upgrade

Journal (KS) for customers, partners and employees – 16th year, issue no. 16, April 2016

News

bauma: The world's leading trade fair of the building industry

The trade fair bauma is the broadest platform for experts on construction machinery and building material machines, construction vehicles and equipment as well as mining machines world-wide. The 31st bauma takes place in Munich from 11 – 17 April 2016. LASCO exhibits in Hall B1, Stand no. 218.

Know-how

Modular system for producing sand-lime elements

LASCO has developed further its award-winning vario-block press into a unique production system meanwhile. With its modular concept it meets all requirements of future-oriented manufacturers of sand-lime elements.

In practice

Well-positioned and ready for the future

The JSC KZSK "Kovrovsky Silicate Brick Plant" in Central Russia has become one of the most renowned enterprises of the building and building material sector in the Russian Federation due to innovative spirit, quality awareness and LASCO technology. The success story is going to be continued.

LASCO UMFORMTECHNIK
WERKZEUGMASCHINENFABRIK

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

Phase of uncertainty

In the last few months the world-wide economy has been deteriorating. Due to its relatively long project lead times, the mechanical and plant engineering sector is faced with this phase of uncertainty earlier than others. Sure, foreign trade risks have existed for quite a while already, but gradually they are leaving their mark in the account books. Business with partners in Russia that was developing positively over the years is strained by sanctions which have a more and more negative effect. The respectable economic development in Asia has lost its stimulating effect at least temporarily, since the upswing in China has been taking a breather. The domestic markets in Europe have not been able yet to compensate for the decreasing foreign demand. The positive effects on the global economy coming mainly from the lifting of the Iran embargo and the regaining of strength of the US economy are being curbed by the steep fall in oil price.

Luckily the construction and building material sectors have been affected marginally at most. In Germany the all-time low of interest rates is motivating both enterprises and private people to intensify their building activities. Further impulse is expected if pressure on the housing market continues to rise, because refugees from international war zones and trouble spots have to be accommodated.

There seems to be a tendency for the construction and building material sector to have the potential of becoming the economic driving force – especially in EU countries, whose economies need to catch up – due to the continued policy of "cheap money" of the European Central Bank. This potential rises with the readiness to make capital spending, especially in public budgets. It is recommendable to approach infrastructural and maintenance measures courageously.

Yours
Friedrich Herdan

At China Salt, one of LASCO's reference customers, the participants of the symposium were shown modern production technology.

Preparing the sand-lime element market in China

Wall-building with sand-lime elements experienced first-hand

The element system provides an outstanding opportunity for China to realize large-scale strategic building projects cost-effectively, quickly and in an eco-friendly way.

This became obvious at the expert symposium organized by LASCO and its cooperation partner ISOCOM, which brought together numerous manufacturers in Hefei (Anhui Province) last year. ISOCOM develops and markets system software for wall unitizing and the sequential production and palletizing of system and vario-blocks. The conference on the "Introduction of the sand-lime element construction and vario-block production in China" was followed by a wall building demonstration with a plant visit to LASCO's reference customer China Salt as well as by a visit to a number of construction sites in various provinces in China.

China is currently focusing on making life in rural areas more attractive by urbanization and on preventing the rural population from moving into the cities. The aim is to maintain the character of rural areas by avoiding high-rise buildings. Two- to five-floor multiple dwelling units are to provide the same living comfort as big cities do. The government is strongly supporting these so-called "Village" projects.

The envisaged types of houses are ideally suited for wall-building with the element system, which can be exactly planned with the ISOCOM software, produced economically with the LASCO vario-block system and used in building with utmost efficiency with the help of laying equipment. Adding aggregates ("fly ash") can additionally contribute to protecting the environment.

Qu Hongle, Director at the Chinese Housing Ministry, is explaining the new "Village" projects in China.

First-hand experience in the outstanding efficiency of wall building with sand-lime elements and vario-blocks could be gained from a wall-building demonstration.

Expert seminars of the association in demand

Gain in expertise

Expert knowledge in the production of sand-lime blocks is regularly updated in "expert seminars" organized by the Bundesverband Kalksandsteinindustrie e.V. (Federal Association of the Sand-lime Brick Industry e.V.).

