upgrade

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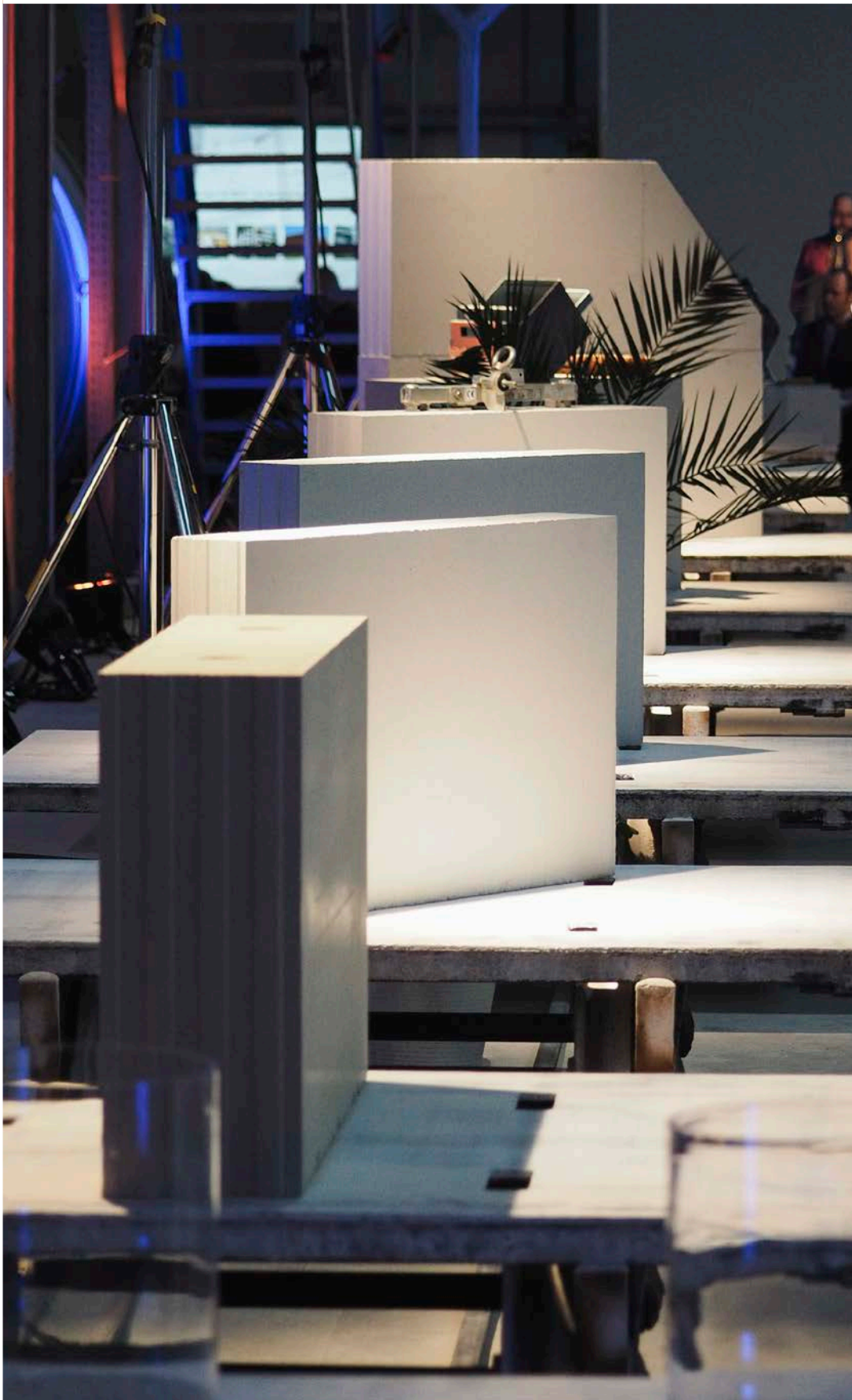


Trends

Sand-lime elements soon available in China?

