

# NETSHAPE

Hatebur magazine for horizontal cold and hot forming – 1/2014



FAW Forge (Jilin) Co. Ltd., China: Xu Xianping (CEO of the FAW Group), Zhang Ruiqing (Ex-CEO of FAW Forge), Bayin Chaolu (Governor of Jilin Province), Lan Baocun (Division Manager of FAW Forge)

## CEO'S VOICE

Dear Business Friends,

The sudden and unexpected death of our director and former company owner Paul F. Hatebur has shocked us all. It is of great importance to me to pay tribute to his 50 plus years of involvement in our company in this issue.



We were satisfied with business year 2013. A particular challenge was the very rapidly changing currency situation. This was due to the significant devaluation of the Japanese Yen. This year too, we will have to deal with this situation.

Hatebur Umformmaschinen AG will continue to look to producing innovative and competitive products for our future success. At the same time, we are intensifying our range of services for our long-lasting machines. As you can see from the table of contents, we are focusing on two main issues:

On the one hand, we will show the rapid development of the Chinese market and the directly related intensive collaboration with our most important customers in China. This success story is the result of the continuously improving local expertise of our subsidiary, Hatebur Technology in Shanghai.

On the other hand, we will highlight our latest baby from the Coldmatic machines series, the CM4-5<sup>ECO</sup>. This new machine was introduced to experts from across the globe on the occasion of the WIRE trade fair (April 7 – 11, 2014) in Dusseldorf. It is the result of intensive collaboration with one of our most important customers in the field of cold forming technology. The main features of this machine aim for global usability and concentration on what is really necessary, without shortfalls in terms of flexibility of the machine and quality of the workpiece.

This year again, we are looking forward to continuing our good collaboration with you as a business partner. You can continue to count on us as a partner! Sincerely, Urs Tschudin.

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FAW Forge (Jilin)  
Co. Ltd., China

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# PAUL FRITZ WILLY HATEBUR – OBITUARY

**\* 12.6.1934 † 19.2.2014**

Paul Hatebur joined his father's company in 1957. In 1980, his father, the company founder Fritz Bernhard Hatebur, died. He had established the company Hatebur in 1930. Following his death, two of his three sons, Hans Hatebur and Paul Hatebur, carried the company on as representatives of the second generation. In 1997, after the death of his brother Hans, Paul Hatebur, at the age of 63, took over Hatebur Umformmaschinen AG and continued to run the business alone.

Many very intensive years followed for him and his family. His impressive humanity, his wise management style and his ability to fill individual positions with just the right people, crowned his commitment with success. We have Paul Hatebur to thank for the fact that the company remained independent and is still family-owned.

He cautiously and thoughtfully ensured that the existence of this successful family business would continue in the third generation. On July 1, 2009, he transferred the company and the entire equity stake to his daughter, Claudine Hatebur, and in doing so placed his full trust in her.

From this time, Paul Hatebur limited himself to the position of director. On February 19, 2014, Paul Hatebur passed away suddenly after a short, serious illness. It was a shock to us all.

Paul Hatebur actively shaped the company's history during more than 53 years of work at the company. He was a great example to us all in many respects. His warm-hearted and generous nature, as well as his humanity, were highly valued by employees. His straightforwardness and openness will continue to characterize the company in future too.

Paul Hatebur dedicated his life to his family and the business. And his extended "family circle" were the employees of Hatebur Umformmaschinen AG.



We will never forget Paul Hatebur and will keep fond memories of him. We would like to pass on our sincere condolences to his family at this difficult time.

We will continue to support our new owner and will do everything we can to ensure that this successful family business continues to develop along the path of independence and autonomy in future too.

Urs Tschudin



## FAW FORGE (JILIN) CO. LTD., CHINA – REACHING NEW ALTITUDES WITH AN AMP 50 XL

📄 Reinhard Bührer / Andy Liang 📷 Andy Liang / FAW

**The Chinese automotive market has grown dramatically over the past decade and the FAW Group is playing at its forefront. Several of the world's leading automobile manufacturers have set up joint ventures with the state owned company and are sourcing quality gear parts from its forging subsidiary. Two hotformers from Hatebur produce parts for FAW Forge (Jilin) Co., Ltd., under a cooperation agreement between the two companies that started as long as 20 years ago.**



*Mr. Lan Baocun and Mr. Shen Ruli are satisfied with the quality of the forged part.*

In 1953, the foundation of First Automobile Works, also called FAW, marked the beginning of China's automobile industry. Since then, FAW has become a large group with 136,000 employees and partnerships with world leading OEMs such as Volkswagen AG, Audi AG, Mazda Motor Company and Toyota Motor Company.

Today, FAW Group and its joint venture companies have a significant market share in China's large automobile industry, producing five million vehicles annually, including 3.6 million passenger cars. The most famous joint ventures are FAW VW, FAW Toyota and FAW Mazda.

