



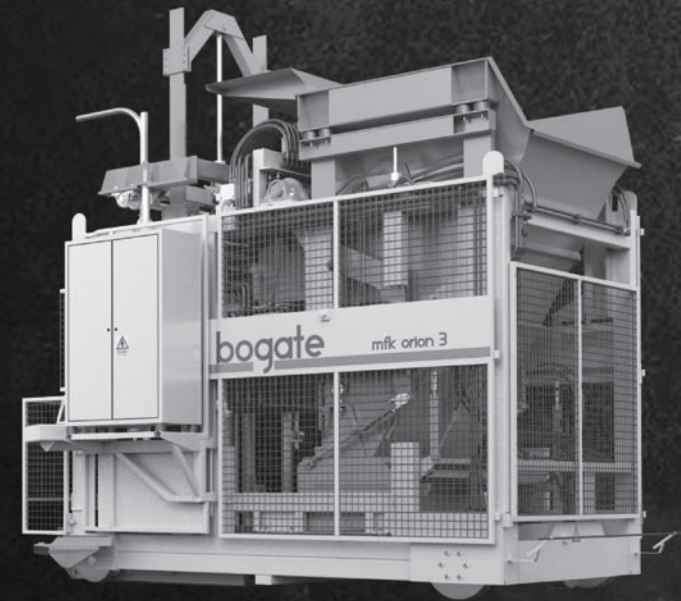
bogate

An equipment and solutions necessary for production and forming concrete elements



Bogate Ltd. is a distributor of machines used for producing concrete and prefabricated concrete elements. Our main objective is to provide our customers with high quality devices with the European CE quality certificate, manufactured in Poland. Drawing on the 25-year experience in the design and production of machines, concrete batching plants and production lines demonstrated by our partners, we help our customers from many countries offer top quality and high-capacity production. Our strategic partner, Road, has for years been a leading manufacturer of block machines and concrete batching plants in Poland. The company started to build its position almost 30 years ago, responding to dynamic changes in the economy. The end of the 1980s saw a number of transformations in the Polish construction market. A rapidly growing demand entailed new technologies, optimisation of production and cost reduction. Additionally, foreign companies raised standards for domestic machine producers. By investing in new technologies and R&D, our partners quickly caught up with the competition. Simple, low-capacity manual machines were replaced with semi-automated solutions, which significantly enhanced the production. Advanced hydraulic systems, combined with top-quality components, made it possible to build first-class egg-laying and stationary machines and drive competitors out of business. As a result of these changes, PHK Mini Max was created which, thanks to its dependable and reliable construction, has become the most popular product in our offer. Further development of egg-laying machines brought about their full automation. Now, the devices are fitted with advanced Mitsubishi drivers combined with a system of sensors, to ensure precise control of the production process. To meet the expectations of our customers, we are sharpening our focus on new solutions. Our latest achievement is an egg-laying machine with a rotary mould, with the use of which the range of the elements manufactured can be extended to encompass large-size items. We keep improving the technology to make sure that our customers are offered top performance devices to produce highly precise elements.

Table of Contents	page
PHK Mini-Max	4
PHS Mini-Max	6
PDL Mini-Max	8
MFK Orion 3	10
MFS Tytan 2	12
MFS Tytan 3	16
MHS Concrete-Pipe	18
MHS Ring-Bet	20
MHS Ring-600	22
Centrale a Betone	24










PHK MINI-MAX is a mobile machine which is a perfect solution for customers which expect high productivity and exceptional reliability at a reasonable price.

It is an excellent egg-laying machine which, owing to its solid structure, upgraded continually for almost 20 years, has become our flagship product valued by customers. The numbers speak for themselves: we have sold nearly 1,000 machines so far. The secret of the machine's success lies in its easy operation, high production capacity and proven reliability in tough working conditions. The machine is designed to manufacture a variety of elements such as concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks and lawn edges. It is a great choice for customers who produce elements from 19 to 25 cm in height. In the special, custom-fit version, the height of elements is between 19 and 30 cm.

PHK MINI-MAX is weather-resistant. With the additional cooling system, it can also be operated in a tropical climate. Being relatively small (2 x 2.25 x 2.7 m) and light (2,100 kg), the machine is easy to transport. Additionally, the simple mould exchange system enables quick adjustment of production to current customer's needs. PHK MINI-MAX is fitted with a manual control panel, which makes the device controllable by one operator. There are 4 vibrators fixed in the machine: 2 on the mould and 2 on the punches, as well as a specialised system to reduce vibration transfer. PHK MINI-MAX has a hydraulic control system, to ensure smooth operation and movement of the machine. There is an electric motor installed by default, which can be replaced with an I.C. engine. We can also deliver a machine with an extended moulding area (1200x600mm). The size of moulding area in the standard version equals 1080x600mm.

PRODUCTION EFFECTIVITY		product per cycle	
 Solid block (120 x 240 x 380)	8	 Structural-floor tiles (240 x 210 x 520)	5
 Hollow block (240 x 240 x 490)	4	 Ventilation brick (240 x 360 x 500)	2
 Hollow block (120 x 240 x 490)	8	 Kerbstone (120 x 250 x 1000)	4
 Formwork block (250 x 200 x 500)	5		

TECHNICAL DATA

Efficiency	2500-8000 items /8h
Machine dimensions (height x width x length)	2 x 2,25 x 2,7 m 2,15 x 2,45 x 2,75m *
Machine weight (without mould)	2100 kg 2200 kg *
Operator	1 person
Production cycle time	30-40 sec.
Power	12 kW
Hopper volume	0,75 m ³
Batch drawer volume	0,12 m ³
Oil container volume	90 l
Voltage	400 V

MOULDING SYSTEM
DIMENSIONS OF THE MOULD

Mould area	600 mm x 1080 mm 600 mm x 1200 mm *
Maximum height of the mould	300 mm 360 mm *
Minimum height of the mould	240 mm

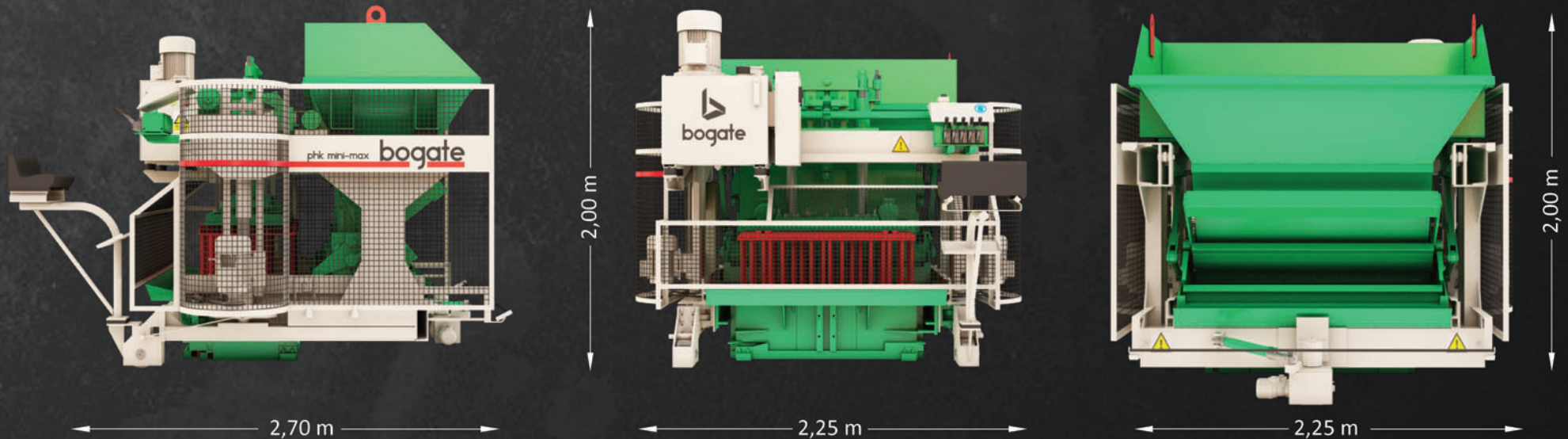
DIMENSIONS OF THE ELEMENTS

Length	1080 mm 1200 mm *
Width	600 mm
Maximum height of the element	250 mm 330 mm *
Minimum height of the element	190 mm

VIBRATING SYSTEM

Vibrators in the mould	2 x 5 kN
Tamper head vibrators	2 x 4 kN

* version available on request












PHS MINI-MAX is a good choice for those customers who value high production capacity and top quality. It is a stationary version of the proven PHK MINI-MAX egg-laying machine used to produce concrete elements. Owing to its solid structure, which we have continually upgraded for almost 20 years, the machine is valued by a large number of customers. Among the key assets of the machine are high production capacity and small size (3.8 x 1.9 x 2.85 m). PHS MINI-MAX can be used for production of a variety of elements such as concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks as well as lawn edges and openwork concrete elements. Additionally, the machine is recommended for its high production accuracy and broader use than the egg-laying model (height of the elements: 10 to 25 cm).

