



up grade

Journal (KS) for customers, partners and employees – 18th year, issue no. 18, Oct 2018

News

Hydraulics replace mechanical systems

The producer of building materials AB Si-likatas in Vilnius is replacing a mechanical press which has become uneconomical by the state-of-the-art hydraulic press LASCO KSP 801 with double-acting compaction. With this forward-looking investment, the company is securing a competitive edge on both the domestic and the Russian market.

Know-how

Quicker start-up of complex lines

The commissioning stage of complex production lines entails time and cost risks, as a number of functions can only be tested and optimized after final assembly. The new LASCO service “virtual commissioning” reduces risks and shortens commissioning stages drastically.

In practice

Quality is first at Emsländer

In Lower Saxony (Germany), the Emsländer Baustoffwerke are a synonym for quality. The family business with its two production sites is known for the quality of its products for masonry construction. Despite a large variety of products, the standard is maintained at a high level.





Lothar Bauersachs
CEO

Looking forward to new challenges

The term “Industrie 4.0” (the fourth industrial revolution) stands for an industrial world of the future already taking shape and dynamically manifesting itself as more and more detailed: Intelligent and digitally interlinked systems shall help interlock production processes with information and communications technology to enable self-organized production as far as possible. Humans, machines, lines, logistics and products communicate and cooperate with each other directly in “Industrie 4.0” with the aim to optimize complete value chains.

The traced development can change complete industrial sectors, markets and even the ranking of whole national economies. For it is clear: Those who do not keep pace with the trend risk losing their competitiveness drastically and being left far behind. This challenges industrial enterprises just as their technology suppliers. Seldom has close alliance been more important.

LASCO in its capacity as technology supplier has never confined itself to viewing its powerful and highly efficient machine tools in the production process of forming technology in isolation. At a very early stage in our company history already, customers tasked us with linking our products with machines and handling devices of other manufacturers to installations or whole production lines and making them centrally controllable. That is how we gained our expertise both in implementing advanced automation solutions and in succeeding in the field of multi-flexible robotics. Now we are going one step further and are making this know-how available to lines of business outside the metal-forming sector, too. At the same time, we are expanding our knowledge and experience in “Industrie 4.0” solutions.

Looking forward to the new challenges associated with this, we hope to be always the partner of your choice and success in our capacity as technology supplier.

Yours Lothar Bauersachs

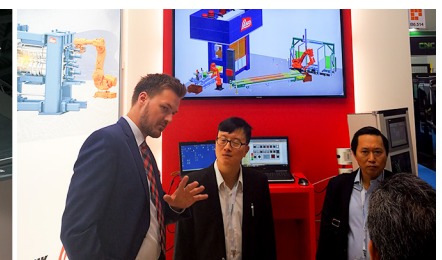
LASCO exhibited at “automatica” for the first time Innovative automation also across sectors now

For the first time, LASCO exhibited at “automatica” 2018 in Munich from 19 – 22 June. The focus of the presentation was on intelligent automation and robotics solutions tailored individually to the requirements of industrial users.

With this debut at the trade fair LASCO presented its know-how in automation solutions, which the company has a world-wide reputation for, across all industries. The focus of the presentation was the “virtual commissioning” of complex robot applications. Response from the public and the interest shown by trade visitors significantly exceeded expectations. LASCO’s experience in projects with virtual commissioning was intensively scrutinized because ready-made solutions have not been on the market in this field by now. Visitors confirmed to LASCO’s exhibition team that the company is a leading global player with this new IT service.

LASCO has more than 40 years of experience in the design and implementation of automation solutions. During this time, 560 production lines have been automated. In addition to LASCO handling systems, several hundred industrial robots are currently in use worldwide, which have been upgraded to robotics systems including process-specific LASCO gripping technology.

LASCO has been building machine tools for 155 years, holds numerous patents and realized the first fully automatic vario-block press in 2007, which among other things prints individually pressed fitting blocks, transports and stacks them with the help of robotics.



Debut at the leading international trade fair for automation and robotics solutions “automatica”: LASCO’s proficient and advanced service was presented across all industries.

bauma CTT RUSSIA successful right from the start

For the first time the 19th International Trade Fair for Construction Machinery and Technologies was held at the Crocus Expo IEC in Moscow (June 5-8, 2018) under the new name „bauma CTT RUSSIA“. It exceeded last year’s results in terms of visitor and exhibitor numbers. The response of the exhibitors was unanimously positive.