Since 1995, 48 events have been organized at regular intervals, in which 1,300 foremen, plant managers, managing directors and expert speakers from sand-lime block manufacturers, the lime industry and mechanical engineering as well as the trade association have taken part. The focus has been on practice-oriented topics such as: Raw materials, properties and measuring; Process technology; Quality relevant brick properties; Quality control of sand-lime block products – measuring technology; Energy savings; Work safety; Technical innovations. "Bringing measuring technology to life" was the topic of six seminars last year, which traditionally took place in Hannover and were again booked out with 120 participants. In-depth discussions and an exchange of expert experience together with visualizations through exhibits and demonstrations rounded up the two-day events. The speakers were Wolfgang Foerster (sand-lime block expert and LASCO sales engineer), Frank Beschorner (Verwaltungs-Berufsgenossenschaft - Institution for Statutory Accident Insurance and Prevention), Dr Wolfgang Eden (Forschungsvereinigung Kalk-Sand e.V. – Research Association Sand-lime), Theodor H. Günther (Rheinkalk GmbH) and Jürgen Lutter (Calcis Lienen GmbH). The objective of the seminars was to get to know the interdependence of raw material properties, procedural production parameters and property values of sand-lime blocks through measuring techniques. In addition the speakers answered questions regarding work safety and energy savings.

The participants of an expert seminar of the German Sand-lime Association in Hannover.

In the picture: Nikolay Somov, President of the Trade Association APSI (right) and LASCO sales engineer Karsten Braungardt (left) during the official admission into the association.

Russian sand-lime block association admits LASCO as a member

Great honour for LASCO: The technology supplier for the sand-lime block industry was officially affiliated in the Russian Trade Association APSI as foreign mechanical engineering company. Like the German Bundesverband Kalksandsteinindustrie e. V. (Trade Association Sand-lime Block Industry) APSI coordinates market activities intended for rendering the product popular, supporting research and development to develop it further, setting quality standards and cooperating with government authorities and public organizations with regard to the development and promotion of building programmes. Moreover, fair competition among their members shall be inspired. Statistics and analyses of market condition, structure and development in the sector of silicate-containing wall building materials in Russia are also carried out. LASCO not only contributes its technical know-how to the association, but also its many years of experience in the market development of silicate-containing building blocks in Germany and a number of foreign markets.

LASCO exhibits at bauma in Munich

Important impulses expected

3,400 exhibitors will be presenting themselves to trade visitors at bauma, the world's leading trade fair for construction machinery, building material machines, mining machines, construction vehicles and equipment.

bauma is the world's broadest platform for experts in construction machinery and building material machines. It is seen as the top event of the industry being the meeting point of international key players. It is the venue where decisive innovations are presented to the public and visitors find the optimum solution. Everybody who has ever been there will always come back for more!

The 31st bauma takes place in Munich from 11-17 April 2016.

LASCO, the technology supplier to international sand-lime block manufacturers, will exhibit on a stand of its own: Hall B1, Stand No. 218.

bauma 2016
April 11–17, Munich

LASCO's stand cannot be missed – as we are exhibiting our 10 m high sand-lime element press KSP 1250. You can find all information about bauma on www.bauma.de.

LASCO vario-block press technology core of innov

Unique modular produc

Since the introduction of the LASCO vario-block press technology in 2006 the system for the economic production of supplementary or vario-blocks has been further developed into the most flexible production line for the element system in close cooperation with our customers.

LASCO is now offering a modular production system, which is unique in the market and complementing the original vario-block press by:

- Green block saws
- Saws for slits in brickwork
- Green block crushers with overspill recovery
- Printers for numbering blocks in product identification
- Stacking robots
- Code-decode systems for curing wagons

As a special feature of the LASCO vario-block press PSP, the sand-lime elements are rotated by 90° and pressed in longitudinal direction contrary to conventional production. The different block lengths are thus produced in pressing direction.

Four moulds for different wall thicknesses are integrated in a shiftable mould box. The filling and pressing operation always happens in the mould that is positioned in the middle of the press. A format change can be handled within three minutes. The use of a second mould box allows the production of up to eight wall thicknesses.

Two thirds of the vario-blocks that have been finished on block saws after being steam-hardened are now pressed in the desired length with the PSP vario-block press. The integration of green block saws for height, gable and bevel cuts dispenses with the need for subsequent treatment of individual hardened blocks outside the process cycle.

The whole process control is handled with a wall unitizing software which follows the architect's construction drawings and first creates brick laying plans. These are used for the creation of data sets of optimized batches for the control of the vario-block press line via the planning software. Program-controlled, the system "decides" what type of system or supplementary block is to be produced, pushes – if required – the mould into the right position, presses the exact dimensions and transfers the green block to the integrated green block saw, if necessary, or stacks it directly on the curing wagon.