The machine operates in a stationary mode. Empty pallets are fed from the feeder to the vibrating table, where concrete elements are formed. Eventually, the finished products are transported on pallets with a chain conveyor. The production line can be extended by an additional storing device, i.e., a stacker, which is used to pile the newly-produced elements on dedicated racks.

PHS MINI-MAX is weather-resistant. With the additional cooling system, it can also be operated in a tropical climate. The simple mould exchange system enables quick adjustment of production to current customer's needs.

PHS MINI-MAX is fitted with a manual control panel, which makes the device controllable by one operator. Additionally, there are 4 vibrators fixed in the machine: 2 on the mould and 2 under the vibrating table, as well as a specialised system to reduce vibration transfer.

PRODUCTION EFFECTIVITY		product per cycle	
 Solid block (120 x 240 x 380)	8	 Structural-floor tiles (240 x 210 x 520)	5
 Hollow block (240 x 240 x 490)	4	 Ventilation brick (240 x 360 x 500)	2
 Hollow block (120 x 240 x 490)	8	 Kerbstone (120 x 250 x 1000)	4
 Formwork block (250 x 200 x 500)	5		

TECHNICAL DATA

Efficiency	2500-8000 items/8h
Machine dimensions (height x width x length)	2,85 x 1,9 x 3,85 m
Machine weight (without mould)	3000 kg
Operator	2 persons
Production cycle time	30-40 sec.
Power	8,5 kW
Hopper volume	0,75 m ³
Batch drawer volume	0,12 m ³
Oil container volume	90 l
Voltage	400 V

MOULDING SYSTEM
DIMENSIONS OF THE MOULD

Mould area	600 mm x 1080 mm
Maximum height of the mould	300 mm
Minimum height of the mould	240 mm
	120 mm *

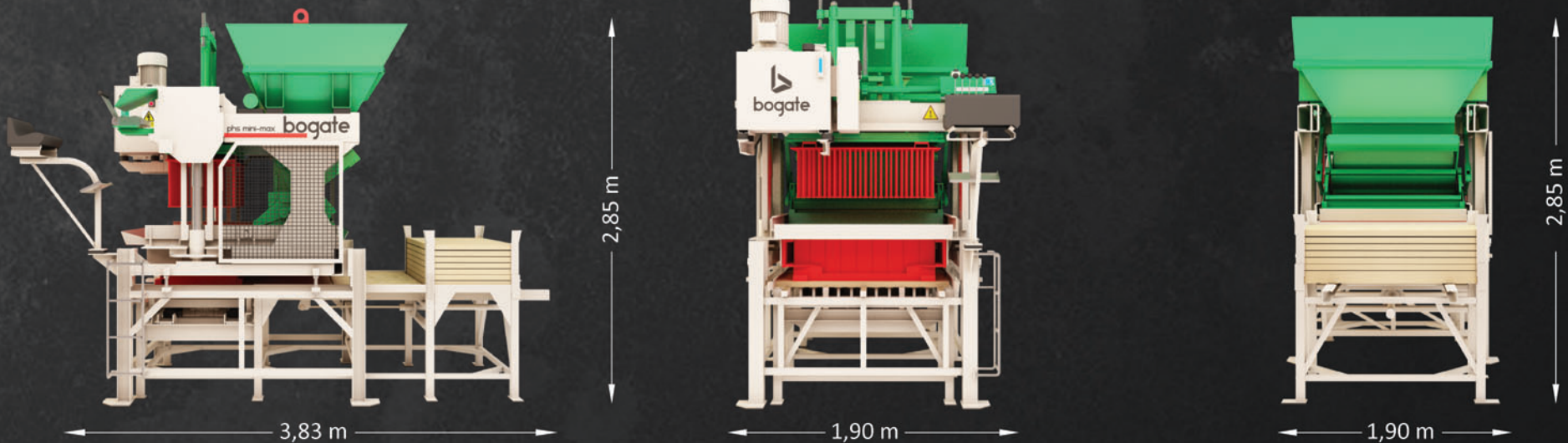
DIMENSIONS OF THE ELEMENTS

Length	1080 mm
Width	600 mm
Maximum height of the element	250 mm
Minimum height of the element	190 mm
	100 mm *

VIBRATING SYSTEM

Vibrating table	2 x 7,4 kN
Tamper head vibrators	2 x 4 kN

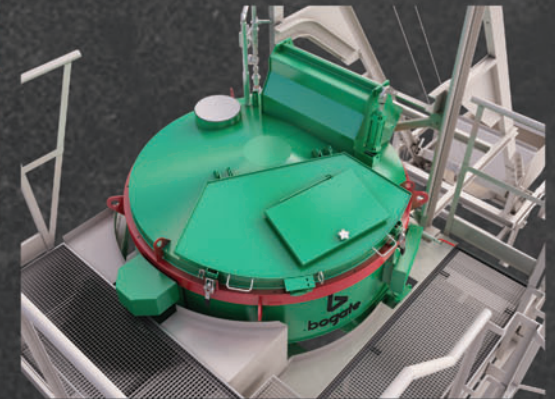
* version available on request





PRODUCTION EFFECTIVITY product per cycle

	Solid block (120 x 240 x 380)	8
	Hollow block (240 x 240 x 490)	4
	Hollow block (120 x 240 x 490)	8
	Formwork block (250 x 200 x 500)	5
	Structural-floor tiles (240 x 210 x 520)	5
	Ventilation brick (240 x 360 x 500)	2
	Lawn edge (120 x 250 x 1000)	4



PDL MINI-MAX is a compact production line for small customers expecting high manufacture quality. It is the smallest of all production lines that we have in our offer, a perfect choice for companies seated at a considerable distance from concrete plants. The production line is composed of the stationary PHS Mini-Max machine, the RMT 600/400 mixer, aggregate feeder and a concrete mix belt feeder.

The line is used for production of a variety of elements such as, for instance, concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks as well as lawn edges and openwork concrete elements. All elements are manufactured with high accuracy. Detailed parameters of the PHS Mini-Max block machine are specified in a separate catalogue sheet.

The line has been fitted with a pan mixer (volume: 0.4m³, one-cycle production). Owing to the use of claddings made of abrasion-resistant steel, HARDOX 400, it is highly durable. The ingredients are fed to the mixer in a hopper feeder, while ready-made concrete mix is poured out onto the belt feeder, which transports it to the Mini-Max block machine. Cement can also be emptied out of bags directly to the mixer. The mixer is controlled manually.

