



up grade

Newsletter for customers, employees and partners

Volume 21, issue no. 21, March 2025

■ LASCO TRENDS

bauma 25 presents innovations in the building industry

Climate neutrality and sustainable construction are the focus of bauma 2025, the leading trade fair that will bring the building industry together in Munich from April 7 to 13. LASCO will be present in Hall B1, stand B1.218.

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■ LASCO KNOW-HOW

Promising alternative building materials

The building materials industry is facing new challenges in the face of increasing climate protection requirements and a foreseeable shortage of resources. In the search for sustainable approaches, CS brick manufacturers are achieving initial successes in cooperation with LASCO.

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■ LASCO PRAXIS

KIMM gets ready for the future

With LASCO production technology, the renowned North Hessian CS brick manufacturer KIMM has positioned itself for the future. Since October 2022, a LASCO KSP 1250 has been boosting production at its Elxleben plant in Thuringia.

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bauma
7.-13. APRIL 2025, MÜNCHEN



Editorial



Acting together with resolve

Climate neutrality by 2045 is an ambitious goal for the sand-lime brick industry. Joint commitment, continuous development and the right political framework conditions are crucial to achieving this.

Climate neutrality requires considerable investment, the use of new technologies and pioneering decisions. At the same time, competitive pressure remains high: while German manufacturers have to deal with rising emission costs, international producers often have more advantageous framework conditions.

At LASCO, we not only understand the challenges of the industry - we actively create solutions. Our goal is to support our customers with future-proof technologies. We have already proven that our innovations drive progress in the industry: with highly efficient press systems, state-of-the-art automation solutions and resource-saving processes - always with the aim of increasing efficiency and competitiveness. We will continue to use this innovative strength to bring energy-efficient processes, alternative building materials and sustainable production solutions to market maturity together with our partners.

We cannot walk this path alone. Politicians are called upon to create framework conditions that make investments in climate-friendly technologies economically viable. Without targeted funding programs, reliable energy prices and effective protection against carbon leakage, Germany's competitiveness as a business location is at risk.

Now is the time to take action! We at LASCO are ready to shape the future of the sand-lime brick industry sustainably together with our customers - through innovation, targeted investment and the right political framework. Let us resolutely pursue this change!

Yours, Lothar Bauersachs
Chairman of the Management Board



LASCO shareholder Friedrich Herdan also spoke at the opening ceremony of the last bauma in Germany at the Munich Residence in 2022.

Building industry experts meet in Munich

INDUSTRY INSIGHTS

The world's leading trade fair for machinery, vehicles, equipment and technologies in the construction, building materials and mining industries will once again take place at the Munich Exhibition Center from April 7 to 13, 2025. From climate neutrality and connected and sustainable construction to alternative drive concepts, the most important topics will be discussed and innovative solutions presented.

What is important to the construction, building materials and mining industry? For years, bauma, the world's leading trade fair for the construction industry, has been providing answers to this question. Exhibitors and visitors benefit from a forward-looking platform for pioneering innovations, international exchange and new perspectives. As the leading trade fair of its kind, bauma covers the entire spectrum of the industry in all its depth.

Digitalization and sustainability - the key topics for the future of the industry - are the focus of bauma 2025. The impulse

provided here will have a significant impact on markets worldwide.

This year, up to 3,000 companies from around 60 countries are expected to present their products and solutions on a total area of around 200,000 m² in the exhibition halls and in the 40-ha outdoor area.

LASCO will be represented on this international stage in Hall B1, stand B1.218 - the area for building material machinery manufacturers. There we will be presenting our machines and systems for domestic and foreign producers using a wide range of raw materials.



LASCO is pleased to invite you to the exhibition at its Stand B1.218 in Hall B1.



The production of fly ash bricks at Xinha sets standards in terms of cleanliness - impressively demonstrated by the pictures from the factory.

Xinha expands production with six additional KSE 1250 presses GERMAN-CHINESE PARTNERSHIP

LASCO reports a notable success: The Chinese company Chiping Xinyuan Green Building Materials Co., Ltd. (Xinha) has ordered six KSE 1250 presses for the production of fly ash bricks.