One of the most prominent further developments, which we are presenting here as well as at bauma 2016 in Munich for the first time is the

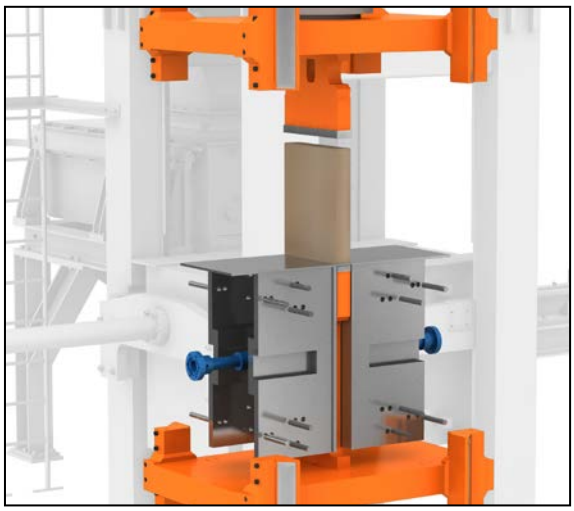
vario-block press PSP compact

The PSP **compact** is conceived to complement the tried and tested PSP 460 and fits well into the modular concept of vario-block production lines. The basic idea here is the optimization of the mould system for applications, in which up to four different wall thicknesses or shapes are used.

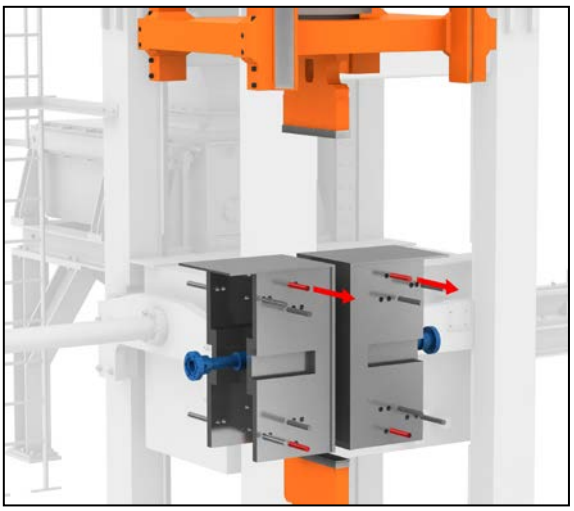
The mould box is not shifted in case of a format change, but pushed in via a mould changing system and hydraulically clamped like in our other sand-lime block presses.

For a format change, the two side plates of the mould are shifted symmetrically to the middle of the press inside the mould box,

Schematic view of a format change at the PSP compact:



Pressing and ejection of the format 115 mm wall thickness



Unlocking of the mould

Shifting of the side plates

vative production technology for elements
tion system

then locked and thus determine the wall thickness. The possible pattern of the side plate adjustment then corresponds with that of the wall thicknesses. Simultaneously with the adjustment, the two head plates of the upper and lower punch are also changed fully automatically.

The new mould system of the vario-block press allows a compact design of the press and shortens the time of a format change.

Our second innovation, the

double green block saw,

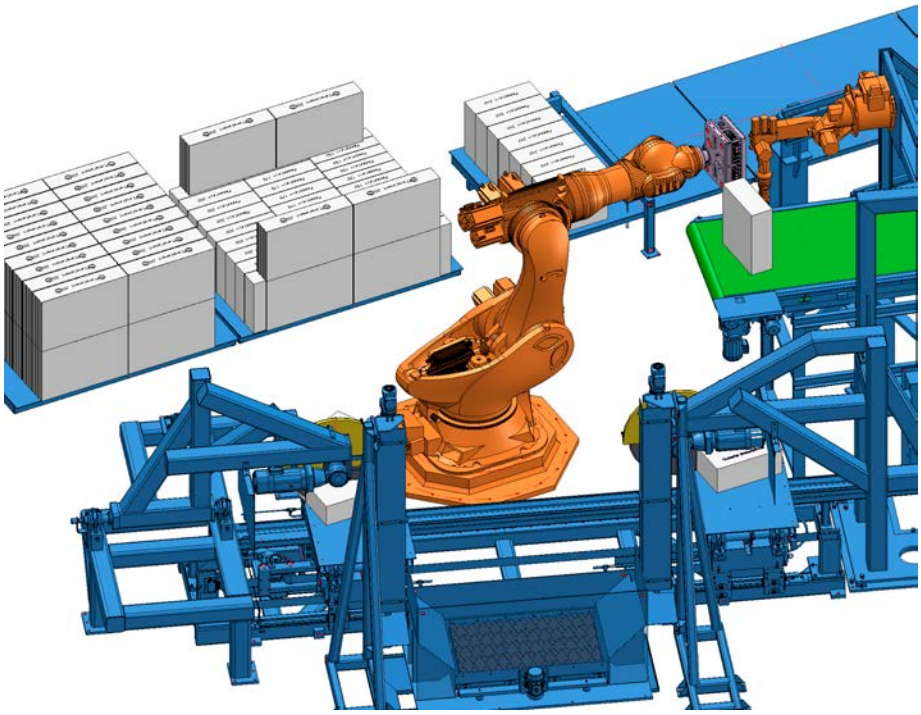
has already proven itself in practice.