In order to meet the increased demand for forging parts in terms of volume and quality, the forging division of FAW Group formed a joint venture with a large forging company from India, which started operating on March 20, 2006. It became one of the largest forging operations in China and is located in Changchun, in China's north-eastern Jilin province. In November 2013, the company again became a wholly-owned subsidiary of the FAW Group and was renamed FAW Forge (Jilin) Co., Ltd.

Today, the three branches of FAW Forge with their 1,400 employees produce more than 900 different forging parts for automobile and light, medium and heavy truck applications on 30 production lines, with

an annual capacity of over 120,000 ton. The company also produces forging parts for the rail, mining, steel and petroleum industries. The range of forging products consists of applications for engines (crank shafts, pitmen), gearboxes (gear blanks) and chassis (front axles, knuckles).

FAW Forge does not export the parts but supplies them to domestic customers such as FAW Group and its affiliated companies. The forgings are finally assembled e.g. in gearboxes from FAW VW for the domestic market or exported around the world. The customers of FAW Forge can be divided into two branches: heavy truck manufacturers and passenger car manufacturers. FAW Jiefang, China HTC Jinan Truck are important customers of the heavy truck branch. Customers of the passenger car branch include FAW VW, Shanghai VW, Dalian VW, FAW FCC, FAW Mazda, Beijing Hyundai and Dongfeng KIA.

#### **LONG LASTING COOPERATION WITH HATEBUR**

Cooperation between FAW Group and Hatebur started 20 years ago, when the

***“Compared with other machines, the Hatebur hotformers have the advantage of offering higher stability, a lower rejection rate, greater efficiency and a higher output.”***

*Mr. Lan Baocun, Senior Manager*



*The gear blank for the Audi project with a new process.*



*The Governor of Jilin province, Mr. Bayin Chaolu, visited the AMP 50 XL line and discussed the production of parts with Mr. Lan Baocun (Senior Manager of FAW Forge).*



*The new parts are still hot during transport to the discharge.*



*The servo-driven infeed rolls bring the heated bar into the machine.*

Chinese car manufacturer decided to invest in a horizontal hot forging line. The project for an AMP 70 was the biggest investment for the FAW Group at the time and was made in order to meet the requirements of Volkswagen and other joint venture partners of the group, as they already had longstanding experience with the quality of forgings from a Hatebur Hotmatic in their own domestic markets. The AMP 70 was installed in 1995 and is still in production in its original installation place, now under the ownership of FAW Forge, located at the 1st branch in the center of Changchun.

FAW Forge uses the Hatebur hotformer to produce parts which are mainly used for gearboxes. These gearboxes are found e.g. in the Jetta, Sagitar and Magotan models from FAW VW, Lavida from Shanghai VW and HongQi from FAW FCC. Thanks to the close relationship with Hatebur and the support for new process developments, new parts will also be used in gearboxes for Audi.

In the 18 years since its installation, the AMP 70 has proved very successful. The production stability, degree of automation and the efficiency of the machine are unmatched and therefore contribute substantially towards the development of the company. With the support of Hatebur, FAW Forge has built up extensive process and tool design know-how which was necessary to operate the horizontal hotformer with a high degree of utilization.

#### **HIGH QUALITY AND RELIABILITY OF HATEBUR HOTFORMER CRUCIAL FOR INVESTMENT DECISION**

When AMP 70 production (more than one million high-quality forging parts each month) was no longer sufficient to meet the drastically increased demand i.e. from Volkswagen, it became necessary for FAW Forge to consider investing in a new machine. The AMP 50 XL became the second Hotformer from Switzerland. It is installed at the 3rd branch of FAW Forge in a new





*From left to right: Mr. Huang Yunlong (Process Engineer), Mr. Shen Ruli (Workshop Director), Mr. Lan Baocun (Senior Manager), Mr. Zhang Zhizhong (Electrical Engineer), Cai Fengqi (Vice Workshop Director), Mr. Liu Meng (Section Chief)*

industrial zone outside Changchun. This industrial zone is a strategic investment by FAW Group for the promotion of gearboxes and related products designed to enhance the competitiveness. The investment is of a strategic nature and involves a volume of around RMB 20 billion.

According to Mr. Lan Baocun, Senior Manager of FAW Forge, the most appreciated points about the new AMP 50 XL are the consistent high quality, the excel-

lent reliability, the long machine life and the prompt service from Hatebur and its service center in Shanghai. Compared with other machines, the Hatebur Hotformers have the advantages of offering higher production stability, a lower rejection rate, greater efficiency and a higher output. Compared to the 18 year-old AMP 70, the smaller AMP 50 XL has a higher degree of automation, enhanced machine protection, improved safety as well as some other new technical features.

The material used for the forging process depends on the requirements of the end customer. After forging, the subsequent processes applied consist of heat treatment, shot blasting and flaw detection. As far as part quality is concerned, this is a key aspect for FAW Forge. The company has

therefore developed a strict quality control process in which the cause of each failure is determined and corrected in order to prevent the same failure from happening again. The degree of automation of the Hotmatic AMP 50 XL, with its integrated production process, is very useful for achieving high production efficiency and part quality.