This major order marks a further milestone in the long-standing partnership between LASCO and Xinha, which already purchased four KSE 1250 machines in 2017. Since then, the lines have been reliably in operation 24/7.

The project combines German and Chinese expertise in a partnership-based division of labour: while mechanical components such as the press frame, filling carriage, curing wagon and stacking gripper are manufactured and pre-assembled at LASCO (Beijing)

Forming Technology Co. Ltd, the Coburg plant supplies the key technology - including hydraulic units and electrics with state-of-the-art control technology. This division of labour ensures efficient production and enables the optimal combination of local production and German engineering.

The LASCO equipment will be installed in a specially constructed production hall on the site of the Xinha-operated coal-fired power plant in Chiping. A highly automated production line for fly ash blocks with a fly ash content of up to 60% will be built. The process includes raw material preparation, pressing, hardening in autoclaves, and automatic packaging of the bricks ready for sale. Thanks to the high proportion of fly ash, the production process contributes to the recycling of industrial by-products

and makes an important contribution to the sustainable production of building materials in China.

With a pressing force of 7,500 kN at a maximum pressure of 250 bar, the KSE 1250 enables high-precision and energy-efficient production. The integrated 4-axis robot picks up 36 bricks per stroke and stacks them crosswise on the curing wagon. The fully automatic process chain guarantees consistently high quality and maximizes production speed at the same time.

This order not only reflects Xinha's confidence in LASCO's proven technology, but also highlights the strategic relevance of sustainable building material solutions.

Bauma China 2024 NEW IMPULSES

bauma China 2024 in Shanghai impressively confirmed its role as the leading hub for the construction industry in Asia.

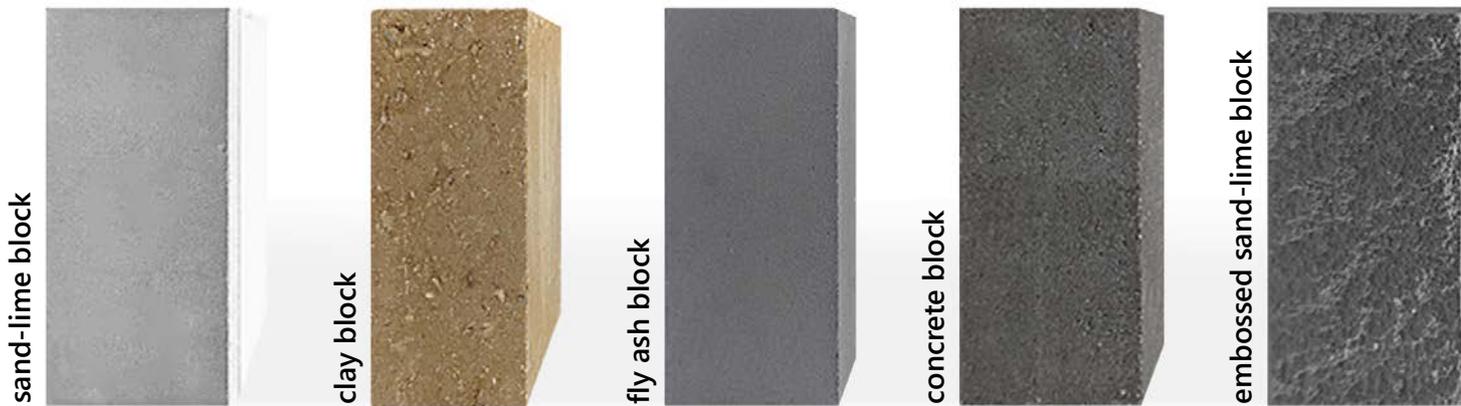
LASCO presented itself in Hall N2 with a successful trade fair appearance, which was convincing both in terms of organization and the high visitor frequency. In particular, our Chinese subsidiary, LASCO (Beijing) Forming Technology Co. Ltd., took the opportunity to make valuable new contacts.

