On-time commissioning of one of the most modern concrete block making plants in Russia

Masa GmbH, machine and plant manufacturer for the building materials industry from Andernach, was able to convince Vibor-S, one of the largest manufacturers of paving stones in Russia, of its many years of experience and its high-quality machines – so much so that one of the most modern concrete block making plants in Russia was jointly put into operation in September 2014.

Hyun-Dee Ro, Masa GmbH, Germany

Since its establishment in the year 2000, the Russian company Vibor-S, which is geared to the production of high-quality building materials, has developed into one of the largest producers of paving stones in Russia and, according to the company itself, has an annual output of more than 3 million m². Vibor-S is thus strengthening its market position still further with what is now its fourth production plant and offers an impressive range of over 500 different types of paving stones, kerbstones or palisades.

Initial contact at the ICCX Russia 2011 in St. Petersburg

The annual 'ICCX - International Concrete Conference & Exhibition' in St. Petersburg proved to be an outstanding platform for the initial discussions between the two companies. Masa GmbH left a lasting impression on the Russian company.

Further intensive discussions followed, resulting in Masa GmbH being awarded the contract for the planning and construction of the new Vibor-S plant near Moscow in mid-2013.



20 aggregate silos are available for filling the two charging scales

New plant in Bogatisheva (Kashira district) near Moscow uses Masa XL 9.1 concrete block making machine

Today the Russian company Vibor-S produces concrete blocks in the plant in Bogatisheva using the Masa XL 9.1 concrete block making machine, which is



The concrete mixture for the facing concrete is manufactured by the Masa S 350/500 mixer

equipped with state-of-the-art and matured technology.

A special feature of the XL 9.1 is the fully automated mould change procedure, which is started by Masa's modular plant control software, Factory Automation Service Tools (FAST). Once the last pro-



Vibor-S uses German technology for high-quality products



The new Vibor-S plant in Russia





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Masa covers the complete range of machinery and ancillary equipment for the building materials industry: Batching and Mixing, Concrete Blocks/Pavers, Kerbstones, Concrete Slabs, Sand Lime Bricks and Aerated Concrete (AAC).

All technical solutions are individually planned, designed, adapted and realised for each customer, resulting in one supplier and one individual contact person.

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One of the two Masa Multicolour systems being filled



Individual colouring by means of the Masa Multicolour system

duction cycle is completed, the mould – including the tamper – automatically drives forwards for changing. The change procedure is thus completed within a few minutes and the production of the next blocks with a product height of up to 500 mm can be continued.

Thanks to the short cycle times of the 9.1 and the production of concrete blocks of all kinds with particularly high height accuracy, very large daily production quantities and very high product qualities can be manufactured.

"Vibor-S's products are characterised by high strength, frost resistance, durability and environmental friendliness", says Mr Vasiliy Schewtschenko, general director of Vibor-S. "With state-of-the-art equipment, the best components and constant laboratory checks, we offer top quality along the entire Vibor-S product line. High quality and refined products play a very large role in our company. We want to be able to ensure this in future as well, therefore we're looking to extend the new plant in the very near future with further surface refinement technology."

The entire concrete block making plant in Bogatisheva is consistently designed for the manufacture of refined paving stones and offers space on the dry side with its two return transport systems for future extensions with further refinement equipment.

Refinement of paving stones with facing concrete of particularly high quality

The Masa S 350/500 concrete mixer was already used during the commissioning of the plant. The model impresses in particularly by the excellent quality of coloured facing concrete that it produces and is an important element in the manufacturing process of high-quality products. Short mixing times and the optimum use of energy, water and cement are just a few of its many strengths.

Two Masa Multicolour systems are used in the facing and core concrete areas in order amongst other things to manufacture concrete blocks with colour transitions on the visible surface.

The Masa Multicolour systems used in the Russian plant enable the individual colouring of the products and also offer many different options for further processing. In particular through the use of the Masa Multicolour system in the core concrete area, fracture surfaces with a colour transition can be manufactured by splitting the concrete stones. Reproducibility of the coloured concrete block surfaces is always possible.



In focus: the Masa XL 9.1 concrete block making machine



Nozzles of the Masa washing unit



The paving stones are washed by the Masa washing unit before moving on to the drying chamber

Optimum appearance of the surface

In order to achieve an optimum and highclass appearance of the stone surface, the newly produced concrete blocks are freed of cement pastes by a double washing unit. This process step is optional and is performed before the hardening of the concrete blocks in the drying chamber, which has a rack storage capacity of about 8,000 boards.

Satisfactory project progress – punctual commissioning

"We are very satisfied with the overall progress of the project. Masa completed all of its work punctually by the agreed deadlines", Schewtschenko continues. "The commissioning of the most modern production plant in Russia is something special and reflects the outstanding co-operation with Masa GmbH."



Drying chamber with racks from Rotho in the new Vibor-S plant in Russia: total capacity 8000 boards



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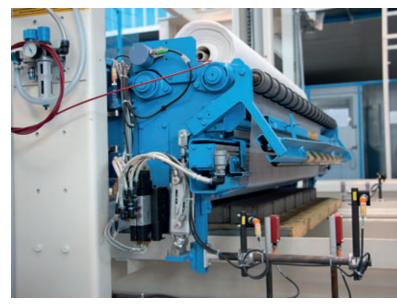
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Two lowerators for two return transport routes



The surfaces of the concrete blocks are protected by a cover sheet feeder



Depending on requirements the boards are either buffered or supplied to the production cycle





Well packed and ready for transport: foil wrapping plus vertical and horizontal strapping of the finished paving stones



Plenty of space for storage as well as for further refinement techniques

About Vibor-S

Vibor-S has aimed since its establishment at the production of highquality building materials. The company has been geared to the manufacture of design elements and materials for road construction since the first decade of the 21st Century. The company's range of products currently includes the following elements: paving stones (road paving stones), kerbstones, palisades, 'Invito' double-layer terrazzo stones, elements for landscaping, high-quality concrete, gravel of various granulations and sand.

Apart from the Vibor-S headquarters in the city of Noworossijsk, the company also has four branches in Moscow, Rostow on the Don, Krasnodar (in the Afipsky settlement) and in the city of Kurganinsk. Each branch has its own sales department and any desired products from the Vibor-S product range can be ordered.

Paving stones are manufactured using the semi-dry vibro-compression method for high quality and durability of the products. Unique paving stones are created through the use of granite aggregates as well as dyes from foreign manufacturers in the facing layers. High capacities, in-house developed products (e.g. the registered trademark 'Listopad'[®]) as well as the possibility to transport by both truck and rail enable Vibor-S to deliver products not only in Russia but also abroad.



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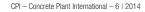


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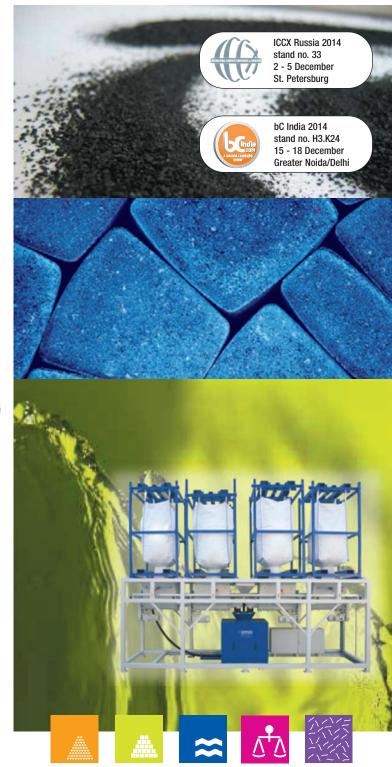
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