The use of a double green block saw is recommendable when more sawing is envisaged for height, gable and bevel cuts.

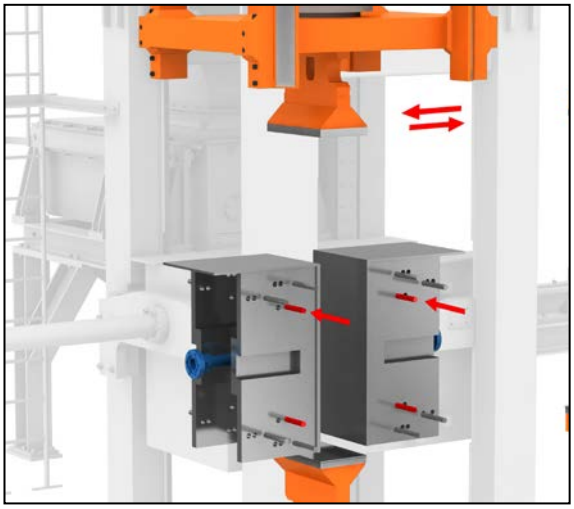
Two sawing tables are arranged on one guideway in such a way that they can be moved into the stacking area of the stacking robot in turns.

There is one green block saw with a special saw blade for each sawing table. The stacking robot takes the pressed green block off the conveyor belt with the vacuum gripper, rotates it by 90° and positions it on the sawing table according to the cutting geometry given by the laying software. Then the sawing table moves to the saw and carries out the sawing cut at variable feed speed.

In the next process step the sawing table moves back to the feeding (and unloading) position. There the cut block is taken off by the stacking robot and placed onto the curing wagon. Before the subsequent loading operation the sawing table is automatically tilted by 90°; the sawing waste is deposited into the green block crusher, crushed and fed back to the raw material circulation.



The new LASCO double green block saw



Locking of the side plates and change of the head plate

Compaction and ejection of the format 300 mm wall thickness

Our picture shows the new as well as the 2nd, 3rd and 4th-year apprentices together with David Hall, works council chairman (2nd from left) and Björn Bühling, training supervisor (left), Lothar Bauersachs, CEO (right) and the two training supervisors Georg Pfeuffer (right rear) and Luisa Wachsmann (right front).

Spotlights

Company management expanded: LASCO's long-time plant manager Robert Welsch (picture) was appointed Managing Director as of 1 January 2016. Together with Lothar Bauersachs (CEO) Robert Welsch is now responsible for Production and Gernot Losert for Administration in the new company management of three.

40 years with LASCO

Andreas Büttner	01.09.2015
Uwe Kolb	01.09.2015
Frank Schulz	01.09.2015

25 years with LASCO

Volker Pfeuffer	01.09.2015
Holger Welsch	01.09.2015
Erich Hähnlein	20.09.2015
Rudi Steiner	01.10.2015

10 years with LASCO

Rene Fuchs	01.09.2015
Florian Herzer	01.09.2015
Matthias Knauer	01.09.2015
Marcel Baetz	01.09.2015

Recently retired

Erich Hähnlein	31.10.2015
Karl-Heinz Fuchs	30.11.2015

Sadly mourned

Manfred Kraußer	† 09.10.2015

Number of apprentices increased again

Top rate of LASCO apprentices

With the 16 first-time employees who just started their apprenticeship at LASCO the company even beat last year's record.

At the beginning of September 16 young people started their first year of training at LASCO Umformtechnik GmbH, 14 of them in an industrial/technical job and two in a commercial one.