Although the company works three shifts per day, and 15 shifts per week on the AMP 70, the number of shifts on the AMP 50 XL is still increasing from the current 10 shifts.

The output is currently 1 to 1.2 million parts per month, with 30 different types of application. Now that the machine has already been in production for one year, the operators have become accustomed to the new equipment and efficiency can be increased day by day.



*The heat treatment line.*



*The bar heater of the AMP 50.*



# HUZHOU MAPLELAND PRECISION FORGE, CHINA – MAJOR OVERHAUL OF AN AMP 70 XL-HFE

📄 Reinhard Bühner / Andy Liang 📷 Andy Liang / Mapleland

**With the relocation of three Hatebur Hotmatic AMP 70s from the USA to China, Mapleland Precision Forge is adding the necessary production capacity for the growing demand of high-quality forgings in the world's largest automotive industry. With the expertise and support of Hatebur, the first AMP 70 was inspected and overhauled before starting production in summer 2013.**

In 2011, the Chinese company Zhejiang 8+1 Precision Machinery Co., Ltd., the U.S. company HHI Group Holdings LLC, and the U.S. company C&U Americas LLC established a joint venture company in Huzhou, Zhejiang Province, about 2 hours' drive from Shanghai.

Besides other equipment, three Hatebur Hotmatic AMP 70 lines were brought into the J/V as the main production assets. At the beginning of the partnership, it was clear to all parties involved that the three AMP 70 lines, which had been relocated from a HHI plant at Tonawanda NY, USA to Huzhou, China, would have to undergo

a major overhaul before they could be put back into operation and that prior to the overhaul, a detailed machine inspection would need to be carried out.

## HATEBUR SPECIALISTS ASSIGNED FOR MACHINE INSPECTION

Since both 8+1 and HHI have many years of experience operating of horizontal multi-station hotformers from Hatebur, the companies have built up a very good, close relationship with the machine manufacturer, and Hatebur was assigned to provide its expertise and support for this large scale project. However, as there was no longer any power to the forging lines in their origi-



*Mapleland's first AMP 70 being overhauled.*

nal place of installation, it was impossible to conduct the machine inspection before the machines arrived at Huzhou. This was a major concern for Mr. Wang Weifang, General Manager of Mapleland Precises Forging and the then project leader for the installation of the Hatebur AMP 70 at Huzhou, since this fact considerably delayed the project. Another obstacle was the difference in voltage and frequency between the USA and China. To overcome this, Mapleland Precise Forging finally decided to customize a special transformer in order to keep the original main motor with 480V, 60Hz.

Thanks to joint efforts and under the supervision of a Hatebur specialist, the equipment was disassembled in Tonawanda NY between November 2011 till February 2012 by Chinese and American staff. After a journey of several weeks and with different means of transportation, the heavy load finally arrived at Huzhou. At the same time as the transportation of the equipment, on-site preparation at the newly established Mapleland Precise Forging facility was progressing for the foundations of the three AMP 70s. As soon as the machines arrived, the AMP 70s could be placed on the foundations one at a time, ready for inspection.

### OVERHAUL WITH NEW MACHINE ELECTRIC WIRING AND CONTROL SYSTEM

The machine inspection was then carried out by mechanical and electrical specialists from Hatebur (Shanghai) Technology Co., Ltd. and a detailed report on the condition of the first AMP 70 was established, providing solid information to the management of Mapleland Precision Forge regarding the scope of the necessary overhaul work. The overhaul work itself could finally be started in spring 2013. The work was carried out by a team of Hatebur engineers, together with the ten members of the project team and the newly recruited staff from Mapleland. The overhaul was finally completed on time and included full electrical wiring of the entire machine, installation of a new machine control system and an ESA 600 bar end detection and dropping system. In July 2013, the machine was ready for production.

### TARGET: ONE MILLION PARTS PER MONTH

At present, Mapleland Precision Forge employs 40 staff and produces more than 20 different types of forging parts, mainly 3rd and 4th generation wheel hubs, consuming about 500 tons of material per month.



*The forging (hub blanks) on the inspection conveyor.*



*The bar heater of the AMP 70.*



The parts are used for various car models, such as Haval H6 and C30 (Great Wall Motor), Qoros CF16 (Chery Automobile) and Mondeo (Ford). The production volume is completed with six shifts per week and one tool changeover per shift. This allows the operators to continuously improve the production processes and the changes from one part to the next. The changeover time has already successfully been reduced from an initial five hours at the beginning to under two hours.

After ramping up the production volume of the first AMP 70 line, the company intends to overhaul the second and third lines in exactly same way, aiming to achieve a production volume of one million parts per month per line. The 8+1 mainly targets the world's eight biggest forging manufacturers and domestic OEMs of the automotive industry.