The interest in innovative building material solutions was noticeable - not only in the production of fly ash bricks, but also in the production of sand-lime bricks. Once again, bauma China 2024 proved to be a first-class platform for professional exchange and underlined its great importance for the industry.

A big thank you to all visitors to our stand!



General Agent LASCO China Bernd Schubert (left) talking to trade fair visitors at the LASCO stand.



Examples of wall-building materials made from different raw materials that are successfully produced on LASCO CS plants.

With LASCO production systems optimally prepared for market changes **FLEXIBILITY THROUGH VERSATILITY**

LASCO is one of the leading manufacturers of machines and plants for the production of sand-lime bricks and enjoys a high level of recognition in the sector. LASCO plants are optimized to meet the specific requirements of our customers, but also offer a wide range of possible applications. This is good news for producers who have to adapt to changes in the market: with LASCO technology, they are future-proofed for alternative raw materials as well as sand-lime bricks.

With more than 160 years of experience in machine and plant construction for forming technology, LASCO contributed its in-depth expertise to the development of machines and plants for the production of sand-lime bricks in 1991 and has continued to develop them ever since. This has led to innovative solutions for the industry, including

- Presses with double-acting compaction of the KSP series with the LASCO hydraulic servo direct drive®
- Compact presses with single acting compaction of the KSE series
- and the vario block press type PSP, which was awarded the bauma Innovation Prize.

Our machines and systems are operated using state-of-the-art automation technology. For years, LASCO has been one of the world's leading system providers for individual machines, production systems and automation solutions - including turn-

key CS plants. Customers all over the world appreciate the reliable technology, which impresses with its low maintenance requirements, intuitive operation and customized services.

Open to alternative raw materials

From the very beginning, LASCO pursued the goal of developing a generation of machines that can economically manufacture products of the highest quality under different conditions and with a wide variety of raw material mixtures. This flexibility also proves its worth when processing alternative raw materials.

Today, LASCO technology is not only used in sand-lime brick production, but also in the manufacture of fly ash bricks, colored and embossed blocks, recycling products and coke pads for steel tempering. Particularly noteworthy is the production of salt licks for animals - proof of the extraordinary adaptability of the machines to a wide range of material requirements.

This means that operators of LASCO building materials plants are ideally equipped to expand their product portfolio and tap into new market opportunities.

Innovation from practice

Many technological advances in the building materials industry arise directly from the requirements of our customers. Manufacturers who want to develop new products or optimize their production processes share their ideas and needs with LASCO. Each system is then precisely adapted to the customer's specific process requirements - not only in terms of key parameters such as press force, cycle frequency, pressing speed and automation, but also with regard to the raw materials used and their properties.

In this connection, the control software is particularly important. As this software is individually programmed by LASCO experts, not only the user interface and user guidance can be flexibly adapted, but also the control system itself. This reacts dynamically during the ongoing process to the properties of the raw materials, such as moisture, temperature or bulk density, and thus ensures optimum production quality.

Development of customized systems by linking research and practice

Based on the desired end product, LASCO works closely with renowned research insti-

coloured sand-lime block



tutes such as the "Sand Kalk e.V." research association and "IAB Weimar" gGmbH to develop the optimum machine and process parameters for the respective production systems. This cooperation ensures that each plant is precisely tailored to the specific requirements and meets the highest technological standards.

The starting material is always the raw material mixture to be compacted, which can vary depending on regional conditions, even for similar products. Based on these specifications, central process parameters such as press force and machine cycles are individually adapted. This offers producers a clear competitive advantage over conventional standard systems, as they can rely on customized, high-performance and future-proof solutions with LASCO technology.

Extended area of application

Residential construction with CS masonry also remains a sustainable choice in terms of CO₂ emissions, as it is durable, energy-efficient and conserves resources. In addition, CS masonry can be recycled and binds CO₂ through carbonation. These properties ensure a low carbon footprint over the entire life cycle and make it an environmentally friendly alternative in residential construction.