Sand-lime elements are attracting wide interest in China, too. This became obvious during LASCO's presentation at the bauma China (Shanghai). The competent licensing authority China Academy of Building Research (Beijing) is holding out the prospect of approving sand-lime elements for internal and external walls.

Know-how

LASCO KSP 860 PE for system blocks AND sand-lime elements

Up to now manufacturers have had to lay the focus on system blocks and/or sand-lime elements, when purchasing a sand-lime block production line for large formats. The new KSP 860 PE from LASCO oversteps this mark for the first time: It is universally usable!

In practice

Ultramodern production in Europe

One of the most modern production lines for customised sand-lime masonry in Europe has been put into operation in Friedberg (Germany). LASCO supplied the technology.

LASCO UMFORMTECHNIK
WERKZEUGMASCHINENFABRIK

Friedrich Herdan
Partner
Chairman of the Board of Directors
Langenstein & Schemann GmbH

Milestones

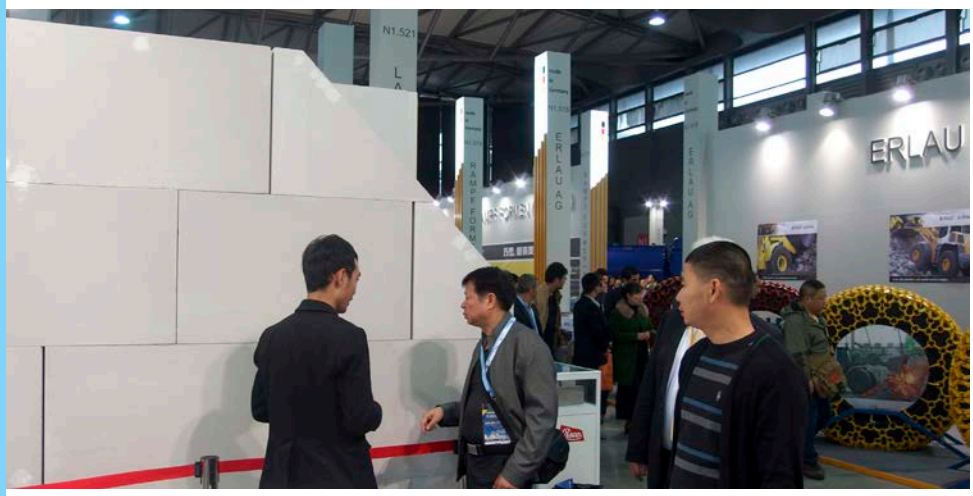
In the early 1990s we set ourselves to modernise the production technology for sand-lime blocks because of the high labour cost pressure in the German building construction sector. LASCO and a leading building material manufacturer jointly developed the vision for supplying sand-lime blocks of a new quality with regard to exactness and homogeneity to the wall-masonry sector. They were expected to enable a leap in the productivity of wall-building, as they offer the advantage of being stuck to and onto each other with thin-bed mortar practically without any joints and laid without any hard physical labour of the staff by the use of lifting equipment.

Moreover the press technology of the path-breaking LASCO KSP series with double-acting compaction was going beyond the boundaries that had been imposed to the sand-lime block for quality reasons before. The building material industry used the newly gained flexibility for its variety of large-format system blocks that additionally speeded up the building progress – and thus the cost efficiency - in practice. Today more than half of the sand-lime block masonry in Germany is realised with system blocks and elements.

Although in some countries labour costs have not reached the importance they have in the high-wage country Germany, even there the trend towards large formats of silicate-containing wall-building materials can be seen to emerge. One of the market leaders in the Russian sand-lime block sector already produces elements and system blocks, leading manufacturers in China are thinking about their launch. Higher quality and quicker completion of the masonry are presently the decisive arguments.

The market development proved our expectations right that made us get into machinery and plant engineering for building materials more than 25 years ago. We are pleased to continue supporting you in our capacity as technology supplier world-wide.

Yours
Friedrich Herdan



The sand-lime element wall from LASCO proved to be a crowd-puller at the bauma China in Shanghai.

