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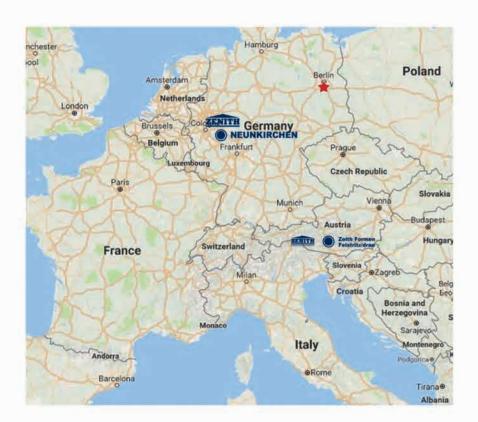
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## CHAMPIONS MADE IN GERMANY

We Provide Integrated Solution For Block Making

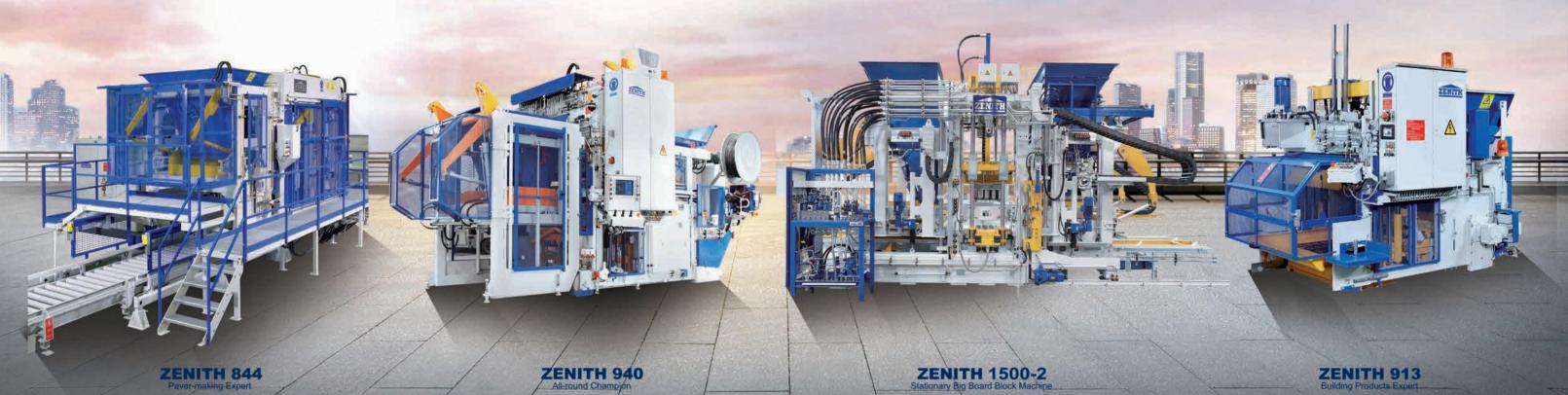






## ORIGINATED IN GERMANY

SERVICES TO THE GLOBAL





ZENITH GERMANY

One Of The Global Leading Brands For Board-Free Concrete Products Equipment



Multi Layer Technology

Saving large amount of pallet cost



Frequency Control Technology

Saving power consumption with 30% – 60% less than other suppliers' block machine of same capacity



Vibration Force 100% Delivery Zero vibration loss caused by pallet, Higher density and strength

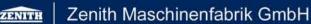
AUTO

Fully Automatic Control & Production

Only 4 workers needed for whole production line, Realization of Remote control, Remote maintenance and service





















#### **COMPANY PROFILE**

Established in 1953, ZENITH Maschinenfabrik GmbH (called ZENITH for short) is Germany-based concrete block machine manufacturer. Over the last 6 decades, ZENITH focuses on the R&D of non-pallet block producing technology and today ZENITH has become the worldwide leader in non-pallet block machine manufacturer. Our products include: Mobile Multilayer Machines, Mobile Single Pallet Machines, Stationary Multilayer Machines and Stationary Fully Automatic Production Line. Due to the highest quality and first class performance, more than 7,000 ZENITH customers all around the world will continuously benefit from ZENITH's expertise and know-how day after day, for more than 60 years.

In July of 2014, ZENITH Maschinenfabrik GmbH was acquired by Quangong Machinery (called QGM for short), and became the member of QGM Group. QGM Group is able to provide a wide range of products to our users, from simple automatic production line to fully automatic production line, from middle class to high class.