Similar to the basic materials of sand-lime brick, clay is also a natural, regionally available raw material. It is processed into masonry bricks on LASCO plants and, like sand-lime bricks, offers the advantage of low raw material transportation costs and

comparatively low energy requirements in production.

Recently, our CS customers have also been increasingly approaching LASCO with new ideas and requirements for alternative building material products. One example of this is the aforementioned raw material clay.

Outside Europe, particularly in China, so-called fly ash blocks have been established as an important building material. This involves integrating coal combustion residues from power plants into the raw material mix and binding them permanently in the hardened brick. Due to increasing demand, the Xinfra Group, for example, which operates a large aluminum and electricity industrial park in Shandong Province, recently ordered six specially adapted LASCO CS plants at once (see p. 2).

The company explained its decision as follows: "The LASCO production lines run reliably in 24-hour operation. Xinfra relies on the stability and reliability of the machines as well as on LASCO's fast and professional service.

Recycling

Production waste is already being fed back into the manufacturing process, and this sustainability concept is even optimized with the development of recycled sand-lime bricks. In view of the growing importance of the circular economy, this area is likely to become increasingly relevant in the coming years. In addition to conserving resources, recycled sand-lime bricks also offer an image advantage through the use of environmentally friendly building materials.

Research in this area has among others been published by Dr.-Ing. Wolfgang Eden, Head of Research at the Bundesverband Kalksandsteinindustrie e. V. (Hanover). One example is the research report "Development of a recycled brick using demolition material and residual construction waste and application of sand-lime brick technology" (2009).

Promising prospects

The development of new building materials offers numerous promising prospects. Which ideas can be turned into marketable products is currently being researched in scientific institutes, colleges and universities and tested in practice by producers. LASCO is actively contributing its mechanical engineering expertise - for example with a specially developed laboratory press. The company also supports users with feasibility studies and technical adaptations to existing systems on request.

While alternative building materials currently still have a niche market, they could become an important addition to the construction industry in the coming years. Thanks to flexible and versatile production solutions, LASCO producers can respond to this development in a targeted manner - as a reliable partner for the future.



Laboratory press specially adapted by LASCO for the Institut für Angewandte Bauforschung IAB Weimar gGmbH.



The LASCO path to a successful future

18 NEW TRAINEES

On September 2, 2024, 18 young school leavers started their vocational training at LASCO.

The new trainees also include six participants from the „Training 1+3“ integration project for refugees and two participants from the „Job-Turbo“ project initiated by the Federal Ministry of Labor and Social Affairs. This means that LASCO is currently training 52 apprentices.

Dual education is a central component of LASCO's corporate philosophy. Theory and practice are ideally harmonized to ensure a well-founded and practical training. The

company has always seen it as an essential task to secure its own medium and long-term requirements for highly qualified specialists and at the same time to assume social responsibility - by offering young people a solid foundation for their professional future.

With a training rate of 13%, which is well above the average for the machine tool industry, our company is well equipped to meet future personnel requirements.



EXEMPLARY TEAM SPIRIT

Team spirit, motivation and lots of fun! At the highly acclaimed company run of a Coburg regional newspaper, we gave it our all and impressively showed what we're made of. Taking off together and celebrating success - that's what our team is all about! A big thank you to everyone who took part and to our fantastic team for such a strong performance!

Spotlights

Award-winning: Our colleague B. Eng. **Nora Reinhardt** has been awarded the Theodor v. Cramer Klett Prize! The mechanical engineer received the prize for an innovative tool for the production of vario-blocks for the sand-lime brick industry.

Every two years, the VDI Bavaria Northeast District Association awards the Theodor v. Cramer Klett Prize to outstanding young scientists and engineers. This special award recognizes outstanding commitment and passion for mechanical engineering.



The LASCO team, under the leadership of B. Eng. Nora Reinhardt, has developed an innovative, patent-pending tool that considerably expands the possibilities for the fully automatic production of vario-blocks. It covers seven block widths with infinitely scalable block length and a constant block height of 623 mm and is only half the size of conventional tools. The time required for maintenance work (changing wear plates) has been drastically reduced and operation has been made much easier.

