameter and a weight of up to 25 tons. In addition to these “colossal” machines – of course the work pieces manufactured on them were on display as well – the remaining machine park also met with plenty of interest. The multitude and size of the milling, turning and grinding machines solicited astonishment from many visitors as did the complexity of the manufactured products, some of which show narrow tolerances of only a few thousandth millimetres.

The visitors could see how fit bores are cut in complex work pieces, how complete machining with main and opposed spindle works, or how the “finishing touches” are put on air-operated self-contained chucks on grinding machines. These chucks are used, for example, in the oil and gas industry for pipeline processing.

With the help of finished clamping tools, an exhibition informed about their fields of application and functions and how gripping technology is used in practice.

The training workshop informed about different courses of training and used examples to demonstrate which work pieces and training pieces are manufactured on the modern machines. School students got first hand information about the training contents from the apprentices.

While the adult guests found interest and pleasure in the technical details, walks around the spacious factory premises and the comprehensive background information, the young guests didn't miss out on amusement either: a jumping castle, a mobile play trailer, handicraft games and other attractions awaited the children. Numerous THW catering stalls around the production halls provided sustenance for the visitors.

RÖHM CEO Michael Fried: “We are very pleased that the employee day met with such lively interest. This shows the close bond our employees have with the company” – and Plant Manager Michael Ott adds: “Our employees are proud to be working at RÖHM. Many of them took the opportunity of showing their families and friends their workplace”. Both expressly thanked all those who contributed to the success of the Employee Day.



More than 4000 visitors showed up for the RÖHM Family Day at the Dillingen plant.



RÖHM supporting three good causes

Since 2008 RÖHM has been supporting local institutions caring for children in need with regular donations. The company continued to show its commitment in 2012 by financing three charities, each with a donation of 5000 euros.

Funds were given to the Kinderhospiz St. Nikolaus [St. Nikolaus Children's Hospice] in Bad Grönenbach, the Kinderheim St. Clara [St. Clara Children's Home] in Gundelfingen and Radio 7's 'Drachenkinder' ['Dragon Children'] campaign. The RÖHM corporate group hopes that its financial support will provide a foundation for the successful activity of the three institutions.

Representatives of the charities were welcomed by CEO Michael Fried to RÖHM's parent plant in Sontheim. Speaking to a small audience, they gave an account of the daily problems faced by their institutions, and described the purposes for which the money will be used.

CEO Michael Fried comments: 'The RÖHM group of companies is happy to support institutions which make it possible for children in need to lead a better life.' He went on to emphasise that the company's involvement will continue in future in the form of a longstanding partnership.

'Public funding is scarce, so donations from industry are very important to us. We are delighted by RÖHM's generosity,' said the representatives of Radio 7, the Children's Home and the Children's Hospice.



Handing over the donations (from the left): Patrick Eitel (RÖHM-Marketing), Lamia Friedel (Radio 7), Sister Maria Elisabeth (Kinderheim St. Clara), Brigitte Waltl-Jensen (Kinderhospiz St. Nikolaus) and RÖHM CEO Michael Fried.

We wish you and your families
a blessed and peaceful Christmas season,
and every success and happiness in the New Year!