TECHNICAL DATA

Efficiency	2500-8000 items/8h
Production line dimensions (height x width x length)	5,4 x 4,1 x 13,8 m
Production line weight (without mould)	7600 kg
Operator	4 persons
Production cycle time	30-40 sec.
Power	26 kW
Voltage	400 V

BLOCK-MACHINE

PHS MINI MAX - technical data in the individual card of the machine

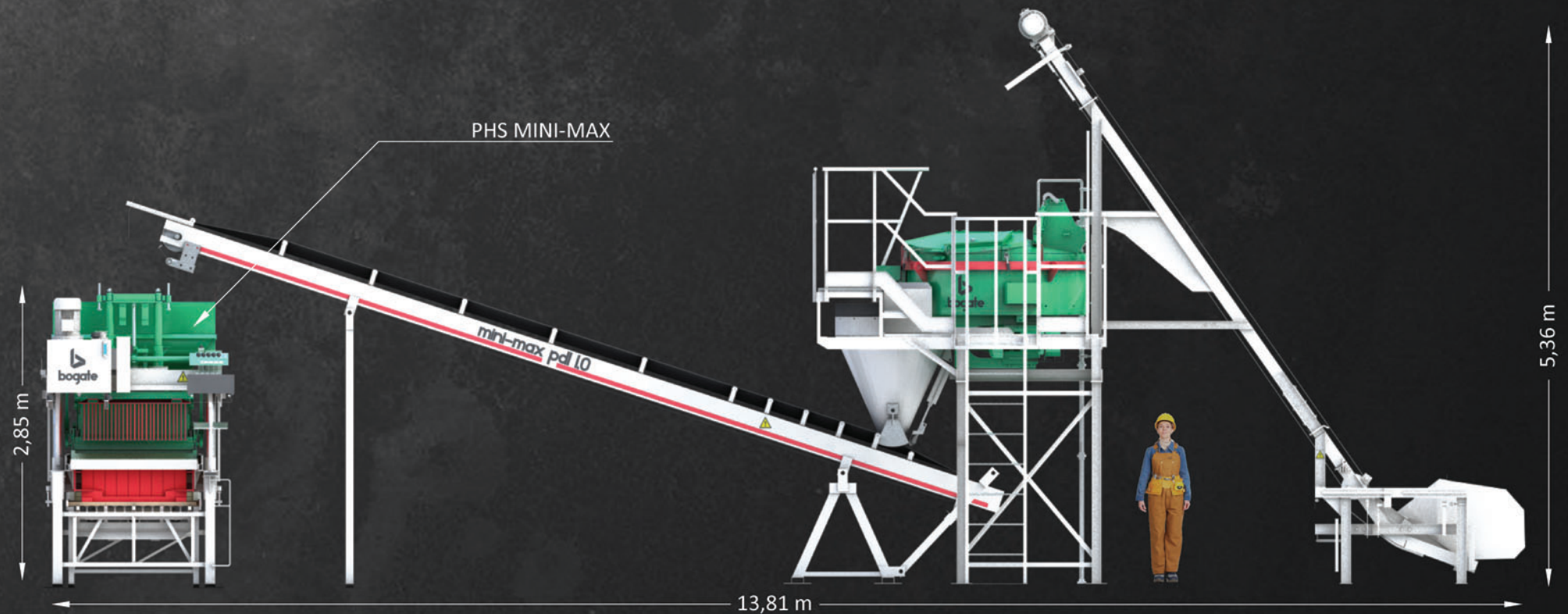
MIXER RMT 600/400

Volume	0,4 m ³
Efficiency	12-15 m ³ /h
Mixing cycle time	1,5-2 min
Mixing speed	36 rpm
Diameter	1,76 m
Maximum aggregate size	32 mm

BELT FEEDER

Length	8 m
Width	65 cm

The belt feeder with alternative dimensions available on request





MFK Orion 3 is a fully automated egg-laying machine for customers which expect high production capacity and a wide range of elements.








It is a technologically advanced machine, which has been quickly appreciated by our customers. As one of the very few big egg-laying machines on the market of, it does not require a trackbed, but runs on dedicated reinforced wheels.

MFK Orion 3 can be used to produce a variety of elements such as concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks, chimney blocks as well as lawn edges, kerbs, drain troughs and openwork concrete elements. The machine is characterised by the biggest production range in our offer (element height: 10 to 50 cm). It is also the only egg-laying machine sold in a version with two charging hoppers, to manufacture double-layered elements (e.g. kerbs and lawn edges).

MFK Orion 3 is weather-resistant. With the additional cooling system, it can also be operated in a tropical climate. Simple mould exchange system enables quick adjustment of production to current customer's needs.

The machine is fitted with 6 vibrators, which ensure top quality of the elements produced. A dedicated vibration damping system ensures stability of the device and good vibration isolation, while the hydraulic drive makes the machine move smoothly.

MFK Orion 3 is fully automated. It is controlled through the fail-safe Mitsubishi FX controller, which guarantees stable operation in difficult weather, high accuracy and repeatability of the product, as well as precise control of all parameters of the machine. There is also a possibility to control manually the production process.

PRODUCTION EFFECTIVITY		product per cycle	
 Solid block (120 x 240 x 380)	21	 Structural-floor tiles (240 x 210 x 520)	10
 Hollow block (240 x 240 x 490)	10	 Ventilation brick (240 x 360 x 500)	8
 Hollow block (120 x 240 x 490)	18	 Kerbstone (120 x 250 x 1000)	7
 Formwork block (250 x 200 x 500)	10		

TECHNICAL DATA

Efficiency	6000-20000 items/8h
Machine dimensions (height x width x length)	4 x 2,95 x 3,9 m 4 x 2,95 x 5,1 m **
Machine weight (without mould)	5600 kg 7000 kg **
Operator	1 persons
Production cycle time	30 sec.
Power	30 kW
Hopper volume	2,2 m ³ 0,8 m ³ **
Batch drawer volume	0,37 m ³ 0,24 m ³ **
Oil container volume	180 l
Voltage	400 V

MOULDING SYSTEM
DIMENSIONS OF THE MOULD

Mould area	1330 x 1080 mm
Maximum height of the mould	550 mm
Minimum height of the mould	120 mm

