masa

Milestone to your success.

Kerbstone Production

HIGH PRESSURE FOR HIGH DENSITY AND RESISTANCE

The output figures listed in this brochure are guiding values. In practice, the production output depends on different factors.
These are: respective plant layout, machine settings, mixing recipes, raw materials and additives used, ambient and other conditions.

CONTENTS

MASA – YOUR NUMBER ONE PARTNER FOR SUCCESSFUL BUILDING MATERIALS PRODUCTION

Individual, sustainable plant solutions

Since the day we were founded, we significantly influence developments in the building materials industry. Our concepts, machines and plants, which have demonstrated their worth for many years, can be quickly updated or expanded if necessary. Our basic philosophy is: to provide flexible and intelligent solutions that enable us, as partners, to help our customers succeed.

WE DO THIS BY MEANS OF:

- Fully automatic machines for the manufacture of concrete products, AAC products as well as sand-lime bricks
- Sophisticated and well-engineered technology
- Several decades of experience gathered by competent professionals
- Service centres all over the world
- Active and effective advice, from design to implementation
- Reliable spare parts supply and customer support

An approach, which combined with hard work, has borne fruit: Today, we can claim to be a global market leader in the design and manufacture of plants and machines for the building materials industry. At present, this success is made possible by some 500 staff.

FROM RAW MATERIAL TO FINISHED PRODUCT

The manufacture of concrete products, AAC products, and sand-lime bricks places high, individual demands on the production plant in question. Only when all components are compatible and the processes are optimised will the plant run economically.

DESIGN COMPETENCE

We define machine configurations as well as logistically and process-optimised plant layouts together with you, based on your requirements for the products to be manufactured, the desired production output and the local conditions at your site.

The close-knit interaction between design, engineering, production and service leads to complete solutions which can encompass all relevant elements of a production plant:

- Preparing, dosing and mixing of the raw materials
- Manufacturing the products
- Curing
- Handling
- Packing
- Surface treatment
- Plant control
- Further equipment

EXPERT ADVICE,
EXCELLENT QUALITY AND
CUSTOMER-ORIENTED SERVICE

BEST CHOICE FOR A SUCCESSFUL KERBSTONE PRODUCTION

High density for high stresses

ADVANTAGES OF THIS SPECIAL METHOD

The production process is based on a method in which liquid concrete is highly compacted with adjustable pressure and the excess water is removed selectively. Both kerbstones and other one-layered concrete products can be produced with Masa kerbstone presses.

Some of the notable characteristics of these products are:

- very high density
- high resistance to freeze/thaw cycles and salt
- excellent weatherproofing
- high abrasion resistance
- high skid resistance

For the production of high density kerbstones we offer the kerbstone press models WP 01 as a single pushing table press and WP 03 as a 3-station turntable press.

MASA KERBSTONE PRODUCTION PLANT: BASIC SET-UP

From the aggregate silos different raw materials are transported to the dosing and mixing plant. Here, the various inputs are processed to concrete. The concrete is supplied, depending on the layout of the plant, to the kerbstone press.

The concrete is filled into a mould and compacted by pressing with adjustable pressure. The water is squeezed out of the concrete. Paper filters are used in this process. In the take-off station the fresh kerbs are then transferred automatically with a vacuum take-off device to transport pallets and forwarded via transport conveyor to the take-off position.

Masa control and safety systems ensure safe and fast production with minimum downtimes.

Note: The plant shown only serves as an example and does not replace a real layout plan. Some special solutions are shown in the images. For better clarity, the safeguards are not shown.

MASA KERBSTONE PRESS **WP 01**

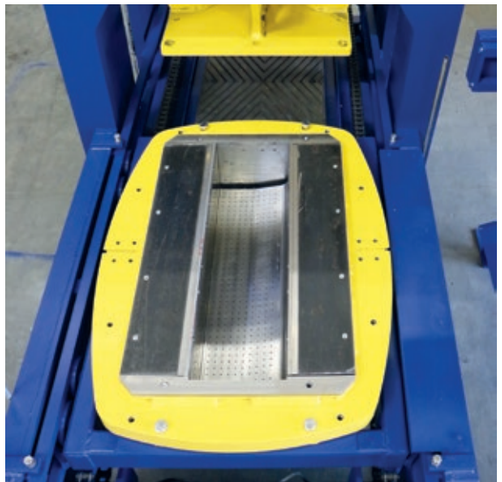
Productivity in small spaces

The compact 1-station Masa kerbstone press WP 01 has its advantage in the combination of high productivity with a lower space requirement compared to the WP 03.

Dosing and filling system:
Liquid concrete is filled from the mixer into the mould. The Masa dosing and filling system ensures an individual adjustment of the required amount of concrete. It consists of an intermediate silo and the actual dosing unit. The dosing unit consists of an additional intermediate silo, distance frame, dosing slider and dosing flap.

Mould car and pressing station:
The mould moves to the pressing station. Here, the concrete is compacted in the mould with high pressure. The excess water is then removed by means of an attached perforated plate which is fixed at the tamper head and at the bottom of the mould (also called a matrix) with an appropriate paper filter. The perforated plate located at the bottom is executed depending on the stone profile. The working pressure can be adjusted according to the product size.

Take-off station:
The product is hydraulically driven out of the mould and placed on a transport pallet by a vacuum take-off device.