Leading Asian trade fair in the spotlight

LASCO is pointing the way in a difficult market

Sand-lime blocks are opening up promising perspectives despite a currently difficult market environment. This became evident at the bauma China in Shanghai (25 – 28 November 2014).

191,000 visitors attended the seventh bauma China in the Shanghai New International Exhibition Center. The presentation of a sand-lime element wall at the LASCO stand attracted wide interest. The elements used were produced with the award-winning LASCO vario-block press at the sand-lime block plant Bienwald (Germany) and brought to China. This wall proved to be a crowd-puller and gave rise to many interesting technical discussions at the LASCO stand.

The trade fair was preceded by specialist talks with experts from the China Academy of Building Research (Beijing) on future perspectives of sand-lime elements as wall-building material in China. The institute is the licensing authority for building materials with regard to fire prevention, quake protection and build quality. In the past the institute approved prestigious building projects such as the Olympic stadium, the Olympic swimming-pool and Terminal 3 of the International Airport Beijing. The institute is currently defining the prerequisites for the approval of sand-lime elements as alternative wall building material.

Nearly 300 German companies participated in the trade fair as exhibitors. 130 of them used the joint VDMA stand that expanded its net exhibition space to more than 5000 m² now.

It could be seen in previous years already that the importance of this trade fair went far beyond the Chinese market and that the bauma China has become one of the major players in its capacity as leading Asian trade fair. Its more and more international character impressed very much this year, though. The majority of foreign visitors came from Russia and a large number of them from Korea, India, Japan and Malaysia. The trade fair inspired the market with confidence in difficult times. Even though the Chinese building and building machinery business was decreasing in 2014 again, most talks were marked by optimism.

The exhibits initiated interesting technical discussions at the LASCO stand.

LASCO vario-block press for Baustoffwerke Havelland

Potential put to the extreme

The LASCO vario-block press system is expanding the production capacity of Baustoffwerke Havelland.

The line is complemented with palletizing as well as automation systems and will go into operation in July 2015. BSW Havelland GmbH & Co. KG (Oranienburg-Germendorf/Germany) is going to produce sand-lime elements type UNIKA with the vario-block press line. The investment was made to expand the production capacity and to increase efficiency at the same time. Therefore the line is equipped with two down-stream green block saws to allow full utilisation of the possible cycle time.

Baustoffwerke Havelland have been expanded steadily since their foundation. Their vast product portfolio ranges from small formats to UNIKA XL building blocks and customised UNIKA sand-lime elements now. The PSP system is the first line that LASCO will deliver to this enterprise

BSW Havelland produce sand-lime blocks type UNIKA in Oranienburg-Germendorf (Germany).

A PSP 460 like the one shown in the picture will go into operation at BSW Havelland in July 2015.

Russian trend setter for sand-lime blocks starts production of large formats

System extension in Wolgograd

One of the leading manufacturers of sand-lime blocks in Russia is now going to give the domestic market for building materials fresh impetus with new products. ZAO PO ZSK in Wolgograd is convinced that the future lies in large formats.

Since 2005 the company has been producing quality blocks of Russian formats with a LASCO KSE 400 with great market success. Now it has expanded its production capacity by a KSP 801 with double-acting compaction in order to add large-format blocks to its product range. The enterprise is promoting a "new generation" of products in brochures forecasting distinct advantages for their users: The productivity in wall-building would be increased by more than 60% with the larger blocks, as one block would replace more than four blocks in standard formats, and the consumption of mortar would be reduced by 70% due to the application of thin-bed techniques. In addition the homogenously smooth surface structure would dispense with the need for expensive plasterwork (just finishing required) and sound insulation would be improved by 10%.

The roots of PO ZSK go back to "Brickyard No. 6", which was founded in Wolgograd in 1929 and produced building materials for the region until World War II. The reconstruction of the city after its destruction during the war required large quantities of building materials. Therefore the production capacity of the works was expanded and the production of sand-lime blocks started. In 1964 the Collective Combine Silicate-containing Building Materials (KSSM) was founded. The establishment of the closed joint stock company "Production Combine Sand-lime Block Plant" (ZAO PO ZSK) on the production site of "KSSM" followed in 2001. Meanwhile the enterprise ranks among the biggest manufacturers of sand-lime bricks, sand-lime blocks and ratio blocks in the country.