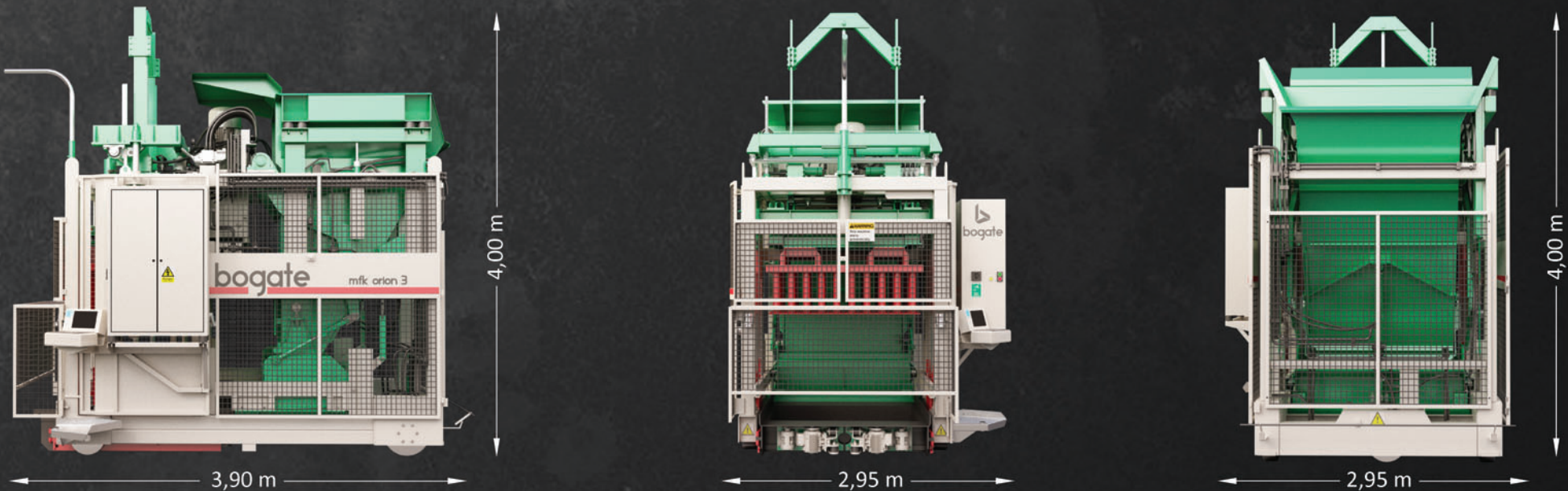
DIMENSIONS OF THE ELEMENTS

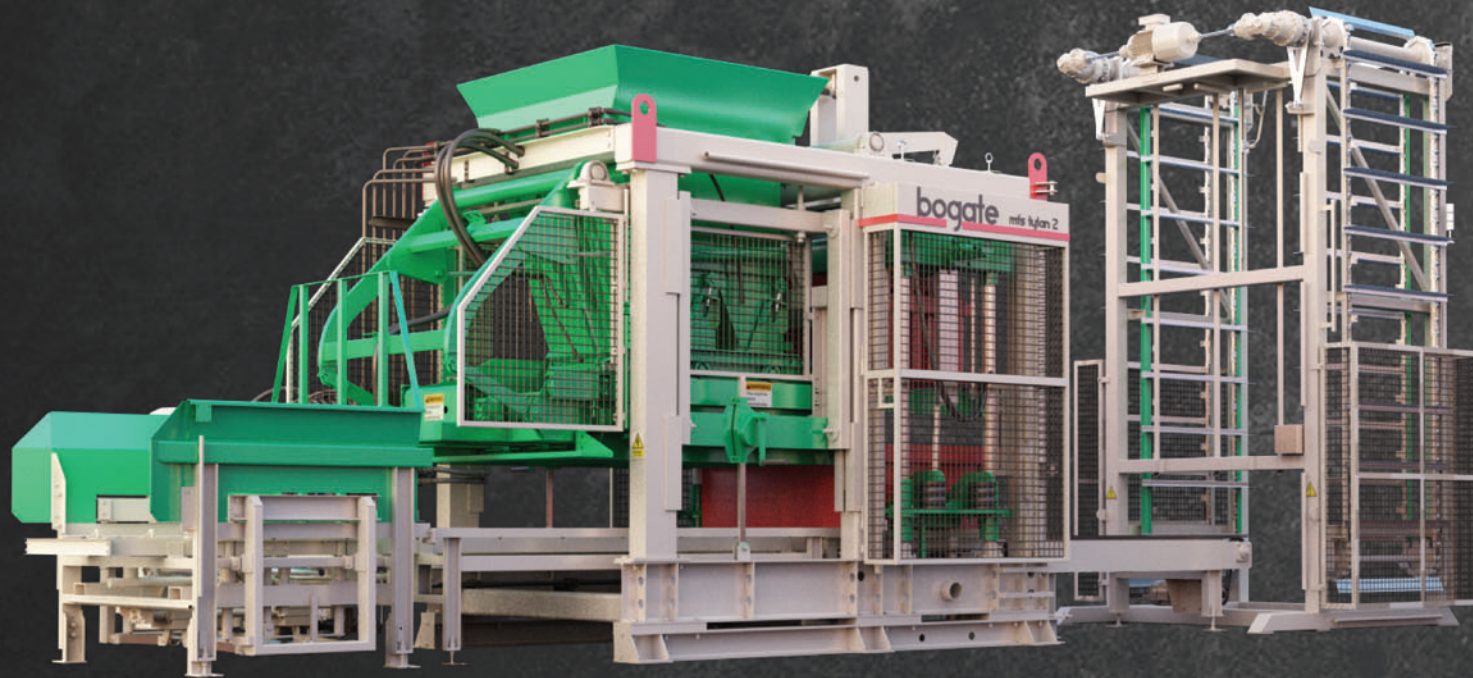
Length	1080 mm
Width	1330 mm
Maximum height of the element	500 mm
Minimum height of the element	100 mm

VIBRATING SYSTEM

Vibrators in the mould	4 x 5 kN
Tamper head vibrators	2 x 13 kN

** Orion 3+ - version of the machine for production of bicolour elements





MFS Tytan 2 is the best choice for manufacturers of concrete elements who value high production capacity. It is the biggest and the most technologically advanced device in our offer. Owing to its solid structure, which we have continually upgraded for almost 10 years, the machine is valued by a large number of customers. The numbers speak for themselves: we have sold over 50 machines so far. MFS Tytan 2 was designed to produce a variety of elements such as concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks as well as lawn edges, kerbs, concrete pavers and openwork concrete elements. The device offers high accuracy of the finished product and a vast range of production (height of elements: 6 to 35 cm).

The machine operates in a stationary mode. Empty pallets are fed from the feeder to the vibrating table, where concrete elements are formed. Finished products are transported on pallets with a chain conveyor. The production line can be extended by an additional storing device, i.e., a stacker, which is used to pile the newly-produced elements on dedicated racks. Our offer can be extended by a packing line, where finished concrete elements are cleaned, put on pallets, packed in foil and prepared for transportation. Complete production and packing lines are customised, to fit the requirements of our customers, depending on their individual expectations.

MFS Tytan is weather-resistant. With the additional cooling system, it can also be operated in a tropical climate. Simple mould exchange system enables quick adjustment of the production to current customer's needs. The system was additionally fitted with a position sensor assembly which calibrates the machine after mould exchange. The sensors also control the manufacture process, ensuring top quality of the product.

The machine is fitted with 6 vibrators, installed in the vibrating table, and with 2 electro-vibrators on the punches. The vibrators have an advanced regulation system that ensures their adjustment whilst eliminating the resonance. MFS Tytan 2 is fully automated. It is controlled through the fail-safe Mitsubishi FX controller, which guarantees stable operation in difficult weather, high accuracy and repeatability of the product as well as precise control of all parameters of the machine. There is an option of manual control of the production process. The device can also be fitted with production data storage and archiving module.

TECHNICAL DATA

Efficiency	6500-30200 items/8h
Machine dimensions (height x width x length)	3,55 x 2,9 x 5,6 m
Machine weight (without mould)	10 000 kg
Operator	1 person
Production cycle time	20 sec.
Power	58 kW
Hopper volume	1,7 m ³
Batch drawer volume	0,4 m ³
Oil container volume	270 l
Voltage	400 V

MOULDING SYSTEM
DIMENSIONS OF THE MOULD

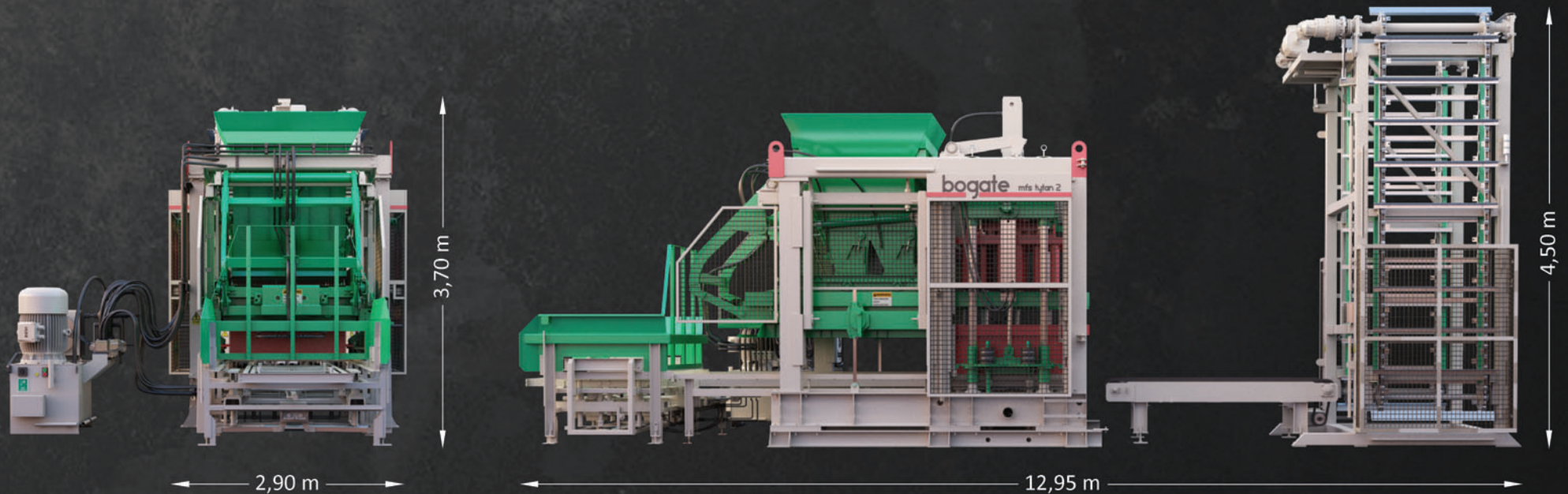
Mould area	1300 x 1050 mm
Maximum height of the mould	550 mm
Minimum height of the mould	80 mm

DIMENSIONS OF THE ELEMENTS

Length	1050 mm
Width	1300 mm
Maximum height of the element	500 mm
Minimum height of the element	60 mm

VIBRATING SYSTEM

Vibrating table	3 x 25 kN
Tamper head vibrators	2 x 13 kN







MFS Tytan 3 is a state-of-the-art machine from the Tytan family. Tytan 3 has all the functionalities of Tytan 2 and in addition it can also be used for production of double-layered materials. The machine is dedicated to manufacturers of concrete products, who expect top production capacity and who offer double-layered elements. Owing to the additional charging hopper, the device can be used to produce concrete pavers, paving slabs and openwork concrete elements with coloured top layer. Moreover, Tytan 3 can be used to produce a variety of other elements such as concrete blocks, structural-wall tiles, concrete filler blocks, ventilating bricks as well as lawn edges, kerbs, concrete pavers and openwork concrete elements. Other assets of the device include: high accuracy of the product and vast range of production (height of elements: 6 to 35 cm).