LASCO has always rated training and development very highly, in which the company sees a very big chance to ensure qualified employees in the long run. "If we want to be able to meet future challenges, we need competent personnel", said the CEO Lothar Bauersachs. LASCO's training rate of 15% not only exceeds the average in this line of industry by far. With the 16 new entrants LASCO currently employs 63 apprentices and has been able to increase the previous year figure by 10%.

Meanwhile two young ladies gratefully accepted congratulations on their outstanding performance. Cornelia Bäz and Ezgi Yamankilic achieved excellent results in their final exams at the Chamber of Commerce and Industry at Coburg. Cornelia Bäz was even the best graduate of the trainee programme. Ezgi Yamankilic can now prove herself fulfilling demanding tasks in LASCO's service department, whereas Cornelia Bäz is still continuing her vocational preparation. She is doing an integrated degree programme and is now attending lectures at the University of Applied Sciences in Coburg planning her BA thesis for 2017.

Gernot Losert, Managing Director Administration/ Production, and Luisa Wachsmann, training supervisor (left) are congratulating Ezgi Yamankilic (2nd from left) and Cornelia Bäz on their successful final exams.

Fairs + dates

bauma
Munich, Germany
11 - 17 April 2016

CTT
Moscow, Russia
31 May – 4 June 2016

KazBuild
Almaty, Kazakhstan
5 – 8 September 2016

bauma China
Shanghai, China
22 – 25 November 2016

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Company management congratulated long-time employees in a ceremony

Record high of anniversary!

The loyalty, know-how and commitment of employees are the foundation of a company according to Friedrich Herdan, Partner and Chairman of the Board of LASCO Holding. The more he was pleased that 15 highly qualified employees could be honoured for 40 and 25 years with LASCO this year.

Both Friedrich Herdan and Lothar Bauersachs, CEO, as well as Gernot Losert, Managing Director Administration/Production, expressed their thanks and congratulations. Additionally they presented anniversary certificates, loyalty bonuses and decorations of the Board of Trustees of Bavarian Employers and the Chamber of Commerce together with David Hall, Works Council Chairman.

40 years

Andreas Büttner started his apprenticeship as a power electronics technician at LASCO in 1975. He qualified as a certified engineer in electrical engineering in 1988 and has become an expert in the electrical equipment of all LASCO products during his 40 years of employment.

Karl-Heinz Fuchs has also been employed with the company for 40 years. Due to his know-how as technical product designer he has taken over manifold assignments in the **design of automation units for the sand-lime block sector.**

Uwe Kolb started his apprenticeship as a technical product designer at LASCO in 1975. In the following years he continued to do extra-occupational further training, though, and is responsible for the technical documentation and authorized for the implementation of the EU Machinery Directive now.

Frank Schulz joined the company as an apprentice 40 years ago and trained as a machine fitter. After having finished his apprenticeship he worked both as a programmer in the production planning department and as a boring mill operator in mechanical production.

25 years

Rainer Scheler started his career at LASCO as a project and sales engineer in 1990. He was responsible for the development of the markets in Russia, Slovenia, Poland, Austria and Spain both in the forming technology and the building materials sector. Due to his profound professional knowledge and his above-average commitment he quickly succeeded in building up a high reputation with his customers. In 2004 he became the Deputy Sales Director and was given power of attorney in 2008. His great sales success and enormous experience in countries of the Russian Federation enabled him to become the General Director of the newly founded subsidiary OOO „LASCO Umformtechnik Service“ in Russia as of 1 June 2015.

Roland Martin started his career in 1990 as an electrical engineer. Having done various further training he was first responsible for the hardware and software of die-forging hammers and essentially contributed to numerous optimizations of the hammer controls. His present assignments comprise the creation of hardware circuit diagrams for all kinds of forming units and complete forging lines.

Thomas Koppitz has been able to use his knowledge in various fields since he joined LASCO as a qualified electrical engineer. He fulfilled the task of the responsible system engineer for CAD/CAM systems and of a system administrator and technical manager at LASCO Multimedia Services later on. Afterwards he supported the project management and has been working in the quality management since May 2014.

Volker Pfeuffer did an apprenticeship as energy electronics technician. Continuous further training mainly with regard to commissioning, programming and user training of robots have also enabled him to take part in machine acceptances at home and abroad as a service technician.

Holger Welsch was employed in the assembly department after having finished his vocational training as an industrial mechanic at LASCO. Having attended several courses he has become a qualified service technician also in the field of machine acceptances at home and abroad.