Respected: „Your commitment is not in vain“ is the motto of the „Dr. Kapp award price“. This was awarded for the 20th time by the Bayerischer Unternehmensverband Metall und Elektro e. V. (bayme) to trainees who show social and voluntary commitment to their fellow human beings. One of them is our colleague **Elias Städtler**! He was honored for his great voluntary commitment to the Bad Rodach-Großwalbur sports community. The budding industrial mechanic supports his club in all matters with joy and passion.

Among the first to congratulate Elias were LASCO's Managing Director Production, Robert Welsch (left), and Training Manager Georg Pfeuffer.



Company anniversaries congratulated by management and employee representatives

HONORING DEDICATION

LASCO Umformtechnik GmbH honors the performance and loyalty of five employees who have worked for the company for 25 years and one employee who has actively contributed to the success of the machine tool manufacturer for 50 years.

At a ceremony, Friedrich Herdan, Chairman of the Management Board of LASCO Langenstein & Schemann, Holding, and Lothar Bauersachs, Chairman of the Management Board of LASCO Umformtechnik GmbH, thanked Brigitta Schrüfer (50 years), Alexander Stahn, Julian Spindler, Philipp Fischer, Stephan Raab and Damian Macioszek (all 25 years) for their work and loyalty to the company. In the presence of Works Council Chairman Peter Wache, certificates and loyalty bonuses as well as the Bavarian Employers' Board of Trustees medal and IHK certificates of honor were presented as a sign of recognition.

50 years

Brigitta Schrüfer can look back on half a century at LASCO. Her career began in 1974 with an apprenticeship as an industrial clerk, which she successfully completed in 1977. She then worked as a clerk in the finance and payroll department. After a few years, she used her expertise to take over as deputy head of the department before being appointed head in 1999. In the same year, she passed her accounting exam and has since managed the financial accounting and HR department with great care, combining financial expertise, organizational skills and social leadership qualities to ensure both the economic stability and performance of the workforce.

25 years

Alexander Stahn started at LASCO in 1999 with an apprenticeship as an industrial mechanic, which he successfully completed in 2003. This was followed by a second apprenticeship as an energy electronics technician for industrial engineering until 2006. In 2010, he extended his qualifications with further training to become a technician specializing in energy technology and process automation. Since 2012, he has been working as an electrical designer in

the electrical/electronics design department and contributes his expertise to the development and implementation of technical projects, providing expert support to the team.

Julian Spindler completed his training at LASCO as an industrial mechanic in mechanical and systems engineering. In 2003 he began training as a technical draughtsman and from 2005 worked as a technical draughtsman in the mechanical engineering design department. While working, he began further training as a technician. Furthermore, he successfully completed his training aptitude test in 2008 and has been supervising trainees as a technical product designer ever since. Mr. Spindler impresses with his positive and friendly manner, which is appreciated by colleagues and trainees alike.

Philipp Fischer began his training as an industrial mechanic at LASCO in 1999, specializing in machine and system technology. He has been working in the company's international service division since 2003. After various further training courses, he took on the responsible position of site manager in 2020. In this position, he combines technical expertise with organizational skills and intercultural competence. His work is essential

for the company's success in global markets, as he makes a significant contribution to the quality and reliability of the machines and systems supplied.

Stephan Raab began his apprenticeship as a milling machine operator in 1998 and worked as a cutting machine operator after successfully completing his training. In 2013, he successfully completed further training as a CNC programmer and has been working in work preparation ever since. There he makes a decisive contribution to optimizing production by making it efficient, precise and economical.

Damian Macioszek began his career at LASCO as a cutting machine operator specializing in turning technology. In this role, he plays a key role in the production of high-precision components. His work makes a decisive contribution to the quality and competitiveness of our products. The components he produces, which often have a six-figure value and require several hundred hours of machining time, meet the highest standards of precision and perfection.