28 sand-lime blocks are produced in one compaction cycle with the LASCO KSP 801 at the "Production Association Sand-lime Block Plant" (ZAO PO ZSK) in Wolgograd (Russia).

The enterprise sees good chances for large-format ratio blocks in the Russian construction market.

KSP 860 PE – system blocks and sand-lime elem

One solution for two for

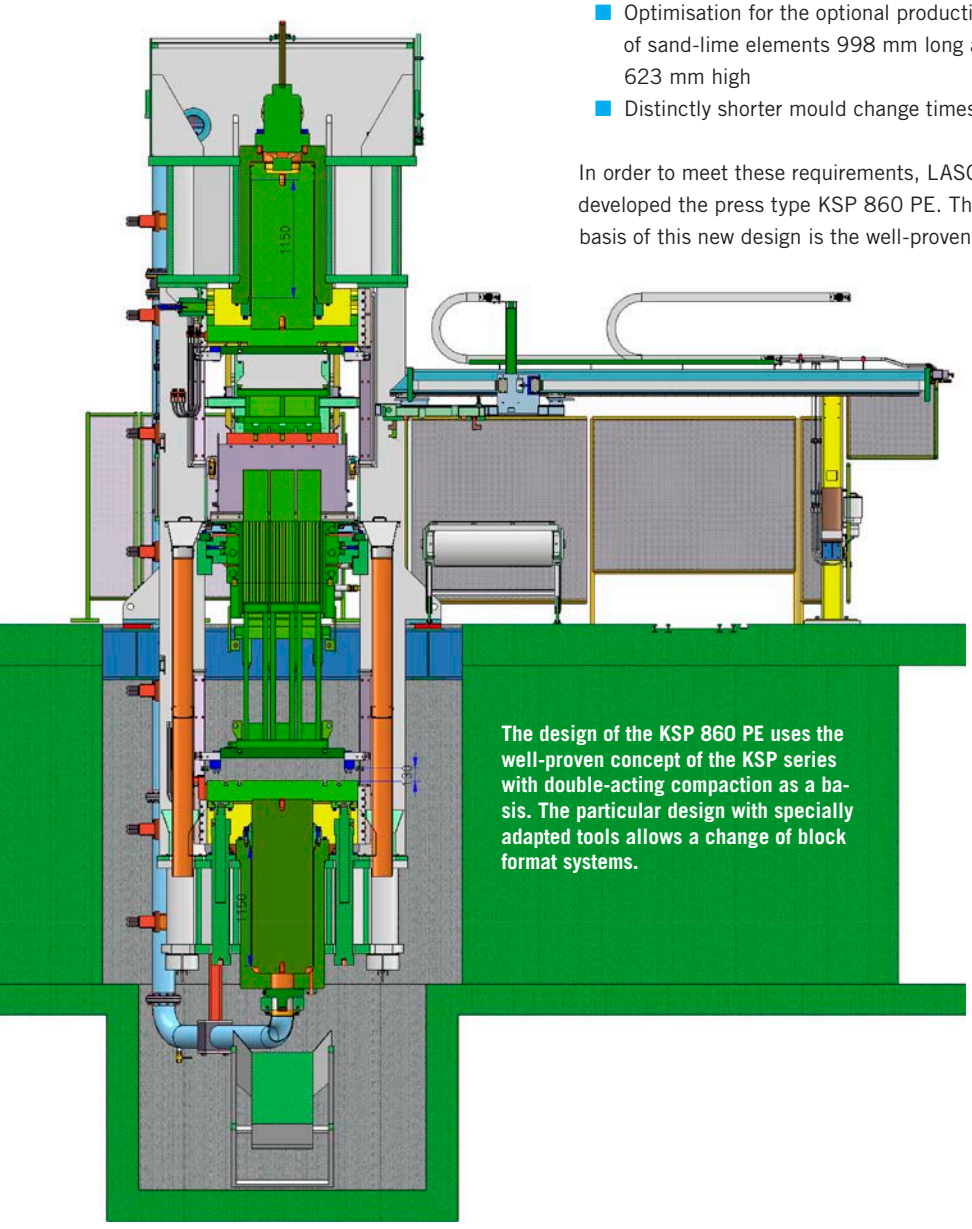
So far individual presses have been used for the production of sand-lime system blocks and sand-lime elements. The KSP 860 PE from LASCO helps to avoid this fundamental decision, since it can handle the two formats.