#### **PARTNERSHIP FOR FUTURE DEVELOPMENT OF MAPLELAND PRECISE FORGING**

With the Hatebur Hotmatic installations at Mapleland Precision Forge and those at another affiliate company, 8+1 now operates a total of six horizontal multistation hotformers from Hatebur and has become one of the biggest users of such equipment in China. The company has realized the advantages of the efficiency and stable production of high-quality forging parts that the equipment from the Swiss manufacturer offers compared to other equipment. The management is convinced that the close relationship with Hatebur and its local subsidiary in Shanghai can ensure good future development of Mapleland Precision Forge. Thanks to this partnership, it is possible to exchange experience and know-how at every level machine operation to maintenance, tool design and application support.



*Mr. Wang Weifang, Mr. Shao Dong, Mr. Xie Weiye, Mr. Xia Xiaoming.*

# CONVERSION TO AC MAIN DRIVE – ROBUST, LOW-MAINTENANCE AND COST-EFFECTIVE

 Hansjörg Gebhard  Hatebur

**Hatebur now also equips large systems with AC motors and, as a result, can offer significant advantages, such as shorter delivery times, separate locking brake, shorter downtimes for maintenance and thus lower costs, as well as lower idle power from the mains.**

Advantages that it was previously only possible to achieve on the smaller forming systems can now also be applied to the large systems:

Requirements of the main drive, which years ago could only be met with DC motors, can now be achieved with an AC motor.

Several years ago, Hatebur converted the main drive motors of its forming systems from DC to AC asynchronous motors.

This wasn't, and still isn't, an easy task due to the high requirements predominantly in the inching and slow action mode of the formers. However, progress in drive technology has made it possible in the meantime.

## VARIOUS DISADVANTAGES OF A DC MOTOR

The DC motor has always been known for its long delivery times and high procurement costs, as in this scale, it always had to be a customized motor solution. Not only that, but a locking brake, which it was necessary to integrate in the motor, had to be added. After a few years of operation, the first major maintenance work became due. That could always mean several weeks of production downtime, if an expensive spare

motor was not available, and also generate high maintenance costs.

## ADVANTAGE OF AVAILABILITY

The asynchronous motor shines out with a few small but clear advantages. Even though it is not an off-the-shelf motor in this size of over 300 kW, its availability is significantly better. This is an advantage in particular in the case of servicing or damage. This motor, with protection class IP 54, is more robust from the outset. There is no costly maintenance or reworking and replacement of collectors and carbon brushes. Only the grease nipple for the bearing fitted on the motor housing must be lubricated.

This means there are also no carbon dust deposits in the motor, which used to have had a negative influence on the coil resistance in the earlier solution and make cleaning and impregnation necessary.

Another advantage is that only very little idle power is drawn from the mains, and on the large formers with mains feedback, practically none is drawn. The motors also cause next to no harmonic waves in the mains.

