

Masa GmbH, 56626 Andernach, Germany

Successful Retrofit Project at Kimm Baustoffwerke KG

Masa is one of the world's most professional and reliable partners in the design, construction and installation of complete plants for the production of concrete blocks. However, the company from Andernach also shows its capability for renovation and modernisation requests and offers competent support. Retrofit measures, which can prolong a plant's life to maintain the long-term economic viability of an existing plant, are planned by Masa with the same care as new plants. It does not matter to Masa whether a company is looking to upgrade existing Masa equipment or modernising components supplied from other companies. The integration of current Masa components takes place after intensive dialogue and in close cooperation with the customer.

In January 2018, Masa delivered a modern block making machine to Kimm Baustoffwerke KG in Elxleben (Thuringia) to integrate it into an existing plant on site. Since its founding in 1991, Kimm has been successfully producing concrete products. The old stone production machine, which received a new Masa vibration table several years ago, had finally become obsolete. Now a new Masa stone production machine is being used.

Kimm's project team worked intensively with the two Masa managers Rudi Buyna and Christoph Dirk to understand the specifications desired by Kimm and create a road map to deliver the correct solution. Both during the planning phase and during assembly and commissioning, a very fruitful and

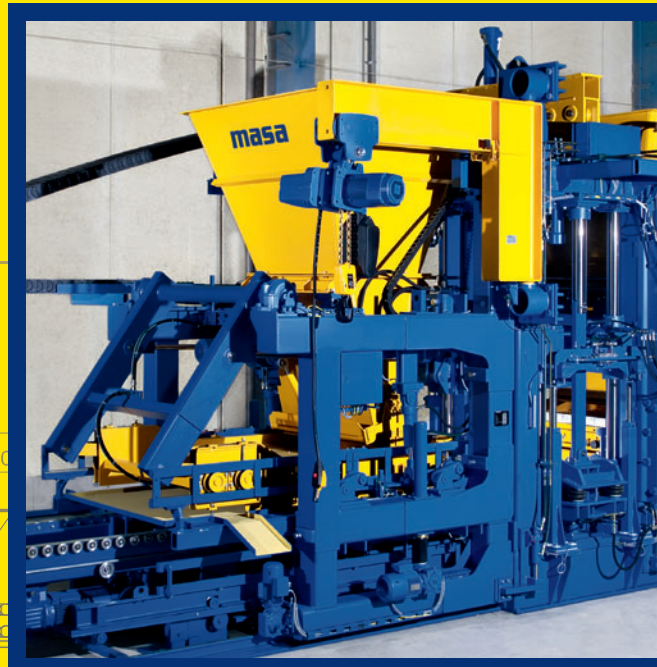


Masa integrated the Masa concrete block making machine L 9.1 into an existing plant in Elxleben, Germany.

masa

Milestone to your success.

Our solutions for your success



www.masa-group.com

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) Products.

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

Masa GmbH
Masa-Str. 2
56626 Andernach
Germany
Phone +49 2632 9292 0
Service Hotline +49 2632 9292 88

Masa GmbH
Werk Porta Westfalica
Osterkamp 2
32457 Porta Westfalica
Germany
Phone +49 5731 680 0

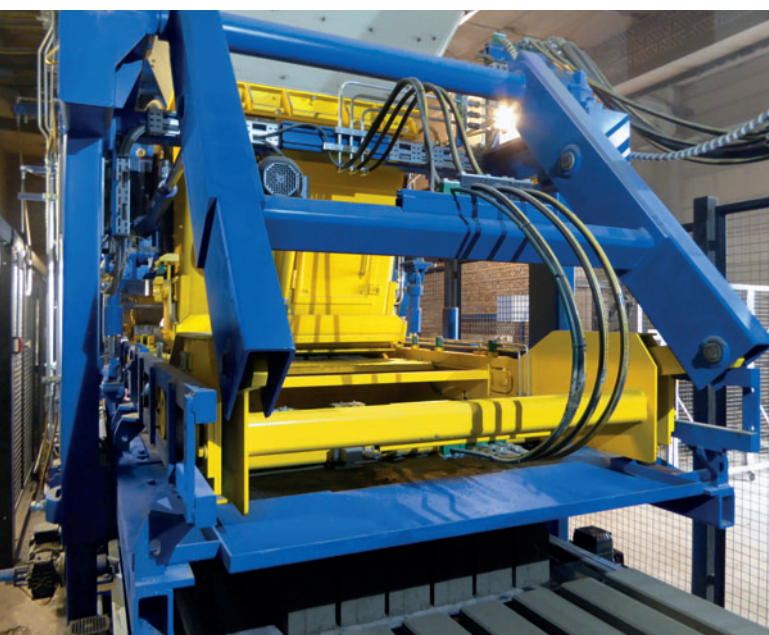
info@masa-group.com
service@masa-group.com
www.masa-group.com



Masa - made in Germany.