The machine operates in a stationary mode. Empty pallets are fed from the feeder to the vibrating table, where concrete elements are formed. Eventually the finished products are transported on pallets with a chain conveyor. The production line can be extended by an additional storing device, i.e., a stacker, which is used to pile newly-produced elements on dedicated racks. Our offer can be extended by a packing line, where finished concrete element are cleaned, put on pallets, packed in foil and prepared for transportation. Complete production and packing lines are customised in order to fit the requirements of our customers, depending on their individual expectations.

MFS Tytan 3 is weather-resistant. With the additional cooling system, it can also be operated in a tropical climate. Simple mould exchange system enables quick adjustment of production to current customer's needs. The system has been additionally fitted with a position sensor assembly, which calibrates the machine after mould exchange. The sensors also control the manufacture process, ensuring top quality of the product.

The machine is fitted with 6 vibrators, installed in the vibrating table, and with 2 electro-vibrators on top of the moulds. The vibrators have an advanced regulation system that ensures their adjustment whilst eliminating the resonance.

MFS Tytan 3 is fully automated. It is controlled through the fail-safe Mitsubishi FX controller, which guarantees stable operation in difficult weather, high accuracy and repeatability of the product, as well as precise control of all parameters of the machine. There is an option of manual control of the production process. The device can also be fitted with production data storage and archiving module.

TECHNICAL DATA

Efficiency	6500-30200 items/8h
Machine dimensions (height x width x length)	3,7 x 4,4 x 10,5 m
Machine weight (without mould)	13 700 kg
Operator	1 person
Production cycle time	20 sec.
Power	58 kW
Hopper volume	2,0 m ³ 0,9 m ³
Batch drawer volume	0,40 m ³ 0,35 m ³
Oil container volume	270 l
Voltage	400 V

MOULDING SYSTEM
DIMENSIONS OF THE MOULD

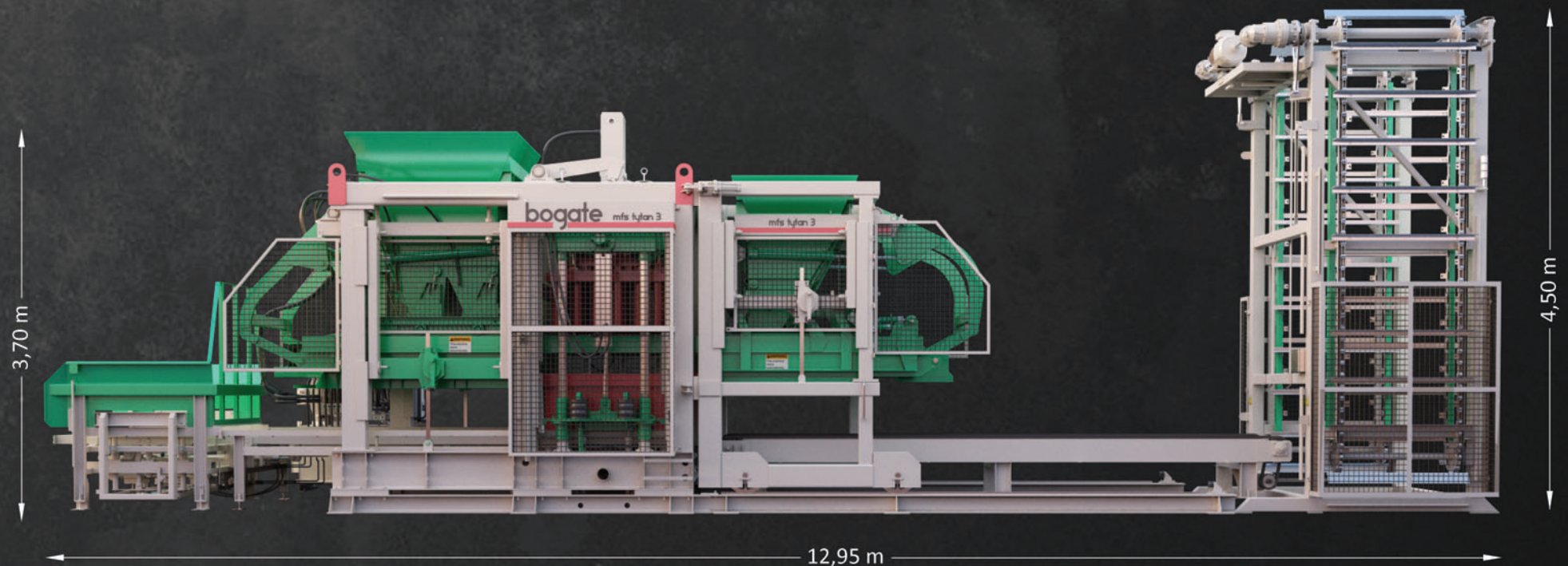
Mould area	1300 x 1050 mm
Maximum height of the mould	550 mm
Minimum height of the mould	80 mm

DIMENSIONS OF THE ELEMENTS

Length	1050 mm
Width	1300 mm
Maximum height of the element	500 mm
Minimum height of the element	60 mm

VIBRATING SYSTEM

Vibrating table	3 x 25 kN
Tamper head vibrators	2 x 13 kN





MHS Concrete-Pipe is a fully automated stationary hydraulic machine used to produce concrete manhole rings and pipes. It is an excellent choice for those customers who expect high production capacity and fully-automated processes. The machine is controlled through the fail-safe Mitsubishi FX controller, which guarantees smooth production and precise control of all parameters of the machine.

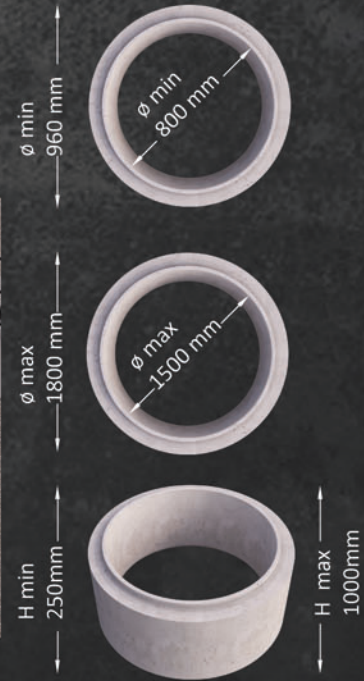
The device can be used to produce concrete pipes and rings (inner diameters from 800 to 1500 mm; height: 250 to 1000 mm). The machine also produces sewage cones, diameters: 1000, 1200 and 1500 mm, height: 600mm, as well as manhole rings (for manholes with cast-iron steps).

MHS Concrete-Pipe is based on hydraulic pressing technology, i.e. a compaction method in which concrete elements are vibrated and pressed simultaneously. Specially designed axial vibrator, installed at the core of the mould, accelerates the manufacturing process and reduces vibrations of the machine. As a result, the product has very good resistance parameters and smooth surface and is characterised by high accuracy. Owing to the state-of-the-art hydraulic system installed to control oil pressure and flow rate, the durability of hydraulic and mechanical elements of the machine was enhanced by c.a. 20%.

MHS Concrete-Pipe is installed in an underground concrete chamber, where the moulding and vibrating part is located. The mould charge and finished element discharge is performed at the level of the ground. This solution reduces the space needed for production.