Walter Reißenweber joined LASCO as a horizontal boring mill operator 25 years ago. Until 1999 he attended various REFA courses and started as a CNC programmer for in-house machining centres in the production planning department in the same year.

Erich Hähnlein joined the mechanical production of the company as a boring mill operator. He was able to constantly extend his specialist knowledge in various further training courses and now specialises in the mechanical machining of large components.

Detlef Schmidt has been working in the welding department for 25 years. Over the years he has become a welding specialist for complex, elaborate parts due to his specialist knowledge.

Frank Schulze joined LASCO as a boring mill operator in 1990 and extended his know-how in diverse training courses. With advancing technology he wrote programmes on his own specialising in the mechanical machining of hydraulic valve blocks in different sizes.

Rudi Steiner was employed as a turner 25 years ago and then specialised as a radial drill operator. Now he accompanies the process of pre-setting tools in mechanical production.

Michael Rauscher started his career in the assembly department of the company as a painter/varnisher in 1990. Further training in painting techniques and painting preparations made him a specialist in his field.

Staff members celebrating their anniversaries at LASCO together with Friedrich Herdan, Partner and Chairman of the Board LASCO Holding (front 2nd from right), Lothar Bauersachs, CEO (right), Gernot Losert, Managing Director Administration/Production (2nd from left) and David Hall, Works Council Chairman (left).

Interview

Vladimir Ivanowitsch Barankov
Owner, General Director

JSC KZSK „Kovrovsky Silicate Brick Plant“
Kovrov, Wladimir region (Russia)

Staying innovative!

up grade: Mr. Barankov, your enterprise has been using a LASCO press KSE 401 in production successfully for several years now. What technical changes has this brought about?

Vladimir Barankov: The use of the new hydraulic press has opened up the opportunity of changing the brick parameters. This enabled us to optimize their accuracy and density.

up grade: Has the new production technology also changed your product sand-lime bricks – and how?

Barankov: Of course we have been able to improve edge sharpness, brick weight and thus quality. Using a new filling technology and an additional mould it is now possible to produce perforated bricks at high accuracy as well.

up grade: What was your customers' reaction to the high-quality bricks in your markets?

Barankov: We were able to maintain our market share despite lower construction activities in the Russian Federation. Exactly the products of our new KSE 401 are an argument in discussions with our customers.

up grade: What are the future perspectives of your sand-lime brick production from your point of view?

Barankov: The sand-lime brick has a very long tradition in our country. Sand-lime brick walls are especially popular in house building. Demand for such apartments is still relatively high despite lower building activities.

Sand-lime bricks will also gain acceptance as building material both in the Kovrov region and all over Russia on the presumption of further cooperation of users and machine tool manufacturers in the field of developing innovative and efficient solutions for the production of high-quality sand-lime bricks.

JSC KZSK „Kovrovsky Silicate Brick Plant“

Spirit of progress

The JSC KZSK “Kovrovsky Silicate Brick Plant” is one of the leading sand-lime brick manufacturers in Russia. The reputation of the company is also to be seen as a personal success of the owner Vladimir I. Barankov, who has been forming the enterprise since the early 1980s and lead it to high reputation.

Barankov, who was appointed General Director in 1981 and who acquired the enterprise in the 1990s, launched a modernization program for the company, which was established in 1951, in order to increase quality. His vision of offering customers high-quality products at a fair price laid the basis for a success story that has been going on up to now. Today 400 employees produce a wide portfolio of 30 products which ranges from simple (65 mm, NF – Russian format) and reinforced (88 mm, 2 NF – Russian format) sand-lime bricks to coloured decorative and bossed bricks. Other products are aerated concrete blocks, building and feeding lime as well as dry mixtures. Another field of activity is sand mining.

To increase quality, efficiency and capacity even more the first LASCO KSE 401 with hydraulic drive was acquired in 2013. The central technical changes were accompanied by improvements in material preparation. Already one year later the enterprise won a national ranking in the category “Annual sales between 500m and 1bn RUB” and was voted on the top 50 enterprises of the Russian building industry.

Igor Barankov, Technical Director

The spirit of progress is perpetuated by Vladimir Barankov, owner, and his son Igor, Technical Director. For instance the company recently developed an app for Smart Phones that helps users to calculate the number of required wall building bricks for the construction of any building themselves.

Vladimir Barankov in the modern production hall with sand-lime green blocks stacked appropriately for the autoclave. The enterprise ranks among the top 50 of the building and building material sector in the Russian Federation.