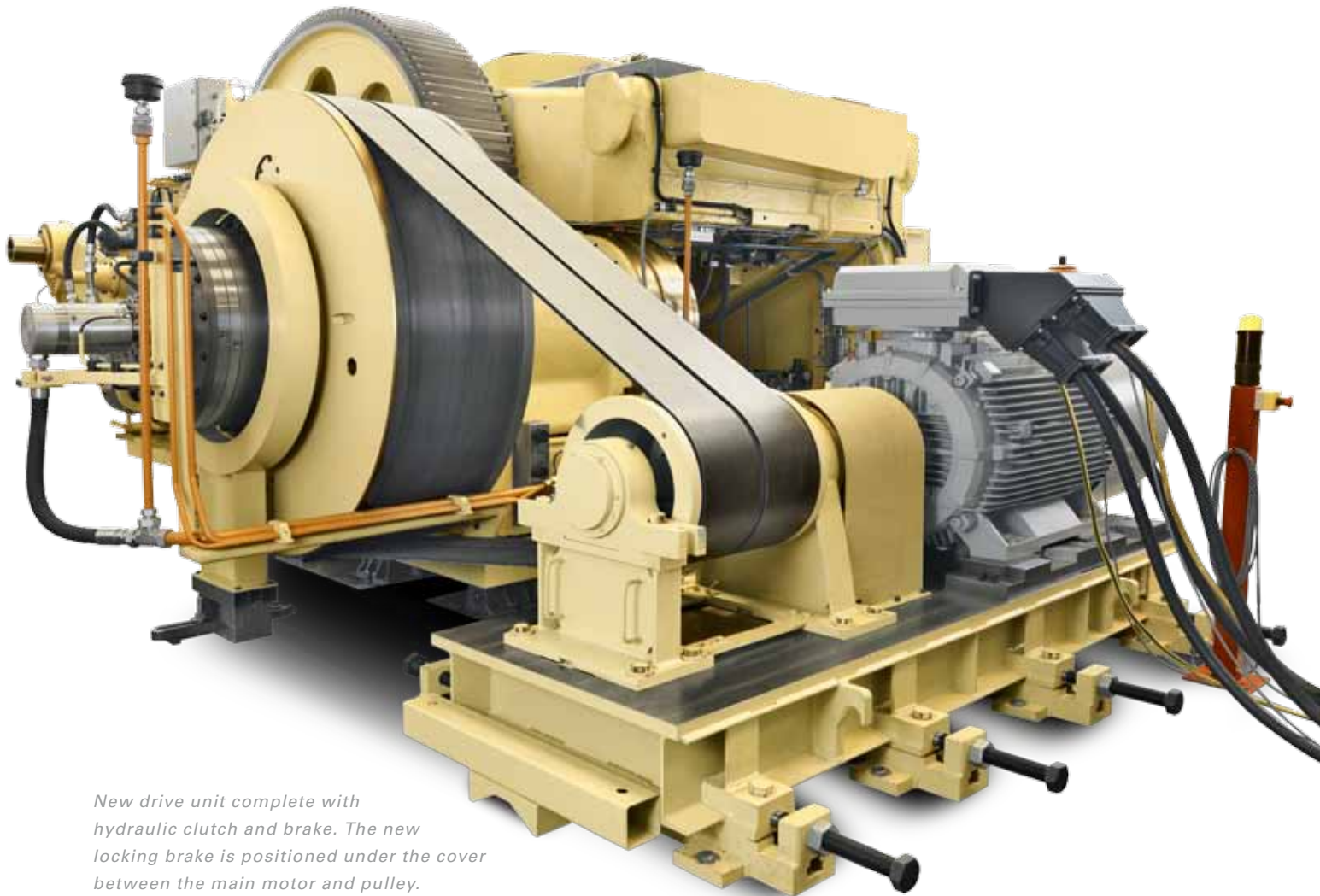


### LOCKING BRAKE AVAILABLE AS A SEPARATE UNIT

Hatebur used this conversion as an opportunity to separate the locking brake, which plays an important role in the positioning of the machine during inching mode, from the motor on the large forming systems and adding it as a separate unit. Of course, this also helps with the move away from a customized motor solution.



As it is easily possible to convert existing systems, this conversion is repeatedly requested for large systems.

Interested? We would be pleased to advise you!



*New drive unit complete with hydraulic clutch and brake. The new locking brake is positioned under the cover between the main motor and pulley.*

# THE NEW ONE: HATEBUR COLDMATIC CM 4-5<sup>ECO</sup> – FROM CUSTOMER REQUIREMENT TO PRODUCT

 Christoph Pergher  Hatebur design

**In light of the firmly embedded lean production philosophy at SFS intec, this experienced Coldmatic operator approached Hatebur with a specific request. For decentralized production at sites throughout the world, they requested a means of production that fitted the Group philosophy as closely as possible.**

Hatebur accepted the challenge and examined the project intensively in a strictly time-tabled preliminary project phase. Based on initial concept considerations and cost estimates, the spark was definitively ignited. It became clear that the combination of strict commercial requirements and an open dialog regarding costs/benefits of existing and new solutions had vast potential.

## THE CUSTOMER AS DEVELOPMENT HELPER

At various meetings, in which the key experts were able to exchange ideas in an open atmosphere, it was possible to consolidate the ideas and suggestions into a coherent concept. Bringing together the vast experience of SFS intec in the establishment of efficient production processes with the tried and tested development skill of Hatebur turned out to be very productive.