Mould car and pressing station

Masa vacuum take-off device

MASA KERBSTONE PRESS **WP 03**

The efficient all-in-one press

In the WP 03, three mother moulds are arranged on the turntable to allow simultaneous filling, compacting and removal from the mould. Compared to the WP 01, this leads to shorter cycle times and higher output on the WP 03.

Turntable and pressing station:
The turntable includes three mother moulds. In each cycle, a filled mould moves to the pressing station. After centring the mould, the concrete is then compacted at a high pressure in the mould. The excess water is removed in the same way as in the Masa kerbstone press WP 01. The working pressure can be adjusted according to the product size.

Individual distance frames or complete dosing units (to achieve shorter downtimes) for the production of different kerbs are available for both Masa kerbstone presses as an option.

Masa control desk

All-in-one: Simultaneous filling, compacting and removal from the mould.

CAPACITY DATA OF MASA KERBSTONE PRESS

		WP 01 1-STATION PRESS	WP 03 3-STATION PRESS
Number of stations		1	3
Pressing power	in t	400	400
Max. useful area	in mm	1000 x 600	1000 x 600
Min. pressing product thickness	in mm	50	50
Max. pressing product thickness	in mm	250	250
Cycle time[1]	in sec.	60	40
Max. production capacity[2] in meter/ 8h shift			
Kerbstone 1000 x 300 x 150 mm	running meter	480	720

[1] relating to manual insertion of filter paper

[2] At 100% efficiency. The capacity data are theoretical and are dependent on machine settings, mix design, aggregates used and other environmental conditions.

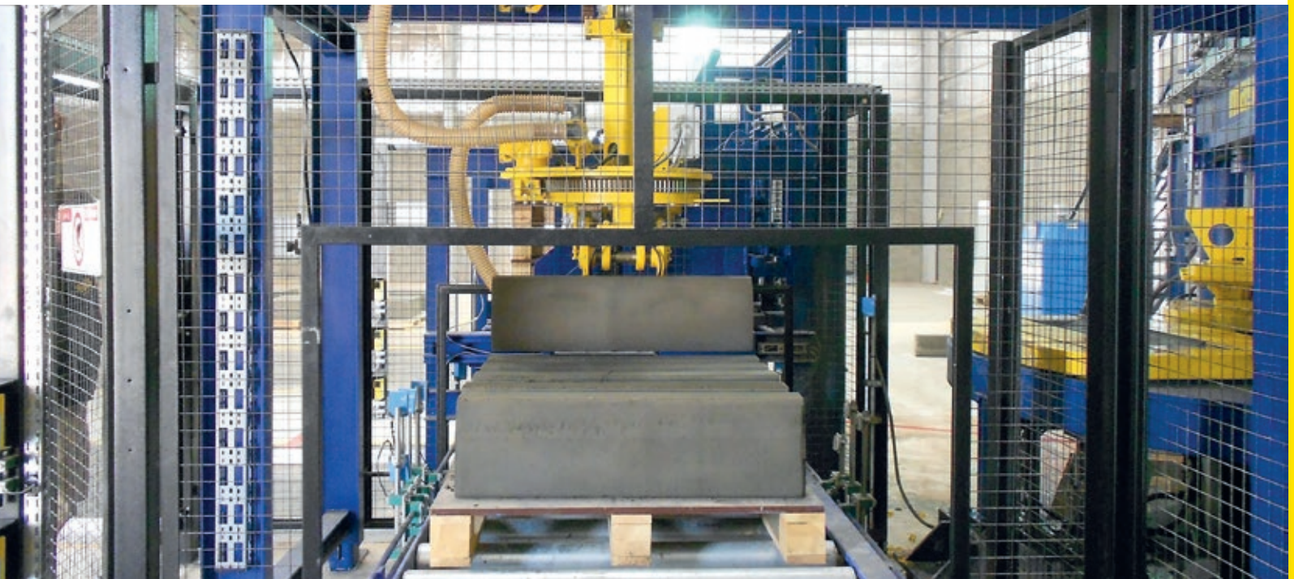
After delivery, the plants are installed and commissioned by our own qualified and experienced engineers. During installation and commissioning of the equipment, operators are trained and familiarised with all parts of the plant and should be able to operate the plant themselves at the agreed productivity after the final test run.

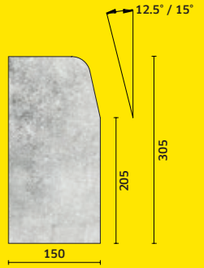
STANDARD KERBSTONES

An overview

The four basic profiles are “Half Batter”, “Bullnose”, “Splay/Full Batter” and “Channel square/Flush”, produced in various sizes and lengths.

The standard lengths are 600 mm, 914 mm (British Standard) or 1000 mm for straight laying areas.





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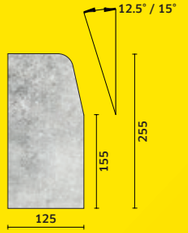

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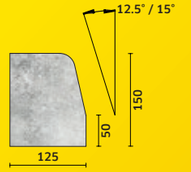

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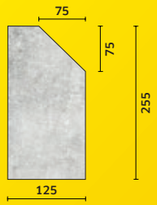

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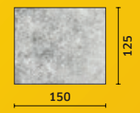

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