StroiExpo now larger positioned as Budexpo in Minsk

In March 2018, the 21st Budexpo took place in Minsk (Belarus) as the successor event of StroiExpo. During the rebranding, not only its name, size and shape were changed, but also its location. This is the organizer’s response to the growing demand for construction technology, building materials, construction machinery and interior design solutions. LASCO participated in the trade fair for the first time.

Production resumed at the sand-lime block plant in Kavelstorf

The Kavelstorf plant of Heidelberger Kalksandstein GmbH, a company of H+H International A/S, can resume production much earlier than planned. On 13 September, production was taken up again after the successful start-up of all presses.

Two presses were destroyed, a third one severely damaged when a fire broke out in the basement of the Kavelstorf sand-lime brickworks on 24 October 2017. The repair of the plant would last at least until the end of 2018, according to the assessment of the technicians at that time. Thanks to the rapid reconditioning of the damaged press and the speedy delivery of two new hydraulic sand-lime block presses, the plant was able to start up again at the end of August, according to the management.

„Our special thanks for the great support go to all the companies that have contributed to the speedy restoration. We would also like to thank our employees and many customers, whose flexibility and loyalty have been put to a tough test,” summarized Dr. Tobias Jung, Technical Managing Director of Heidelberger Kalksandstein GmbH, with regard to the difficult months in the past. In the meantime, the workforce has returned to the lines where large-format sand-lime Quadro system blocks and medium formats are manufactured. During the ongoing restoration work, the 30 employees worked at the sister plant in Demmin. The Kavelstorf and Demmin plants produce for Mecklenburg-Western Pomerania, Brandenburg, Schleswig-Holstein and Hamburg.



Dr. Tobias Jung, Technical Managing Director, Tilo Hahn, Sales Manager/Managing Director, Marc Sattler, Project Engineer, and Frank Kühn, Plant Manager Kavelstorf/Demmin of Heidelberger Kalksandstein GmbH as well as Lothar Bauersachs, CEO of LASCO, during the official start-up of the plant



At AB Silikatas Akcine Bendrove in Vilnius, a modern KSP 801 from LASCO replaces an old mechanical press.

AB Silikatas invests in the future

Hydraulic press in special design

AB Silikatas Akcine Bendrove in Vilnius produces wall-building materials for both the Lithuanian and the Russian market in different country-specific formats. That is why the KSP 801 needs to be equipped individually.

The company, based in Lithuania's capital Vilnius, is investing in modern, more efficient production technology in response to continuing high demand. The mechanical press previously used in the sand-lime block sector will be replaced by the LASCO KSP 801 with double-acting compaction. The blocks will be produced both in the Lithuanian format 340 mm x 198 mm and different wall thicknesses as well as in the Russian standard format in various block heights. This requires an enlarged tool installation area and increased press force. In order to guarantee high brick quality, automatic water dosing ensures consistent moisture of the sand lime mass. Press

and automation are adapted to the available space and optimally integrated into the existing press hall.

Silikatas can look back on more than 60 years of history. Founded in 1954, the company was privatized after Lithuania had regained state sovereignty and is now a joint-stock company. In the past fiscal year, 49 employees generated sales of around eight million Euros. The company produces sand-lime bricks and blocks of the „ARKO” brand and polystyrene panels of the „ETNA” brand. By 2017, 26.5 million units (ARKO) or 138,000 cubic meters of polystyrene foam (ETNA) of these products had been produced.

Messen + Termine

bauma China

Shanghai, China
27.–30.11.2018

bauma

Munich, Deutschland
08.–14.04.2019



New LASCO service: virtual commissioning

No time to lose

If production lines are complex and highly individualized, the time interval between the dispatch of the components and their assembly up to the start of regular production operation may sometimes be quite long. This is because the lines can only be tested properly and optimized during actual commissioning. Not only can this run into a lot of money, but it can also cause competitive disadvantages. High time for professional remedy!