In August 2014 LASCO got the order for the supply of a special sand-lime block press with double-acting compaction for the **Kalksandsteinwerk Babenhausen of the Heidelberger Kalksandstein GmbH (Germany)**.

Following the requirements of Heidelberger the press will have universal features.

- Optimisation for the use of the existing moulds for the system block "Quadro"
- Optimisation for the optional production of sand-lime elements 998 mm long and 623 mm high
- Distinctly shorter mould change times

In order to meet these requirements, LASCO developed the press type KSP 860 PE. The basis of this new design is the well-proven technology of the KSP series which guarantees homogenous compaction and thus excellent block properties even for large-format block geometries due to the double-acting compaction through upper and lower punch.



The design of the KSP 860 PE uses the well-proven concept of the KSP series with double-acting compaction as a basis. The particular design with specially adapted tools allows a change of block format systems.

The different geometries of Quadro system blocks and sand-lime elements make individual demands on efficiency, dimensions and control technology of the press unit, which must be reflected in the new press without allowing cutbacks on the economy of the unit. LASCO's engineers not only succeeded in coping with this challenge though, they were even able to increase the efficiency of the new line considerably compared with former single units.

The well-proven design concept of the KSP series was adapted to the customer's requirements:

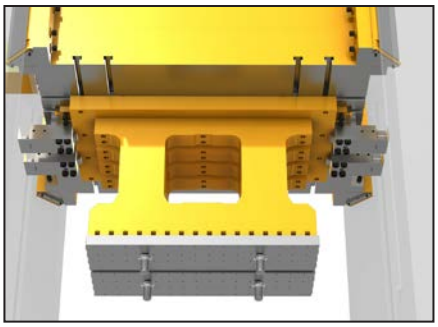
- Extra width of the press frame to accommodate moulds for a block length of up to 998 mm
- Increase in press force to reach the necessary specific pressure
- Well thought-out adaptations of the existing Quadro moulds to be able to use them in the new sand-lime block press as well
- Use of hydraulic clamping units to connect the upper and lower punch with the press rams. This way the costly manual screw mounting of the moulds can be omitted.

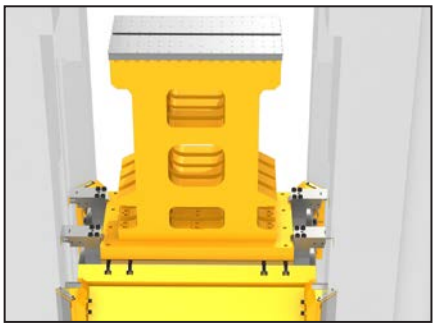
Feed box with oscillating mould box

An even yet quick filling is sometimes critical especially for large formats. The KSP 860 PE is therefore equipped with the LASCO feed box with oscillating mould box. The significantly improved filling behaviour is reached by the use of a suspended trapezoidal mould box which is set in oscillating motion by a drive infinitely variable in amplitude and frequency. This can be visualised roughly as the shaking of a sieve when filtering sand. A filling frame is inserted in the feed box around the oscillating mould box moving on a wear plate and stripping off surplus mass.

nents made with one single production line

rmat systems





Picture above: The KSP 860 PE is mounted on a steel frame on the O-meter level to reduce the pit depth. Pictures right: Upper and lower punch fixed with four hydraulic escaping arc clamps each.