Jubilee ceremony (from left): Friedrich Herdan (Chairman of the Management Board of LASCO Holding), Peter Wache (Chairman of the Works Council), Julian Spindler, Philipp Fischer, Stephan Raab, Damian Macioszek, Brigitta Schrüfer, Alexander Stahn and Lothar Bauersachs, Chairman of the LASCO Management Board.

Interview



Stefan Kimm-Friedenberg
Managing Director
KIMM GmbH & Co. KG
Wabern-Udenborn

Future-proof

up grade: Mr. Kimm-Friedenberg, how and when did the collaboration with LASCO come about?

Stefan Kimm-Friedenberg: The contact was made at the bauma trade fair in 2016 when we were looking for a replacement for a saw. LASCO was recommended to us by industry colleagues who are very satisfied with their LASCO presses. We were also interested in the company because it is one of the few suppliers of sand-lime block presses and also a medium-sized company like ourselves. As a result, possible projects were discussed every now and again.

up grade: Three years ago, you ordered a complete LASCO sand lime block press. How did that come about?

Kimm-Friedenberg: Our product range has changed. CS elements now account for around 70 percent of our total production. However, only one of our older presses is suitable for large formats, so the risk of downtime was increasing. So we ordered a KSP 1250 in January 2022 and put it into operation in the same year. LASCO managed to ensure that we didn't even have to change our on-site infrastructure, such as the foundations.

up grade: Your company now has two years of operating experience with the new equipment. What does this look like?

Kimm-Friedenberg: CS presses are special machines. There is always something to readjust and optimize. We have always found a good solution with LASCO.

up grade: What do you see as the biggest advantages of the LASCO press?

Kimm-Friedenberg: The press has high performance reserves that we are not yet utilizing. However, we can use it not only to increase our capacity, but also to change our product range. We are equipped for the future.



KIMM-Werk in Elxleben

KIMM GmbH & Co. KG

NEW EFFICIENCY STANDARD

KIMM GmbH & Co KG, one of the leading manufacturers of sand-lime bricks and CS elements with headquarters in Wabern-Udenborn, Hesse, has set another milestone in production technology. In October 2022, the state-of-the-art LASCO KSP 1250 press was put into operation at the production site in Elxleben, Thuringia. Since then, it has expanded the company's existing production line.

The KSP 1250 represents a technological leap forward. In addition to the mechanical and electrical equipment, the press impresses with the LASCO hydraulic servo direct drive®, which enables precise and energy-efficient movement sequences. Automation solutions such as the element gripper with turning device and specially adapted control technology ensure optimum output as well as seamless integration into existing processes.

With an adjustable press force of up to 10,000 kN and a maximum pressing speed of 17 mm/s, the KSP 1250 is ideally suited to meeting the demanding production requirements of CS elements with a block height of up to 623 mm. The new press harmonizes perfectly with the company's existing moulds.

The sophisticated mode of operation - from the fast filling and braking of the upper punch to the synchronized control of the upper and lower punches - guarantees precision in the range of tenths of a millimetre and excellent product quality. The material flow is further optimized by the integration of a servomotor-driven table removing device.

The acquisition of the KSP 1250 is part of KIMM's strategic investment to expand production capacities and increase efficiency at the same time. „The collaboration with LASCO was a conscious decision for innovation and quality,“ emphasizes Managing Director

Stefan Kimm-Friedenberg. The combination of technical excellence, customized planning and maximum machine availability offers the company new opportunities to respond to the growing demand for high-quality sand-lime brick elements.

KIMM GmbH & Co KG has been a reliable partner in the building materials industry for many years and is known for environmentally friendly products that meet the highest standards. With its site in Elxleben and a particular focus on sustainable production methods, the company has positioned itself as an innovative player in the industry.

With the KSP 1250, KIMM has added future-proof technology to its production facilities. The plant is synonymous with the partnership between LASCO and KIMM - a connection that sets standards in sand-lime brick production.



KSP 1250 at KIMM in Elxleben