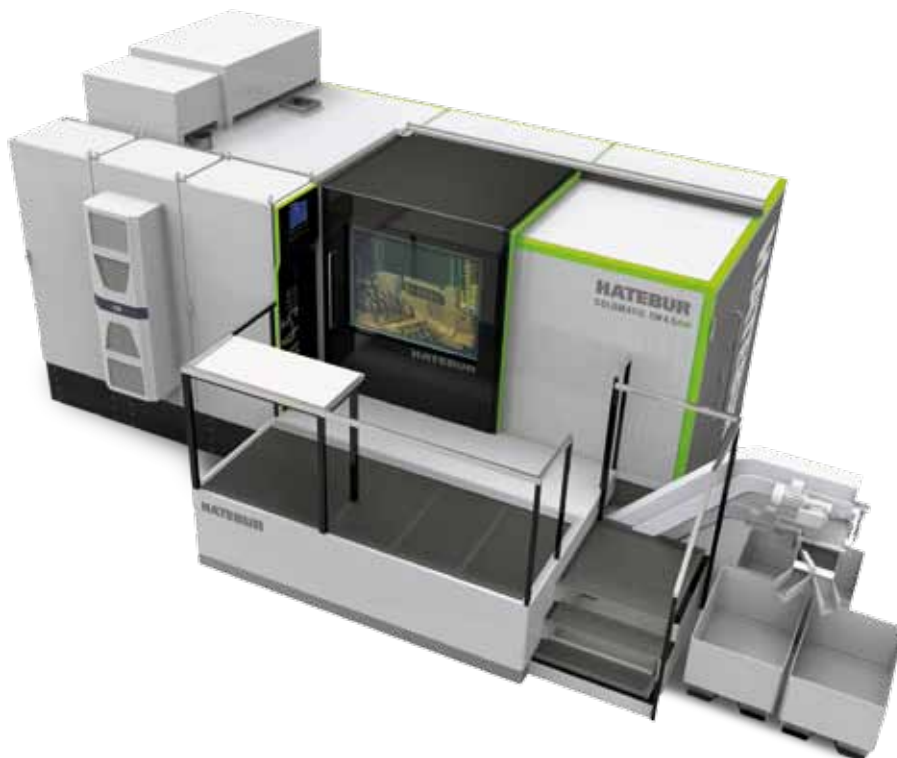
## THE CORNERSTONES OF THE CM CONCEPT

Based on the strengths of the tried and tested Coldmatic series an even more efficient means of production was to be produced through targeted integration of new solutions: a compact “workhorse” with the focus on high productivity and simple operability with a simultaneous increase in flexibility for the development of new forming processes. The possibility of material heating directly before the first process step or the simplified processing of bar material through the servo roller feed are just two examples of the new additions.

Universal compatibility with existing Coldmatic AKP 4-5 tools, including all kinematic possibilities, must be guaranteed.

## RELIABLE COMMISSIONING AT THE INTENDED SITE OF USE

The compact system concept should reduce the hall capacity required and should





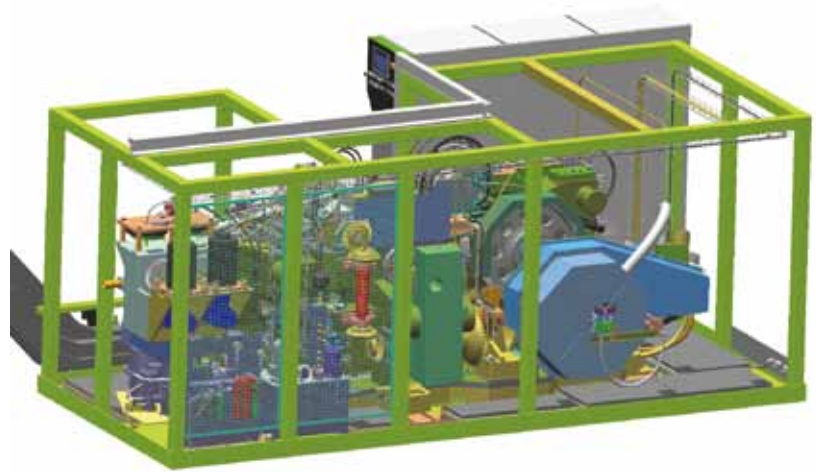
create a high degree of flexibility in the implementation of new logistics or production workflows. With the focus on “plug-and-produce”, the reduction of commissioning expenditure at the production site has been weighted more strongly.

The selected solution, with a sturdy base plate as the central assembly element, combines the demands for space savings with floor level installation and, at the same time, is the basis for the transport and commissioning of a completely assembled and tested system.

Through the integration of units for lubrication and hydraulics as well as installations for electrics, pneumatics and cooling in a compact whole, it was possible to combine measures for noise, personal and machine protection more effectively, resulting in an advantage in terms of user-friendliness and ease of maintenance.

### TRUST AND TRANSPARENT PROJECT MANAGEMENT

The basis for successful collaboration at all levels is respect and trust in the abilities of your partner as well as open communication. In this project, not only were the technical and commercial aspects agreed mutually before the definitive GO, but the scheduling and central milestones were also defined. In addition to the acceptance conditions, a time frame for joint monitoring in the first months of production was



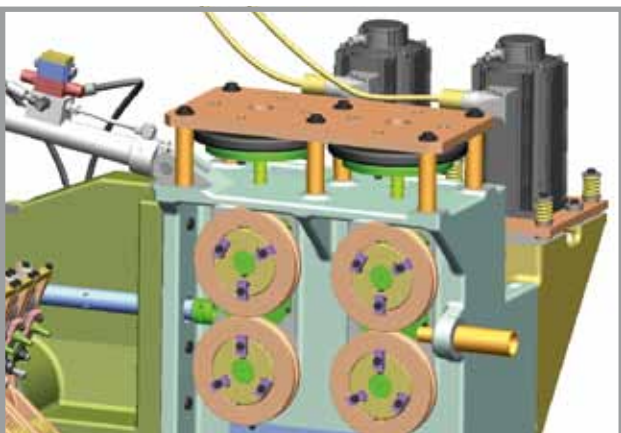
defined and the procedure to be followed in the event of problems was discussed.

### BETTER SOLUTIONS TOGETHER

The openness on both sides was the key factor contributing towards the positive course of the project and resulted in a number of improvements in the various phases of the product life cycle. The complexity of the topics can be illustrated by examples, such as achieving more efficient inching through the optimization of the safety concept or the standard use of a clutch/brake combination with friction linings in block design.