During the production cycle, the vibration force can be adjusted independently from the rotational speed, ...



..., since an amplitude-controlled drive of the vibrators is used

targeted cooperation between the two contracting parties quickly became apparent. In the end, the optimal solution and final decision was to proceed with a Masa L 9.1 concrete block making machine with face mix leaving both sides very satisfied with the outcome.

For all considerations, a holistic approach was always considered as one of the highest priorities. After a comprehensive analysis of the old machine foundations, Masa recommended to not only put the new machine on an adapter frame, but also make adjustments to the existing foundation to create a long-term stable solution which was readily accepted by Kimm.

The standard equipment of the Masa L 9.1 has been supplemented with various features:

Amplitude-controlled drive of the vibrators

During the production cycle, the vibration force can be adjusted independently from the rotational speed, since an amplitude-controlled drive of the vibrators is used.

Fully automatic mold change

To simplify and speed up the change of shape, the machine is equipped with a fully automatic mold change. The compaction head design was adapted electrically and mechanically to fit their existing design, as they wanted to utilize their extensive "mold park". A customized device for clamping has ensured that all existing molds can continue to be used without restrictions.

Hydraulically driven cross-cleaning device

The hydraulically driven cross-cleaning device is required depending on the product, especially in the production of high-quality curbs in order to clean the pressure plates (swords).

Continuous laser detection

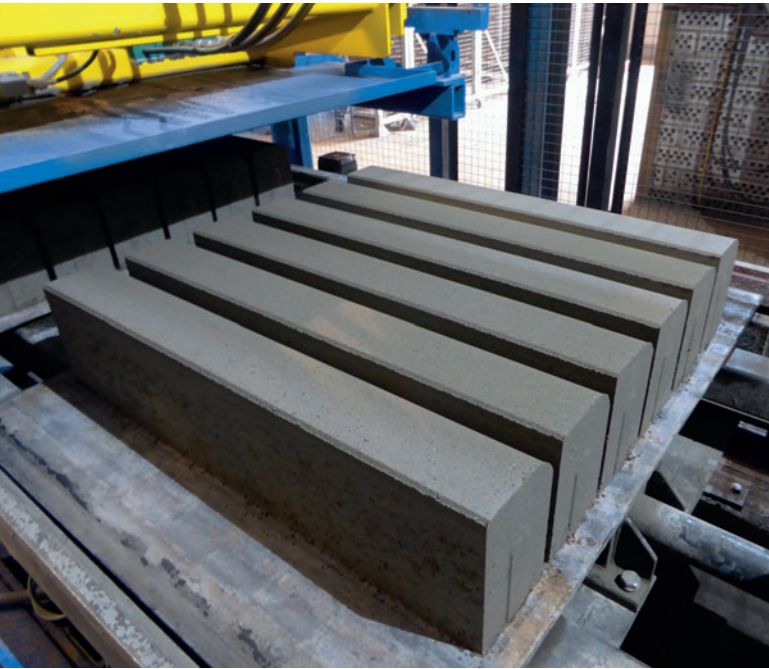
The level of the face-mix filling box is visualized for the operator via continuous laser detection. This ensures optimal filling of the face mix concrete filling box for high-quality paving stone production.

Hydraulically driven roller device

For the production of coloured products, finished surfaces and large-sized concrete block products, a hydraulically driven roller device is installed on the face-mix concrete filling box.

Separately driven pulling device

For products with a special core profiling, the concrete block making machine is already prepared for retrofitting a separately driven pulling device.



Kerbstones can also produced with the new Masa L 9.1 at the plant in Elxleben.

Wear-resistant inner lining

The inner lining of the concrete silos (core and attachment) of the machine was made of highly wear-resistant hard polyethylene.

The modular Masa system control software for uniform operation and visualization of the components has been supplemented by a data transfer interface. Masa thus created the basis for external monitoring of the operating and production data, which Kimm can access from every workstation in the company network.

Elsewhere, Masa devotes special attention to interface issues. Pivotal points in the implementation of a new machine in an existing plant are the areas of "Concrete transport to the concrete block making machine", "Supply of production pallets" and "Transfer of production pallets to the fresh side". Here, Masa was in charge of the design of the process interfaces as well as the security-relevant interfaces and providing the hardware and software. For mechanical adjustments of the transfer points in the areas "Supplying the production pallets" and "Transferring the production pallets to the fresh side", Masa provided the constructive documentation.