Energy consumption reduced drastically

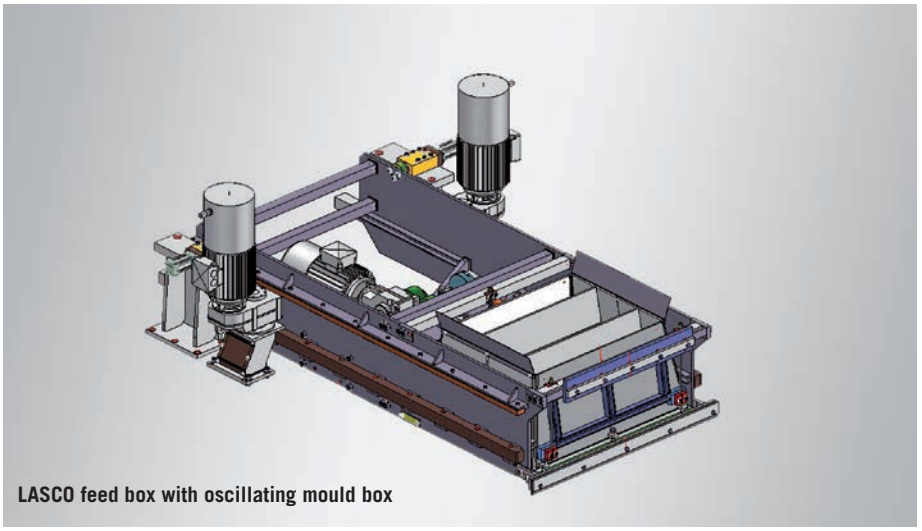
Another significant advantage of the line is the use of the newly developed hydraulic LASCO servo direct drive. This drive is operated by the combination of a servo motor and a hydraulic pump. It moves the punches at optimum pressing speed and with highest precision. No efficiency-reducing way valves are required for this drive.

About 30% of the energy needed so far for the conventional hydraulic drives with proportional valves can be saved with this new drive concept.

Quick mould change

The complete mould consists of the press table, the upper and the lower punch. During transport the upper punch sits on the lower punch. The assembly-hall crane places the "mould package" onto the mould supports and the mould change cylinder pulls the package right into the working position. After the press table has been clamped into the press frame hydraulically, the lower press ram lifts the lower and the upper punch, the temporary bolts are removed manually and the lower ram is clamped to the lower press ram hydraulically. In the following process step the upper punch is aligned manually. Then the upper press ram is moved down until the ram and the upper punch touch each other. The upper punch is fixed with hydraulic escaping arc clamps by analogy with the lower punch and the mould change is finished. This automated mould change is much quicker than the one carried out manually so far.

The new line of the **Kalksandsteinwerk Babenhausen der Heidelberger Kalksandstein GmbH (Germany)** will be brought into service in May 2015 and first used for the production of Quadro system blocks. With the KSP 860 PE the foundations are laid for broadening the production range by sand-lime elements in the Babenhausen plant.



LASCO feed box with oscillating mould box

Spotlights

New LASCO bistro opened in May:
The managing board signalized in LASCO's last works meeting to think over the existing catering concept completely. Therefore the works council carried out an employee survey on behalf of the managing board to consider the staff requirements as much as possible. The evaluation of the survey results carried out by the architect's office Eichhorn, Coburg, clearly suggested the concept of bistro. This was realized with a bistro kitchen following the latest technical and hygienic standards with an integrated counter for light meals, salads and various hot meals.

The LASCO bistro is conceived to be a place where both employees and visitors can communicate with each other at ease. The tasteful exterior completes the overall picture of the "LASCO meeting-place".