Interlinked lines are becoming more and more complex and demands for the earliest possible time for putting them into operation are on the increase. International competitive pressure increasingly shortens the time users can make available for the readjustment and optimization of lines. The lines are expected to run smoothly right from the start, if possible,

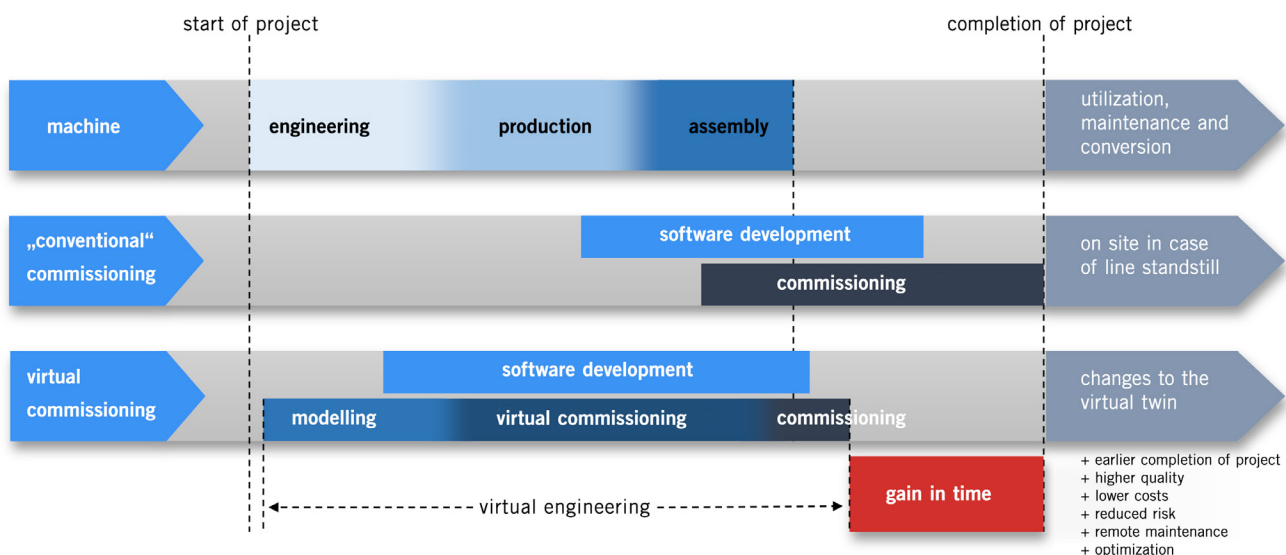
in accordance with all duties imposed.

With its very advanced technology of so-called virtual commissioning, LASCO can offer customers a service which meets these requirements to a high degree.

So far, the production of a line with conventional commissioning has been a sequential

process in which the following items used to be handled step by step:

- conception
- planning
- realization
- testing
- commissioning
- utilization



What are the advantages of „virtual commissioning” for the customer?

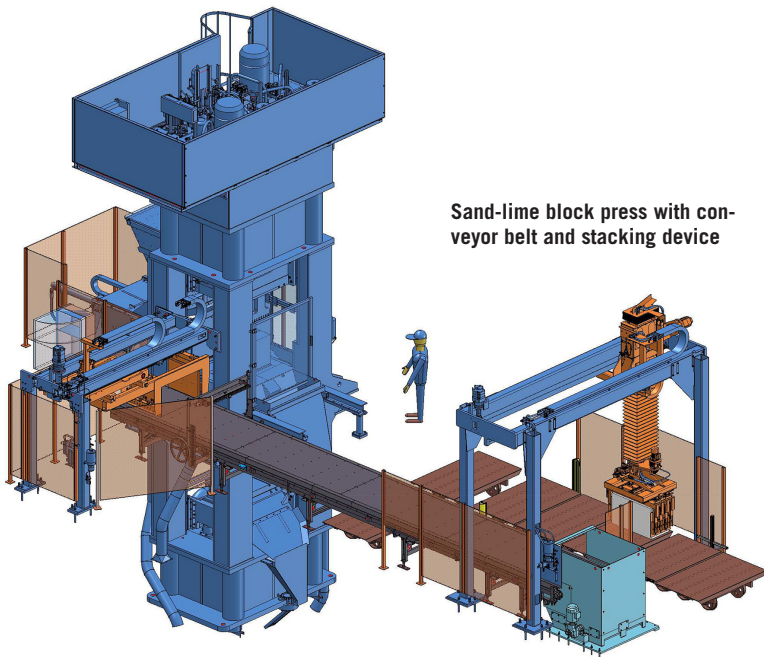
To reduce time and costs for machine assembly and commissioning at our customers' plants, LASCO uses highly developed information technology - virtual components for the commissioning of complex machines. Especially in sand-lime block plants, this offers further decisive advantages, as illustrated in the example of the PSP vario-block press:

The LASCO PSP can be used to press any elements, such as supplementary or fitting blocks with different block heights/lengths, depending on the brick laying plan software. This requires a very flexible double mould shifting system with which the press can produce up to eight different wall thicknesses.

The table take-off removes the pressed green blocks from the tool installation space and places them on the cycled conveyor belt. The stacking robot with vacuum gripper picks up the most diverse formats from the cycled conveyor belt and stacks them individually onto the curing wagon. In order to control the complex processes, considerable software expenditure is necessary. With the engineering tool of virtual commissioning, LASCO is able to simulate the pressing process of the various block formats right in the design phase up to stacking on the curing wagon as individualized cycles. The interfaces of the press, positioning of the punch strokes, filling factors, position of the shifting mould, table take-off and stacking robot with suction gripper etc. are supplied with the specifications from the elementing or finished batch software. Due to this very complex data synchronization already during the design phase at LASCO, the vario-block press can be put into operation at the customer's plant in the shortest possible time, and time-consuming work for readjustment and optimization of the programs can be reduced to a minimum. With the new LASCO service of virtual commissioning, we can support our customers in mastering the high demands of the future and in securing decisive competitive advantages.



Dipl.-Ing. (FH) Jochen Günnel
Sales Director
LASCO Umformtechnik



Sand-lime block press with conveyor belt and stacking device

This conventional commissioning has to be amended substantially by using information technology, as the handling of a project extends over a relatively long period. The costs of fault removal afterwards rise disproportionately by factor 10 – depending on the stage of fault detection. The mechanical system and the software of the line can only be tested properly after the assembly of the line has been completed. Consequently, the commissioning stage is a relatively long unproductive period for the customer, too.

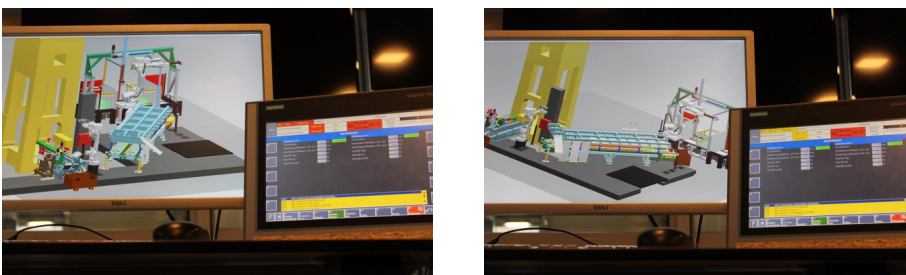
Compared with this, virtual commissioning comprises the same process steps as the conventional one. It has the advantage, however, that certain work packages can already be handled parallel to the design of the line

virtually under production conditions in the manufacturer's works. All machine operations and operating conditions are simulated at the computer as early as in the engineering stage. For this, digital data from the design stage are evaluated: 3D CAD data, PLC control programs and their robot programs, drive models including parameters etc. As our virtual simulation already takes place far ahead of the start of the real commissioning stage in the customer's plant and uses realistic process parameters, this method allows a calculable and shortened commissioning stage. Potential faults can be spotted at an early stage and correction loops will be minimized. Apart from that, we can already show the customer his machine in a virtual presentation in full working order at a very early point of time.

Decisive advantages of virtual commissioning:

- Reduction of the commissioning time at the customer's premises by up to 75%
- Reduction of potential trouble sources
- Reduction of the commissioning costs at the customer's premises
- Optimized ROI due to earlier start of production

Automation project of a production line



The production line has already been modelled completely with the computer (cf. screens) and can be operated with the original control (cf. terminals to the right of them) as in reality, long before components are produced. Thus, the complete production process is simulated in detail with all parameters and optimized beforehand.