We would like to thank the team from SFS intec for the intensive and successful collaboration and we are confident of quickly and smoothly establishing the new machine type as a reliable means of production at SFS, through consolidated efforts.

The first COLDMATIC CM 4-5<sup>ECO</sup> series is currently under construction at Hatebur Swiss Precision. We are looking forward to delivering the first machine to SFS intec before the year is out, after running it through an extensive series of test programs.



## HATEBUR DEALERS WORLDWIDE – YOUR LOCAL DIRECT CONTACT

Thanks to its large network of dealers worldwide, Hatebur has a local presence directly where customers need it. Due to successor regulations and ownership changes, it has been necessary to find new dealers for some countries. Therefore, in this and the next issue of Netshape, we will be providing a brief overview of our long-term and new partners.

### BRAZIL DEALER

Founded in 2010 by the engineer Fábio Wagner Pinto, the company Eins Soluções em Engenharia Ltda is headquartered in Blumenau. Its team of professionals consists of mechanical engineers and production engineers, highly specialized in planning, implantation and maintenance of production lines. The focus of the company have been given to the machining processes on the production lines. Already in January 2014 EINS has assumed the Brazilian representation of Hatebur.

Contact: Fábio Wagner Pinto  
Eins Soluções em Engenharia Ltda  
CEP 89031-000 Blumenau / SC Brasil  
Tel. +55 47 8404 98 18  
fabio@eins.com.br

### BULGARIA/ROMANIA DEALER

MDC Turbo Services was founded in 2011 by Marius Dogaru. MDC Turbo Services SRL has taken over a share of the activities of Ferrostaal Bukarest in Romania. The company has three employees in Romania and a contact person in Bulgaria. Initial contact was established between Marius Dogaru and Hatebur at the start of 2010.

Contact Marius Dogaru  
S.C. MDC Turbo Services SRL  
020359 Bucharest, Sector 2 / Romania  
Tel. +40 722 22 36 46

### UK DEALER

Schneeberger Engineering has been operating in England since 1989. In 1993, Ernst Schneeberger took over assembly work for Hatebur in various countries, and since 2003 has been operating as the dealer for the English market. The main focus is on the After Sales Service as well as service jobs in various countries – the strengths of the company.

Contact Ernst Schneeberger  
Schneeberger Engineering  
West Midlands / Great Britain  
Tel. +44 1213 513 865  
ernstschneeberger@hotmail.com

### INDIA DEALER

The company Chrystec Machine Tools Pvt. Ltd. was founded by Mr. Philip Mascarenhas, former business unit head and General Manager of Voltas Machine Tool Division and former Product Heads, Mr. MRI Shaikh, Mr. Sunil Bhatkhande, Mr. ARA Kani and Mr. J.D. Moogat in October 2009 as a result of the decision by Voltas Ltd. to exit from some of their trading business. Manpower strength is 21 personell that includes sales, service and application persons.

Contact: P. Mascarenhas  
Chrystec Machine Tools Pvt. Ltd.  
560025 Bangalore / India  
Tel. +91 9845 153 978  
pmascarenhas@chrystec.com



### KOREA DEALER

The SQ Tech company, based near Seoul, serves the customers in South Korea. At the beginning of year 2015, Hatebur and SQ Tech will celebrate 10 years of successful relationship. Mr. Sang Yul Yoo, General Manager, has many years of experience in the market of hot- and coldforming and brings permanently his dynamism and his strong support to the success of Hatebur. The SQ Tech team, with high technical skills, supports Hatebur during machine commissioning and for maintenance operations. SQ Tech is very close to the customer and provide very effective services.

Contact S.Y. Yoo/J.W. Seo  
SQ Tech Corp.  
403-858 Incheon City / Korea  
Tel. +82 32 623 7800-6  
sales@sqtech.co.kr

### SINGAPORE DEALER

Munger Machine Tool Pte Ltd. has an excellent reputation on the market and, for over 25 years, has been representing reputable machine manufacturers from Germany, Italy and Switzerland with a qualified sales and service team. The focus on consultation and service for discerning customers in the field of metal processing is the ideal prerequisite for successful collaboration.

Munger Machine Tool Pte Ltd.  
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service@mungermachinetool.com

### THAILAND DEALER

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### MALAYSIA DEALER

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service@mungermachinetool.com

### POLAND DEALER

In 1992, Waldemar Trzesniewski founded ABH as a technical office for consultation and import of machines and technology in the field of forming technology. Around 20 people work at the head office in Warsaw, in a building with a 120 m<sup>2</sup> exhibition space for machines. In addition to sales, ABH also offers servicing, training, and spare parts deliveries.