TECHNICAL DATA

Efficiency	70-100 items/8h
Machine dimensions (height x width x length)	7,99 x 3,31 x 5,55 m
Inner dimensions of the underground concrete chamber	6,75 x 6,1 x 2,5 m
Machine weight (without mould)	22 000 kg
Operator	1 person
Production cycle time	4-7 min
Power	58 kW
Hopper volume	2,9 m ³
Batch drawer volume	0,9 m ³
Oil container volume	670 l
Voltage	400 V



MOULDING SYSTEM

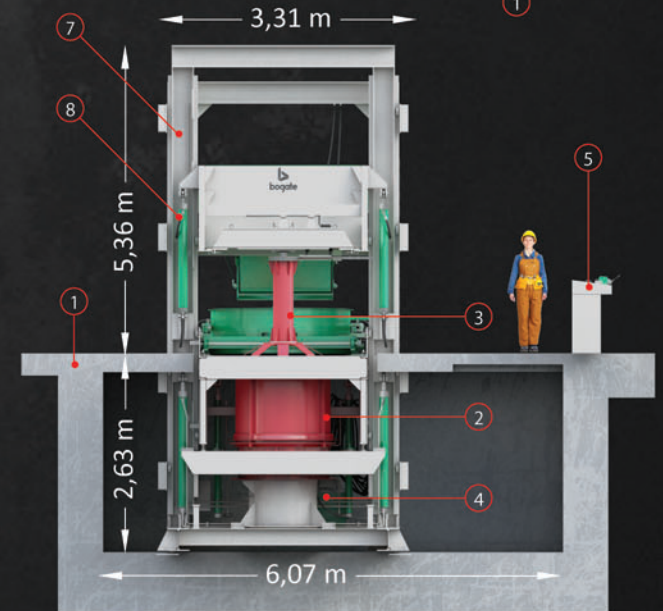
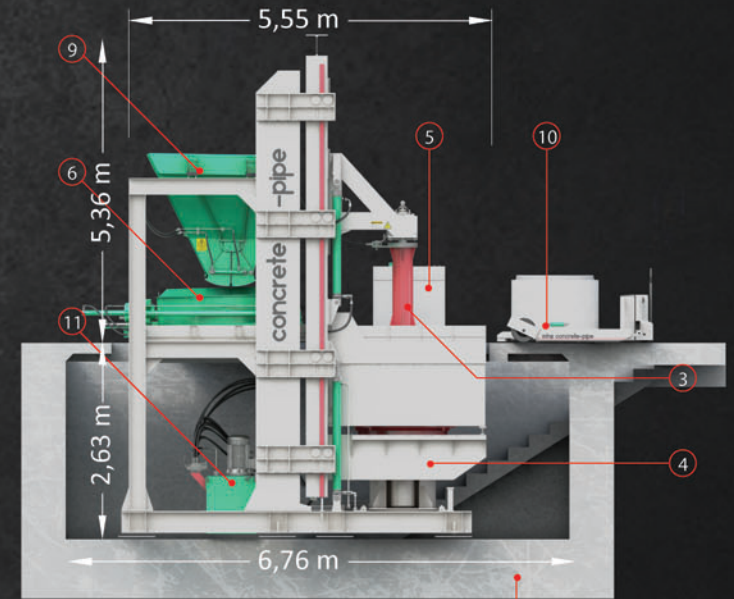
DIMENSIONS OF THE ELEMENTS

Minimum inner diameter	800 mm
Maximum inner diameter	1500 mm
Minimum outer diameter	960 mm
Maximum outer diameter	1800 mm
Minimum height	250 mm
Maximum height	1000 mm

VIBRATING SYSTEM

Axial vibrator	70 kN
----------------	-------

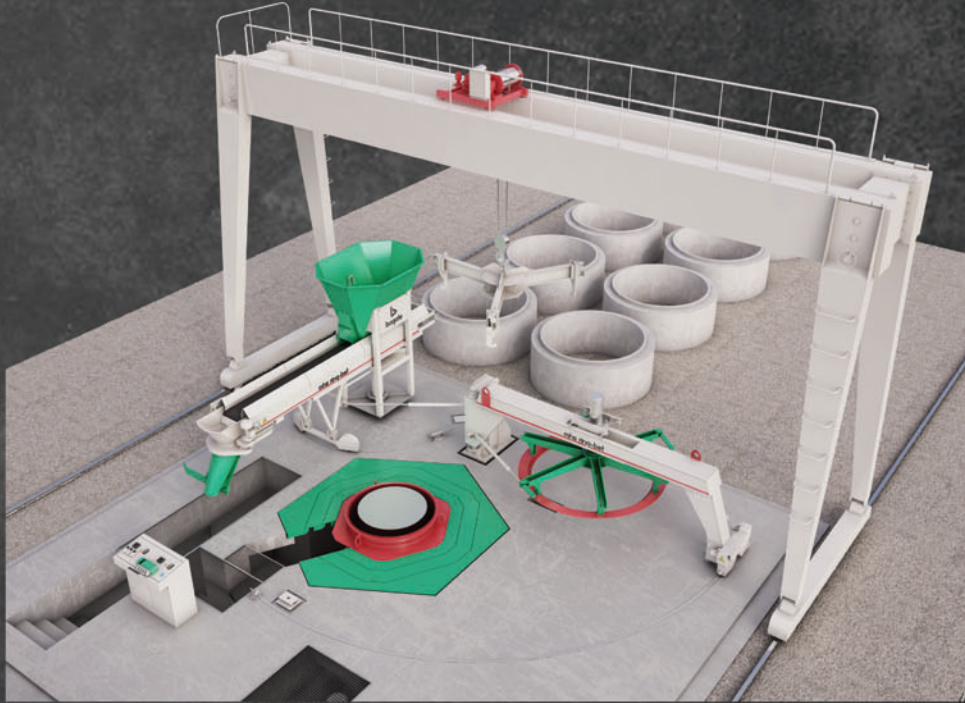
- 1 concrete foundation
- 2 mould
- 3 clamping ring
- 4 axial vibrator
- 5 control panel
- 6 batch drawer
- 7 steel frame
- 8 hydraulic cylinder
- 9 hopper
- 10 pallet truck
- 11 oil container





MHS Ring-Bet is a stationary hydraulic machine used for production of concrete manhole rings and pipes. It is a good choice for those customers who expect high manufacture quality and want to produce a vast range of sewage elements. The machine is easy to operate and can be used to produce a variety of elements. Inner diameter of the rings varies from 800 to 2000 mm. Additionally, MHS Ring-Bet is also a good choice if you produce sewage cones (diameters: 1000, 1200 and 1500 mm). Product height varies from 250 to 1000 mm. MHS Ring-Bet is based on hydraulic pressing technology, i.e. a compaction method in which concrete elements are vibrated and pressed simultaneously. As a result, the product has very good resistance parameters as well as smooth surface and is characterised by high accuracy. MHS Ring-Bet can also be used to produce manhole rings (for manholes with cast-iron steps).

The device is built from a variety of interconnected elements: charging hopper, belt feeder, rotary feeder, gland ring, vibrating table and replacement moulds. Some of the elements are installed in an underground concrete chamber. MHS Ring-Bet operates in tandem with a travelling crane. The entire production assembly covers an area of 10.5 x 9.5 m. The structure of the machine enables quick and easy mould exchange, depending on current production needs. The device is operated manually, which makes it easy to use.