Spotlights

Exemplary commitment: Once again, three LASCO apprentices were awarded the Dr. Kapp-Vorbildpreis (prize for voluntary work) by the Upper Franconian metal and electrical industry, because they spend many hours of their spare time doing voluntary work and thus keep society going. *Paula Lehmann* (apprentice industrial clerk), *Jannik Hofmann* (dual studies in mechanical engineering and plant manufacturing/industrial mechanic) and *Lukas Zapf* (apprentice IT specialist) received the prize in a ceremony in the Kaisersaal of



Paula Lehmann

Kloster Banz (district of Lichtenfels) with another 65 prize winners. P. Lehmann has been with the fire brigade for six years and is responsible for youth affairs.



Jannik Hofmann

In addition, she is active in equestrian organizations and the cultivation of customs.

Since the age of seven, J. Hofmann has been member of the German Life-saving Association (DLRG) and has worked as a lifeguard as well as a lifeguard/rescue diver and swimming instructor for children. Since 2007, L. Zapf has been supporting the volunteer fire brigade in his hometown. Due to his outstanding achievements, he has already been promoted to the position of Senior Fireman.



Lukas Zapf



For the first time, LASCO took part in the mobile career orientation exhibition „Zeig Dich!“ in the Coburg region. Gernot Losert (left) presented the company to the young people.

LASCO supports vocational orientation

Top address for newcomers

LASCO is one of the top addresses in the Coburg economic region for young people who want to achieve something in their professional lives on the basis of a thorough education.

This was recently confirmed once again in dialogue with the participants and organizers of the latest „Zeig Dich!“ (“Show yourself!”) tour in the region. For the first time, LASCO took part in this mobile career orientation exhibition, in which school students visit various training companies in order to find out about career prospects and to meet the people in charge. The project was established in cooperation of the Coburg District Administration, the Coburg Junior Chamber of Commerce and the juniors of the Handicraft Association Upper Franconia West e. V. in the

„Mehr-Ausbildung“ (“More vocational training”) initiative.

The tour has been rolling since 2013 and connects young people and the regional economy in a personal and individual way. This year, around 80 pupils from all types of schools from the seventh grade onwards were given the opportunity to get to know 50 companies in the region. With the number of school leavers declining, it is becoming increasingly difficult for companies to fill the vocational training places on offer and thus secure the medium and long-term demand for skilled workers from their own vocational training. LASCO has not been affected by the trend so far, because the company has had disproportionately high rates of apprentices for many years and enjoys a high public reputation due to the quality standard it offers.

For the sixth time already: „School physics meets mechanical engineering“

LASCO has maintained constant contact with secondary schools in the town and district of Coburg and the Coburg University of Applied Sciences for many years, also with view of securing the long-term demand for young skilled workers. For this reason, already the sixth practical day was held this year again under the motto „School physics meets mechanical engineering“. 15 school students from the Albertinum grammar school under the direction of Rüdiger Schindler were able to experience the direct link between theory and practice. Our picture shows the young people in one of the assembly halls together with the LASCO employees (from left) Mathias Taubmann (certified physicist/engineering department), Emile Fortanier (certified engineer, deputy sales manager), Felix Holzheimer (industrial electrician) and OStR Schindler (Albertinum).



LASCO stands for successful professional biographies

Company jubilarians of merit

Four employees, who have been working for the enterprise for many years, were honoured for their performance and loyalty in a ceremony at LASCO Umformtechnik GmbH in November 2017, among them also Robert Welsch, Managing Director Production, for 25 years of employment.

In a ceremony, Friedrich Herdan, Chairman of the Board of LASCO Langenstein & Schemann, Holding, honoured the performance of Robert Welsch for 25 years in prominent position in the company. Following this, CEO Lothar Bauersachs thanked Matthias Löffler for 40 years at LASCO as well as Angela Rath and Stefan Fink for 25 years' commitment to the company. In the presence of Managing Director Thomas Götz and David Hall, works council chairman, the long-time employees received certificates, loyalty bonuses, honorary certificates of the Chamber of Commerce and Industry as well as decorations of the Board of Trustees of Bavarian Employers.