Contact W.+M.Trzesniewsky  
ABH Trzesniewski  
PL-02-401 Warsaw / Poland  
Tel. +48 2286 359 89  
info@abh.com.pl

### CZECH REPUBLIC/SLOVAKIA DEALER

Elcomed was founded in 1996 by Rostislav Necas and Tomas Cajka, and they began collaborating with Hatebur in 2012. In addition to Hatebur's forming systems, Elcomed also supports suppliers who offer electrical safety components for conveyor belts on the Czech market.

Contact Rostislav Necas  
Elcomed spol. s.r.o.  
104 00 Prague 114 / Czech Republic  
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hatebur07@elcomed.cz

*Due to space restrictions, we can only list a few of our dealers in this issue of Netshape. Information on the other dealers will be provided in the next issue of the Netshape magazine.*

## ESA 600 – SAFETY AND PROFITABILITY

 Carsten Sieber  Hatebur

**When processing bar material in a Hatebur Hotmatic, it must be ensured that the bar ends do not enter the forming process. To prevent this, Hatebur has developed the ESA 60/ESA 600. This detects and monitors the bar ends on their way from the bar rack through the heater to the shear plane in the Hatebur Hotmatic former.**

### ESA COMBINES SAFETY AND PROFITABILITY

Since the launch of ESA in 1961, ESA has been being continuously improved and adapted to customer requirements. Through the exact recording of the bar ends via laser light barriers, they can be detected with precision to the nearest millimeter, and thanks to the analysis, the bar feed can be monitored to within a hair's breadth via a measuring wheel. This means the number of eliminated cut offs can be minimized, which results in a significant saving of energy and material costs.

### INTERACTION OF ESA 600 WITH SERVO TECHNOLOGY

If the bar end identified by the ESA 600 unit is too close to one of the two cut-off ends, the ESA sends a corresponding signal to the machine's control system. The control system then causes the servo feed to perform a reduced feed stroke (shorter cut-off). As a result, the position of the bar end is shifted to the middle of the cut-off and troublesome shards are prevented. When this action is performed, one reduced and one regular cut-off (contains the bar end) is normally eliminated.





Servo feeds are in the meantime available for all hotformers (except AMP 20S) and can be implemented in existing formers as an add-on.

#### **ESA MONITORS BAR AREAS OUTSIDE THE TARGET TEMPERATURE**

The temperature of the materials to be formed is essential in particular for ball bearing steel and automotive parts. That's why ESA offers the possibility of analyzing signals from a pyrometer at the end of the heating section and thus monitoring the corresponding area. The ESA system monitors this area down to the shear plane and then has it eliminated by the machine.

#### **NEW VERSION 6.03 WITH SIGNIFICANT IMPROVEMENTS**

Above all when starting the forging systems, temperature differences can occur in the bar materials. The latest ESA version monitors the material as soon as it leaves the bar rack, and can thus evaluate detected temperature fluctuations in the bar and, if necessary, have this section eliminated from the machine.

Combined with the additional infeed length monitoring, which is new in the ESA, process reliability can be brought to a whole new level.

#### **NEW FEATURES IN THE ESA 600**

- The ESA monitors the material from the first moment.
- Cut-off length monitoring via ESA measuring unit.
- Gaps between the bars are analyzed. This enables optimal adjustment of the bar roller.
- Passwords for the protected areas can be changed by the customer to protect the system against operating errors.





## TRADE FAIRS / EVENTS

### ACTIVITIES IN GERMANY

From April 7 – 11, Hatebur took part in the biennial Tube & Wire trade fair in Dusseldorf, Germany. At its own stand, the trade fair team, comprising members of the company management, international sales, After Sales Service and technology, welcomed customers and prospective customers. The big innovation from Hatebur, the Coldmatic CM 4-5<sup>ECO</sup>, was discussed at length and presented to the interested audience in detail. For more information on the machine, see pages 14 and 15 of this magazine, or speak to your Hatebur contact directly.

### ACTIVITIES IN SOUTH KOREA

Together with our long-term South Korean dealer, Hatebur took part in SIMTOS in Seoul from April 8 – 13, 2014.

### ACTIVITIES IN INDIA

The Imtex trade fair was held in Bangalore from January 23 – 28, 2014. Together with our Indian dealer, Chrystec Machine Tools Pvt. Ltd, employees from Hatebur welcomed visitors to the trade fair. The IMTEX trade fair was focused on forming technologies in all technical applications.

### VISIT HATEBUR

#### ■ IN GERMANY

From June 29 to July 4, Hatebur will participate on the 21st International Forging Congress IFC 2014, held in Berlin.

#### ■ IN CHINA

In 2014 too, Hatebur (Shanghai) Technology Co., Ltd. will take part in the China International Bearing Industry Exhibition from September 18 – 21.

#### ■ IN BRAZIL

Together with representatives from Hatebur, EINS Soluções em Engenharia will take part in the Senafor trade fair in Porto Alegre in Brazil from October 8 – 10.

## NEWS

### SUPPLIER AWARD

For the second time, Max Pichler AG from Liestal has been awarded the Hatebur Supplier Award for reliably supplying important parts in a variety of sizes.