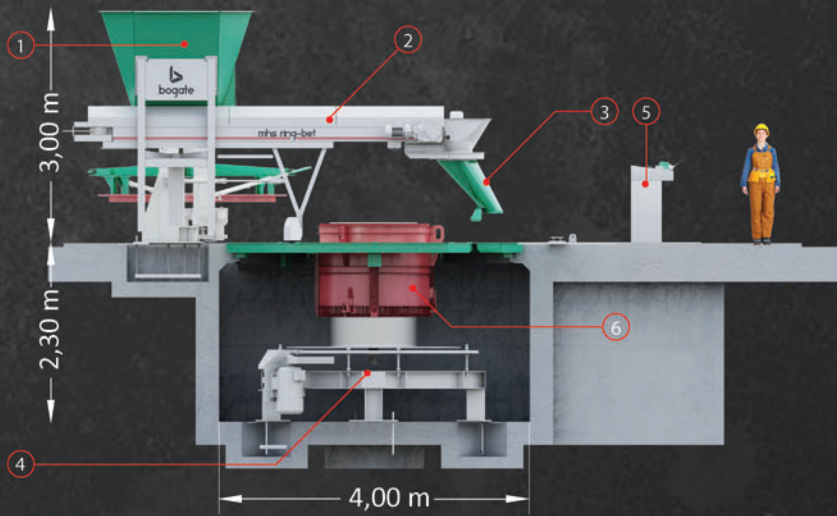
TECHNICAL DATA

Efficiency	80 items/8h
Required surface	10,5 x 9,5 m
Inner dimensions of the underground concrete chamber	7,5 x 5,1 x 2,3 m
Machine weight (without mould)	17 500 kg
Operator	1 person
Production cycle time	5-10 min
Power	44 kW
Hopper volume	1,6 m ³
Oil container volume	300 l
Voltage	400 V

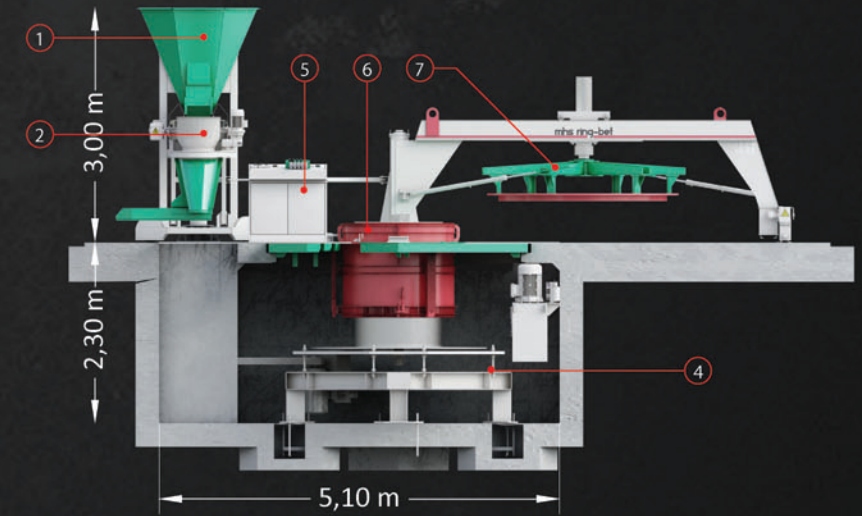
VIBRATING SYSTEM

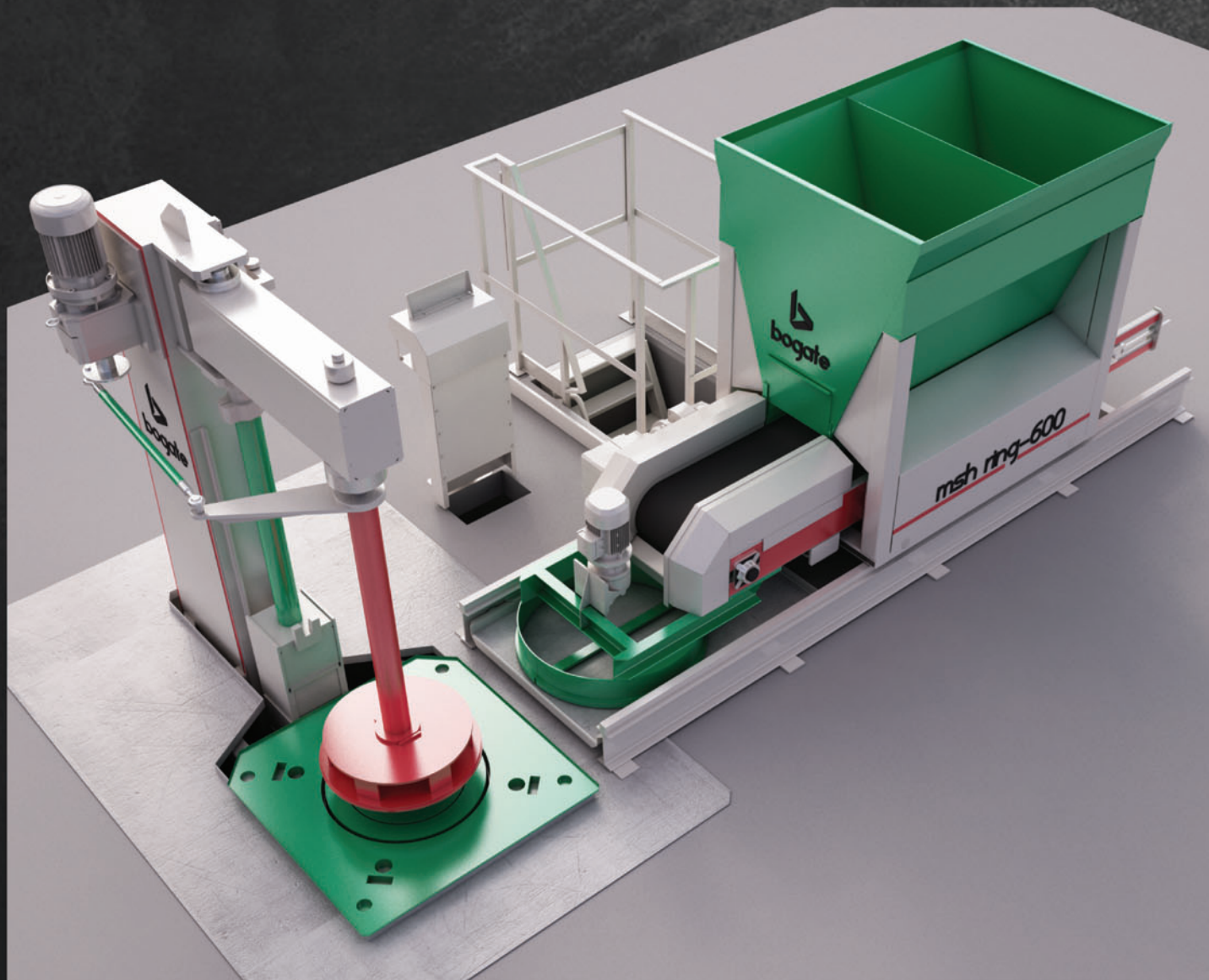
Axial vibrator	70 kN 160 kN*
----------------	------------------

* version available on request



- 1 Hopper
- 2 Belt conveyor
- 3 Dosing element
- 4 Axial vibrator
- 5 Control panel
- 6 Mould
- 7 Clamping ring

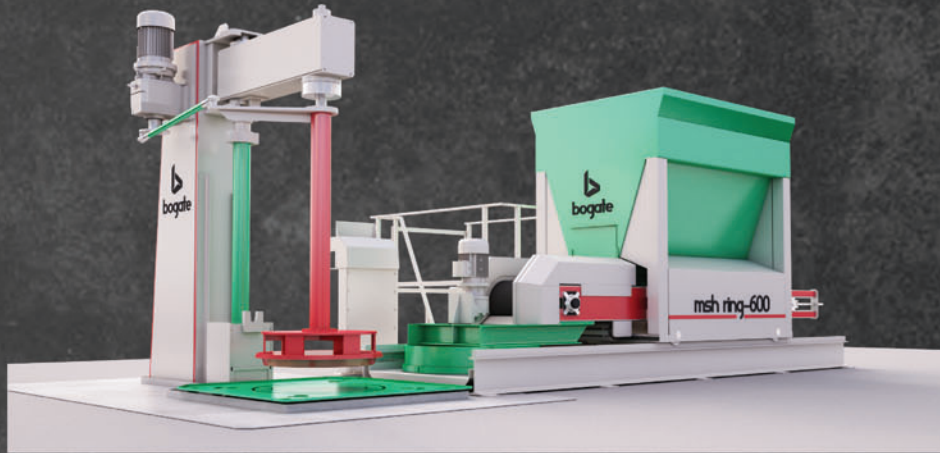




MHS Ring-600 is a stationary hydraulic machine used to produce concrete pipes. It is a perfect choice for those customers who value simple operation and want to manufacture a vast range of piping elements. Inner diameter of the pipes is from 300 to 600 mm.