Robert Welsch – Managing Director Production

25 years ago, Robert Welsch started his career in production as master and head of quality control and gained additional qualifications as graduate in business management in an extra-occupational course. Within few years, he was promoted to the deputy plant manager and took over the function of a plant manager in sole responsibility and thus the direction of production, service and logistics in 2002. Since then, he has been head of production at LASCO.

At LASCO, in-house manufacture of components for machines and lines for forming technology as well as for the production of construction material reaches a very high level of 70%. Individual components that weigh 120 t are not uncommon. They have to be processed in high precision in the μ range, delivered and commissioned world-wide on time. Numerous investments in production and administration equipment have been realized on Welsch's initiative in 25 years. He has been committed especially to achieving optimum manufacturing costs and realizing on-time completion. Due to excellent production know-how and the implementation of efficient operational procedures, Robert Welsch was appointed Managing Director Production in 2016.



In the picture (from right): Lothar Bauersachs, CEO, Frank Reißerweber, head of the engineering department automation, the jubilarians Matthias Löffler and Angela Rath, Matthias Blinzler, head of the electrical workshop, Friedrich Herdan, Chairman of the Board of LASCO Langenstein & Schemann, Holding, Jochen Günnel, sales director, the jubilarians Robert Welsch, Managing Director Production, and Stefan Fink as well as David Hall, works council chairman.

10 years with LASCO

| | |
|--------------------|------------|
| Klaus Knapke | 01.01.2018 |
| Rene Ertlschweiger | 19.02.2018 |
| Ralf Butz | 01.04.2018 |
| Irina Brechenzer | 01.08.2018 |
| Sebastian Frank | 15.08.2018 |
| Alexander Geelhaar | 01.09.2018 |
| Andre Moser | 01.09.2018 |
| Rene Sollmann | 01.09.2018 |
| Luisa Wachsmann | 01.09.2018 |
| Joshua Gäbler | 01.09.2018 |

25 years with LASCO

| | |
|-----------------|------------|
| Markus Griebner | 01.09.2018 |
|-----------------|------------|

40 years with LASCO

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|----------------|------------|
| Klaus Geelhaar | 01.09.2018 |
|----------------|------------|

Sadly mourned

| | |
|-------------|--------------|
| Rudolf Guhl | † 07.04.2018 |
|-------------|--------------|

40 years in the company

Matthias Löffler started his career at LASCO as apprentice draughtsman in September 1977. Not long after passing his final exams, he was charged with demanding engineering tasks for the automation of forging machines. Furthermore, he qualified as a technician for machine tools in an extra-occupational course and passed his final exams in 1993 very successfully. In 1998, he was appointed deputy head of the automation department and has been contributing his expert knowledge to automation solutions for LASCO machines world-wide since then..

25 years at LASCO

Angela Rath joined the LASCO sales department as a typist in January 1992. In 1994, she did some further training to become a certified secretary. Today she supports the customer acquisition in the field of contract manufacture. Angela Rath is highly appreciated both by her colleagues and by customers.

Stefan Fink started at LASCO as apprentice energy electronics technician (engineering operations and maintenance) in 1992. After finishing his vocational training successfully, he took part in further training and has been deployed as chief mechanic for machine installations since then. Currently, Stefan Fink is working in the electrical workshop in the field of machine installations and commissionings.

up grade ks

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Bernhard Kanne
Plant Manager Surwold
Emsländer Baustoff-
werke GmbH & Co. KG
(Haren/Ems, Germany)



Emsländer Baustoffwerke

Market-oriented innovations

up grade: Mr. Kanne, the Emsländer Baustoffwerke advertise their „knowledge of generations” collected over more than 100 years and at the same time emphasize innovativeness. How does this go together?

Bernhard Kanne: Increasing demands and stricter legal requirements also call for new, forward-looking solutions in the construction industry. We work on it every day - in close partnership with trade, crafts and industry. The results are market-driven innovations, convincing products and, above all, satisfied customers.

up grade: The partnership with the machine tool manufacturer LASCO as an innovative technology supplier could therefore be very promising. What's your expectation?

Kanne: LASCO has of course been well-known to us as a leading international supplier of machines and production plants for sand-lime bricks quite some time. The cooperation has now become possible due to the development of our needs. The sand-lime block press ordered must meet some special requirements in addition to standard performance parameters. This is why it is a special version. We expect the press to start operation punctually and, if possible, without start-up difficulties and to develop optimum economic efficiency in the future due to low downtimes.

up grade: What are the special requirements?