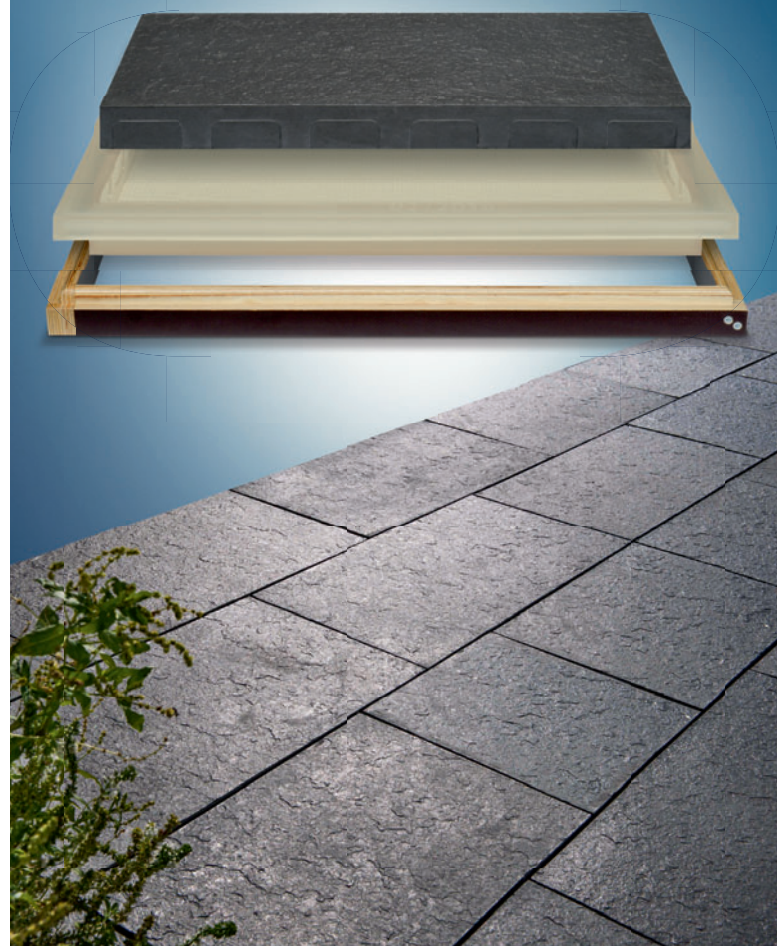
The fact that Masa acts with great foresight was evident in terms of safety. When planning the safety cabinet, a sustainable solution with a long-term perspective was preferred. Masa prepares the control cabinet from the outset in such a way that later step-by-step investments in security technology

Polyurethane meets concrete.

**For greater flexibility and creativity:
WASA WETCAST moulds and innovations.**

With **WASA WETCAST** we enable you to manufacture high-quality paving slabs with an individual shape and surface structure – automated and in series. Our in-house model construction department develops a prototype for this, entirely in accordance with your wishes; our casting shop manufactures robust polyurethane casting resin moulds.

Contact us and learn more about **WASA WETCAST**.





The modular Masa system control software for uniform operation and visualization of the components has been supplemented by a data transfer interface.

can be easily implemented. The construction of the concrete block making machine and the assembly process were based on the existing soundproof cabin, so that the company Kimm had only minor adjustments to make. Applicable health and safety guidelines are fulfilled as of today.

In addition to plant safety, Masa is also particularly interested in the energy efficiency of plant components: Masa machines are equipped with energy-efficient drives (actuators) as a standard, and the processes are energy-optimized.

Thanks to the time-optimized duration of the refurbishment measures and a tightly planned renovation, Kimm's machine is now operational for production. ■

In 2017, the family-run company Kimm celebrated its 60th anniversary. Since its founding in 1957, the Hessian company has developed into a brand for building materials and concretes. In addition to the main location in Wabern (Northern Hessen), products for gala and road construction, precast concrete elements, sand-lime bricks and plan elements, sewer and civil engineering components are manufactured at two other locations in Germany. Kimm also supplies a wide range of concretes, liquid soil, bulk materials and natural stones.

FURTHER INFORMATION



KIMM Baustoffwerke KG
 Riedfeld 1, 99189 Elxleben, Germany
 T +49 36201 630, F +49 36201 63100
elxleben@kimm-baustoffe.de, www.kimm-baustoffe.de



Milestone to your success.

Masa GmbH
 Masa-Str. 2, 56626 Andernach, Germany
 T +49 2632 92920, F +49 2632 929212
info@masa-group.com, www.masa-group.com



Masa sponsored the free download possibility of the pdf of this article for all readers of CPI. Please check the website www.cpi-worldwide.com/channels/masa or scan the QR code with your smartphone to get direct access to this website.