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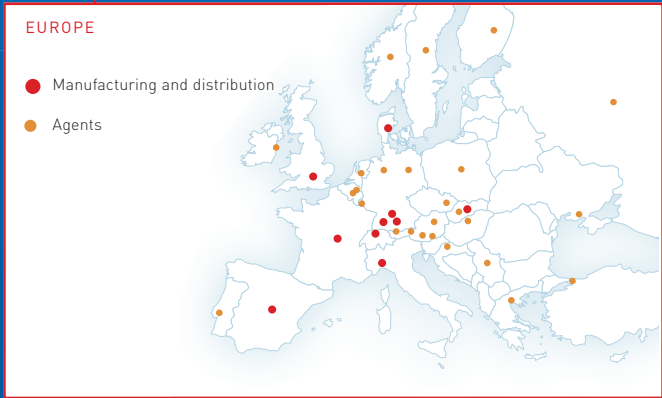
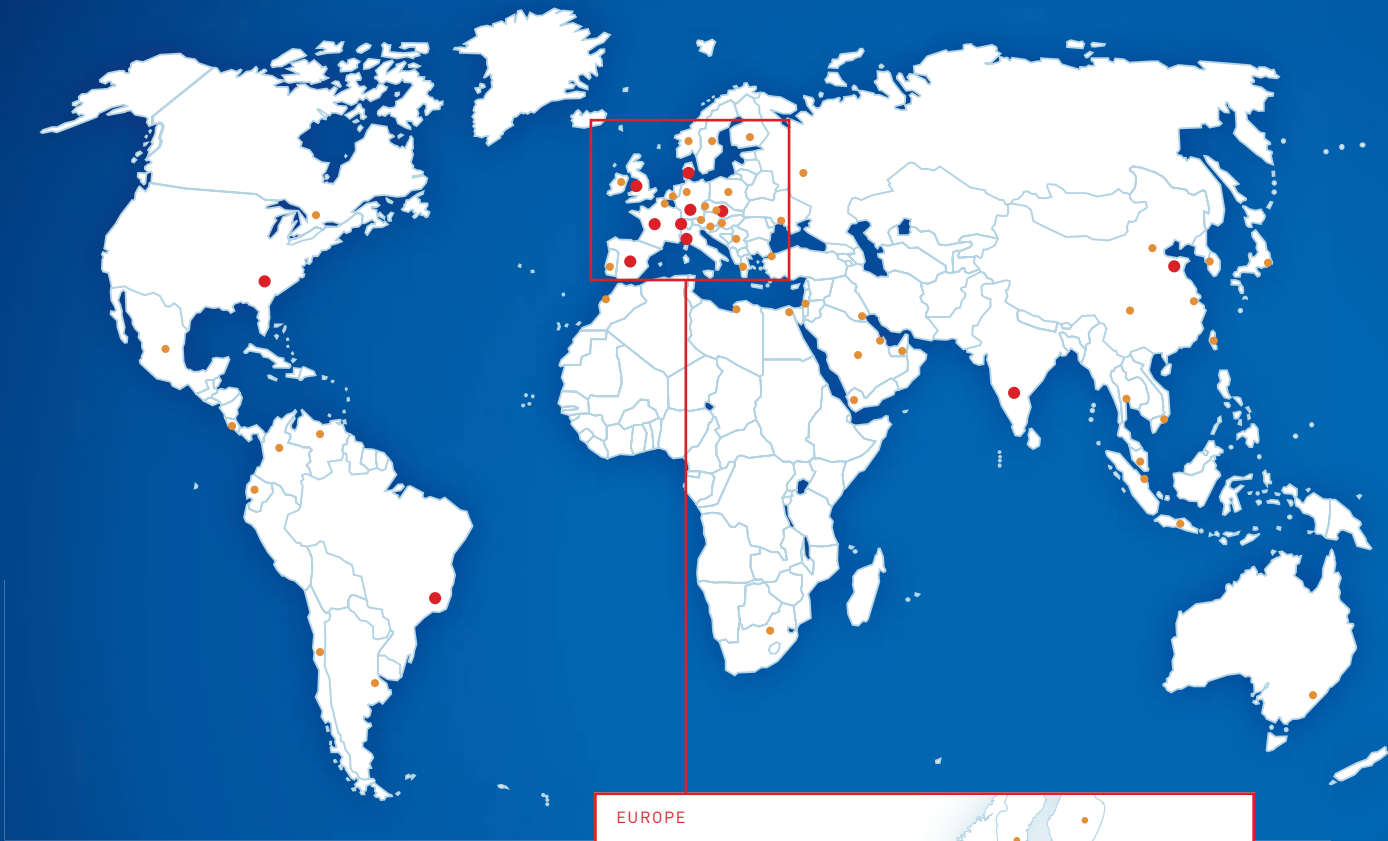
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