Kanne: Our production portfolio ranges from small and medium-sized sand-lime bricks to Quadro and plan elements. This range presents challenges to the machine tool builder in terms of machine flexibility and set-up times for product changes.

up grade: Are you convinced by the solution?

Kanne: We requested the tool change to be semi-automatic in the future so that it can be carried out much faster than today. The availability of the machine will increase significantly. We will be able to optimize our warehousing and still react more flexibly and quickly to customer requirements. These are measurable advantages that convinced us of the high efficiency of the press!

A perfect grip on everything

At Emsländer Baustoffwerke, reliability and quality are the order of the day. The company advertises its many years of experience in the production of high-quality sand-lime bricks: Since 1900, everything related to the white bricks, which are produced in two factories, has been well under control. Customers may rely on this at all times.

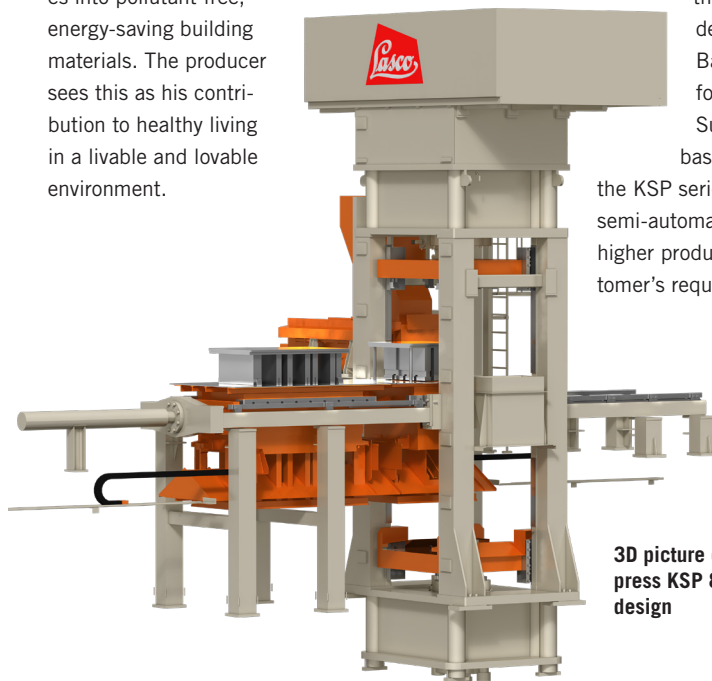
Emsländer Baustoffwerke are part of the industrial history of the Emsland region in Lower Saxony. Since 1899, the company - founded by the merchants Hermann Rüschen and Hermann Wessels - has been engaged in the production and optimisation of binder-bonded wall-building materials and building systems. Today, Emsländer Baustoffwerke are one of the few suppliers to cover almost the entire product range in the sand-lime brick and aerated concrete sector.

The medium-sized family-owned company with around 140 employees, of which approx. 10 are apprentices in different fields, produces at two locations in Emsland, i. e. in Haren and Surwold. Greatest importance is attached on economic and at the same time ecological production. The Emsländer Baustoffwerke process purely biological raw materials in environmentally friendly processes into pollutant-free, energy-saving building materials. The producer sees this as his contribution to healthy living in a livable and lovable environment.

Today, Emsländer Baustoffwerke not only supply the complete wall building material from the cellar to the top of the gable, but also, on request, the complete service from planning to the instruction of craftsmen in Germany and in the Netherlands.

The modern development department works continuously on the optimization of wall building materials and complete building systems. Thus, Emsländer Baustoffwerke have a well-assorted product range in width and depth, which gives architects, planners and builders the greatest possible planning freedom. In the field of construction system solutions, the company offers the multifunctional sand-lime Quadro-Therm blocks and sand-lime Quadro-Etronic blocks. Further products are Porit quick building elements (SBE) and quartz facing bricks.

In early December this year, LASCO will deliver the KSP 850 So in special design, which Emsländer Baustoffwerke have ordered for their production site in Surwold. The unit, which is based on the proven design of the KSP series, can be equipped with a semi-automatic tool changing system and higher production output at the customer's request.



3D picture of the LASCO press KSP 850 in special design