25 years with LASCO

Lars Wagner	01.09.2014
Jürgen Jentsch	01.12.2014
Thomas Koppitz	01.01.2015
Michael Rauscher	01.01.2015
Detlef Schmidt	17.01.2015
Walter Reißenweber	19.03.2015
Roland Martin	01.04.2015

40 years with LASCO

Wolfgang Höhn	01.09.2014
Harald Smola	01.09.2014
Hermann Plenert	02.09.2014
Brigitta Schrüfer	16.09.2014
Karl-Heinz Fuchs	01.04.2015

Recently retired

Dieter Lüdke	30.06.2014
Dieter Rudolph	31.07.2014
Gisela Schiller	30.09.2014
Monika Langbein	31.10.2014
Klaus Bartelt	30.11.2014

Sadly mourned

Ulrich Sauerbrey	† 24.02.2014
Oleg Maidanjuk	† 16.04.2014
Helga Holecek	† 15.08.2014
Siegfried Fischer	† 16.08.2014
Anna Acher	† 01.10.2014

The new apprentices together with their training supervisors Georg Pfeuffer (right), Björn Bühling and Luisa Wachsmann (2nd and 3rd from left) as well as David Hall, chairman of the works council (left).

58 apprentices – Eleven new entrants in autumn

More apprentices than ever before

Currently 58 young people are taking their apprenticeship in various disciplines of mechanical engineering. Eleven new entrants recently started their apprenticeship - nine in technical and two in commercial jobs.

Vocational training and further education has always been regarded as an important task at the machine tool company in Coburg. "The employer's commitment to vocational training is the key to long-term retaining of skilled workers not only in times of demographic change", Lothar Bauersachs, Managing Director Engineering/Sales pointed out. The company's training rate of 15% and more has been above average in the industry for decades. The company currently employs 58 apprentices including the new entrants. This is the highest number in more than 150 years' company history.

Workshop opened for "Young Engineers"

LASCO continued the project with technically-minded school students. In the Coburg-based project "Passport for Young Engineers" they design, produce and "market" a work-piece they thought up themselves (desk clock with temperature display and cell phone holder), supported by local industrial enterprises and the Chamber of Commerce and Industry Coburg. The programme, that lasted several months, is supposed to help to fill the gap between school theory and practice and to make young people sensitive to regional perspectives both in technical and in commercial jobs. At the same time it is also seen as motivation to continue higher education. The school students learn a lot about maths and physics, but they often don't know what practical problems they can solve with this knowledge. Training supervisors and apprentices supported the young people at LASCO (picture).

Eight staff members celebrating anniversaries – four of them of 40 years' employment

Loyalty to LASCO

LASCO honoured the performance and loyalty of eight employees who have been working for the company for many years.

In an official ceremony the Chairman of the Board LASCO Holding, Friedrich Herdan, congratulated the staff members on their anniversaries together with the two Managing Directors Lothar Bauersachs and Gernot Losert. Brigitta Schrüfer, Wolfgang Höhn, Hermann Plenert and Harald Smola have been employed at LASCO for 40 years, Andrea Hamm, Ulrike Rusert, Jürgen Jentsch and Lars Wagner for a quarter century. The Managing Directors and David Hall, Works Council Chairman, presented them anniversary certificates, loyalty bonuses and decorations of the Board of Trustees of Bavarian Employers and the Chamber of Commerce.

Company management and works council congratulated LASCO employees on their anniversaries. From right: Lothar Bauersachs (MD Engineering Sales), Friedrich Herdan (Chairman of Board, LASCO Holding), Andrea Hamm, Hermann Plenert, Wolfgang Höhn, Jürgen Jentsch, Harald Smola, Ulrike Rusert, Lars Wagner, Brigitta Schrüfer, David Hall (Works Council Chairman), Gernot Losert (MD Administration/Production).

40 years

Brigitta Schrüfer did her apprenticeship as industrial clerk at LASCO from 1974 until 1977. After her final exam she started to work in financial and payroll accounting. Some years later she qualified as the deputy manager and in June 1999 as the manager of this department. In the same year she passed her exam as Certified Management Accountant and has been running the department financial accounting/human resources with great diligence since then.