MHS Ring-600 is based on hydraulic pressing technology, i.e. a compaction method in which concrete elements are vibrated and pressed simultaneously. Specially designed axial vibrator, installed at the core of the mould, accelerates the manufacture process and reduces vibrations of the machine. As a result, the product has very good resistance parameters and smooth surface and is characterised by high accuracy.

The device is built from a variety of interconnected elements: charging hopper, belt feeder, rotary feeder, gland ring, vibrating table and replacement moulds. Some of the elements are installed in an underground concrete chamber. The entire production assembly covers an area of 6.4 x 3.1 m. The structure of the machine enables a quick and easy mould exchange, depending on current production needs.



TECHNICAL DATA

Efficiency	70-100 items/8h
Required surface	6,3 x 6,3 m
Inner dimensions of the underground concrete chamber	4,5 x 3,5 x 2,04 m
Machine weight (without mould)	6500 kg
Operator	1 person
Production cycle time	3 min
Power	36 kW
Hopper volume	1,2 m ³
Oil container volume	300 l
Voltage	400 V

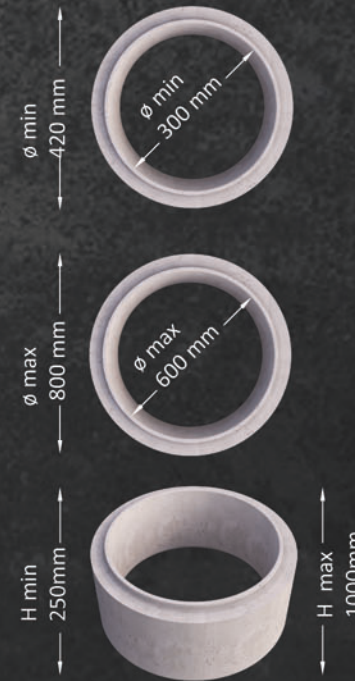
MOULDING SYSTEM

DIMENSIONS OF THE ELEMENTS

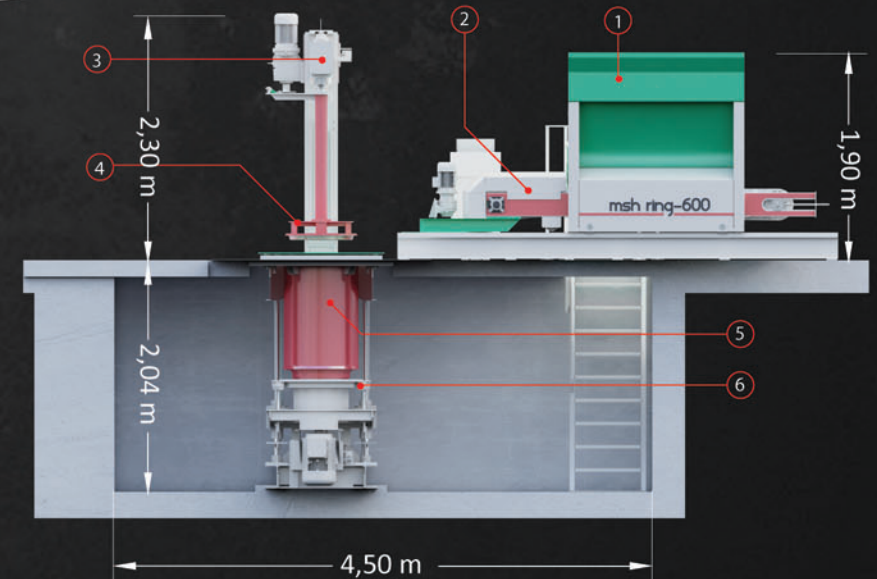
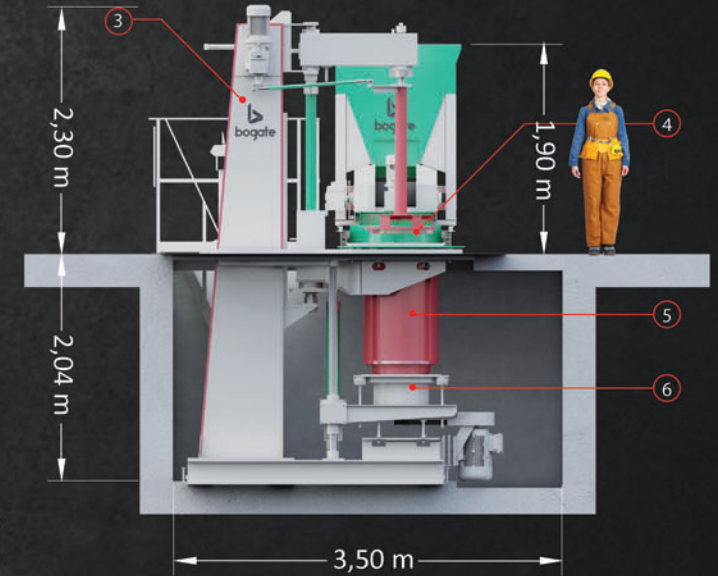
Minimum inner diameter	300 mm
Maximum inner diameter	600 mm
Minimum outer diameter	420 mm
Maximum outer diameter	800 mm
Minimum height	250 mm
Maximum height	1000 mm

VIBRATING SYSTEM

Axial vibrator	15 kN
----------------	-------



- 1 Hopper
- 2 Belt conveyor
- 3 Steel frame
- 4 Clamping ring
- 5 Mould
- 6 Axial vibrator



Concrete batching plants are a very important group of items in our offer. We provide both fixed and mobile batching plants which can be used both on construction sites and in prefabrication or concrete plants. The dismantling of the batching plant into elements depends on local transport conditions. Fixed batching plants are placed on pre-prepared foundations.

Our concrete production lines have the capacity between 20 and 120 m³/h and are configured individually, dependent on the needs and expectations of the customers. A complete line is composed of a mixer (placed on a platform), an aggregate batcher, belt scales, a charging hopper, cement storage silos, batching systems and an advanced control system, for precise control of the concrete mix production process.

Our concrete batching plants can be used to produce mixes of various grades and workability, with the use of different types of aggregate.

Core elements of all concrete batching plants:

- mixers
- structures for under the mixer
- aggregate batching systems
- cement batching system
- water dosing system
- control system



Mixers:

Mixers are offered with a horizontal or vertical mixing system, for effective mixing, quick emptying and high homogeneity of concrete.

Our mixers are fitted with:

- mixing and scraping blades made of materials with high wear resistance
- mixing and scraping arms made of hardened steel
- replacement floor and wall cladding made of hard materials with high wear resistance
- hydraulic elements

Additional elements of mixer fittings:

- control system, which controls the mixer's operation during washing
- microwave probes for moisture content measurements in a concrete mix
- concrete sampling devices (for testing)
- concrete mix workability measurement devices

Structures for under the mixer:

The platform of the mixer has an own load-bearing structure. It is fitted with stairs, landings and handrailing. The platform structure enables concrete mix collection with a truck concrete mixer of up to c.a. 4 meters in height.

Aggregate batching system:

The aggregate batching lines are composed of a freely selected number of tanks in a series. We offer tanks of various volumes, from 10 to 35m³. The tanks are made of abrasion-resistant metal sheets and protected with a layer of rust-proof paints. They can be filled up through a loader or through a tank charging system, with the use of belt conveyors. As an option, our tanks can be fitted with an electronic aggregate batching system and a moisture content measurement system.

Cement batching system:

Our offer includes storage silos of various sizes, made of abrasion-resistant metal sheets. The silos are fitted with a cement opening system, safety valves, filters and batching systems.

Water dosing system:

We offer weight systems for water dosing. These systems ensure that the appropriate amount of water is weighed out, as needed for the production of concrete mixes according to the requirements of applicable standards. The system comprises a tank, sensors, controllers and a measuring/dosing system, which ensure weighing accuracy, overflow control and recipe adjustment based on the concrete mix moisture content assessment. There is also an option of recycled water dosing.

Control system:

We offer to our clients a control system that was fully developed by our specialists. This control system fully satisfies the requirements of the applicable EN 206-1 standard that applies to all concrete manufacturers in Europe. The system ensures full automation of the concrete mix production process.

The control system consists of: software, control panel, computer and report printer. It operates in three modes: manual, automatic and service mode.