Wolfgang Höhn trained as a machine fitter from 1974 until 1977 and moved to a salaried employment in 1982. He constantly extended his knowledge and became a REFA (Association for Work Design/Work Structure, Industrial Organization and Corporate Development) technician and a qualified foreman. Due to his sound expert knowledge and his long-standing experience he has been managing the section "production planning and production processes" in the operations scheduling department since 2005.

Hermann Plenert trained as a high voltage electrician and then attended the vocational prep school. After joining LASCO again in 1974 he has been working as chief service technician at home and abroad for many years. He is responsible for the commissioning of large lines and is considered to be a shining example for new generations of service technicians.

Harald Smola started his apprenticeship as a turner at LASCO in 1974. He qualified as a REFA process organizer and has been working in the operations scheduling department since 1998 where he is responsible for CNC machining centres that are used for high-precision production processes.

25 years

Andrea Hamm started in the purchasing department of LASCO in 1989 and then changed over to commercial administration. Since 1998 she has been working in the operations scheduling department, where she is responsible for time posting, administration of overviews of assembly groups and digital storing of production orders.

Ulrike Rusert joined the LASCO sales department as foreign correspondent for English and French in 1989. She translates technical texts, contracts as well as general business correspondence and has been able to extend her knowledge in various specialist terminologies.

Jürgen Jentsch started his apprenticeship as boring mill operator and was then taken over in the turning department. He extended his expert knowledge in various programming seminars and is an expert for high-precision tasks in mechanical production.

Lars Wagner joined LASCO as an energy electronics apprentice in 1989 and has become an expert and first point of contact in the field of electronic assemblies. In addition he works in the installation team for electronic equipment and fits out lines with electronic components.

Fairs + dates

KazBuild
Almaty, Kasachstan
02.09. – 05.09.2015

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More than 200 guests were welcomed to the official start of the sand-lime block production at the UNIKA works.

Grand finale at Kalksandsteinwerke Südbayern GmbH & Co. KG in Friedberg (Germany)

Ultramodern technology

One of the most modern production lines for customized sand-lime masonry in Europe was put into operation during a ceremony at the Friedberg plant. With this new line the UNIKA group focuses even more on the production of project-related sand-lime block ranges that optimize the construction process.

The new LASCO vario-block press line type PSP 460 in special design allows the individual and customized production of project-related sand-lime blocks in different formats and gross density classes. The robot-assisted line with planning software for optimizing the individual demand is used for the economical production of customized sand-lime blocks. This is also essentially contributed to by the LASCO green block saw integrated in the fully automated production process. The **Managing Directors Benno Böhm** and **Karsten Mechau** regard this as a giant technological stride towards sand-lime masonry systems that point the way ahead. The Board of Management as well as **Rudolf Dombrink, Chairman of the Advisory Board of Kalksandsteinwerke Südbayern GmbH & Co. KG**, were looking forward to this significant grand finale of the modernisation of the Friedberg plant which started in 2012.

Stylish presentation of individual and custom-built UNIKA elements.

From a technological point of view the production line is anything but standard. The design of the award-winning vario-block press technology was adapted to the individual requirements of the user. With its minimal depth of the press basement and installation on a foundation approx. two meters high the press is quasi fit into the hall.

The blocks are taken out of the press by a robot equipped with a vacuum plate which is positioned in a height of approx. three meters, whereas the curing wagons and green block saw are positioned at ground level. The UNIKA group already operates a LASCO vario-block press very successfully at the Wiesbaden site. A third production line is just being delivered to the Baustoffwerke Havelland (cf. page 3).

The handling robots of the production line work on two levels differing by three meters in height.

UNIKA is the sand-lime block trademark of independent medium-sized companies in the German economic areas Rhine-Ruhr, Rhine-Main, Berlin-Brandenburg, Southern and Northern Bavaria, which distribute their products jointly in the whole Federal Republic of Germany. The UNIKA sand-lime block range comprises both wall-building blocks and customized wall-building kits as well as various special products. All UNIKA sand-lime products comply with standards and go through a structured quality assurance process. Due to its German-wide distribution UNIKA focuses on regional proximity, continuous customer relationship and competent and individual customer advisory service.