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## 940 sc

Fully Automatic Mobile Multilayer Machine







Production



System

Multifunctional Production Cleaning System

#### All-round & Highly-efficient Production

The multi talent 940 offers the widest scope of production possibilities of all concrete block and paver machines available on the world

The ZENITH 940 can be used as a universal machine as well as special machine for non-standard and special products which can't be produced by single pallet equipment. With the application of a ZENITH 940, you will always make the right choice. Concrete cable ducts, manholes, prefabricated elements and even high products up to 1,000 mm used for landscaping design can be manufactured with this machine matching highest quality aspects and allowing very economical production. Segmental units such as pavers with face mix or hollow blocks as well as insulating blocks can be made in multilayer production. The single product layers are protected and separated by a layer of dry sand or alternatively, a plastic foil.

The multilayer production offers a great advantage. The ready product cube only needs to be cured and packaged. Many intermediate transports are saved.

The well known ZENITH quality and safety features stand for low maintenance and uninterrupted productions process. Optimized quality control and simple control systems guarantee easy performance at top level.

#### Highlights

#### **Smart Operation**

The self-explanatory, menu-driven Touch Panel makes the machine operation very easy. The production parameters for different mould types and production program are entered and saved by using the well-arranged menu masks. A quick Siemens SPS is used for internal signal processing.

#### Hydraulic System

Main movements of the machine (moving of vibrating table, mould and tamper head lift and moving of feed drawer) are driven by hydraulic cylinders, developed by ZENITH and activated via proportional valves. The products can be put down during demoulding with controlled descending speed.

#### Mobile Production

The machine is equipped with high-hardness wheel, realizing mobile production. It is driven by hydraulic motors, which is stable. Also, the front wheels are equipped with braking system with accurate positioning. The mobile production is easily controlled on Touchscreen.

#### Synchronization Movement

The large dimensioned columns and guiding bearings supported by the synchronization of movements via chain and lever shaft guarantee a safe and precise guiding of mould and tamper head. Digital path measuring via linear encoder is optionally available.

#### Multifunctional Feeding System

The system consists of hopper, guide rail, feeding box and lifting device, etc. Unique cleaning blade driven by hydraulic system can guarantee the clean surface of product. Mixing shafts inside feeding box guarantee the uniform feeding. The mould brush fixed on the feeding box with adjustable height can clean the top mould.



Intelligent Interaction System



Hydraulic System



Synchronization Movement



Polystyrene Foam Inserting Device







#### Project Case







Wall of Residential Areas

Fence & Paver in Park

Fence in Square

#### Product Sample



Insulation Block





Curbstone

Paver

#### 940 Technical Details

Features	
Back concrete hopper volume (loader feeding)	1,200
Back concrete hopper volume (conveyor feeding)	2,000
Face concrete hopper volume (loader feeding)	800 1
Face concrete hopper volume (conveyor feeding)	2,000
Loader feeding height max.	2,800 mm
Production area	
Max. production width	1,240 mm
Max. production depth - vibrating table production	1,000 mm
Max. production depth - floor production	1,240 mm
Production heights	
Multilayer production	
Product height min. (production on pallets)	50 mm
Product height max.	250 mm
Max. cube height (incl. pallet) + one product layer height	640 mm
Low table production on pallets	
Product height max.	600 mm
Low table production (demoulding on floor)	
Product height max.	650 mm
Floor production	
Product height max.	1,000 mm
Product height min.	250 mm

Weight of machine / Dimensions of m	achine	
With face unit and mould		15,500 kg
Total length without face unit		4,400 mm
Total length with face unit		6,380 mm
Total height max.		3,700 mm
Total width incl. control board		2,540 mm
Vibration system		
Table vibrator / centrifugal force max.		80 kN
Tamper head vibrator/centrifugal force max.		40 kN
Mould vibrator max. 6 units/centrifugal force	max.	90 kN
Hydraulics		
System: multi circuit high pressure		
Operation pressure		250 bar
940 Standard	940 Speed & Comfort	
Capacity: 2 x 17 I/min.	Capacity: 2 x 20 I/min.	
Electrics		
Power consumption with max. nos. of vibrators		48 kW
940 Standard	940 Speed & Comfort	
Control system: Siemens S7-1500, position detection of main movements by limit switches	Control system: Siemens S7-1500, digital path measuring system for all main movement axes	

Technical details are subject to changes without prior notice. Pictures of equipment shown are examples only. Photos may include optionals as per customer's demand.

#### 940 Layout



ZENITH Maschinenfabrik GmbH





## 844 SC

Fully Automatic Stationary Multilayer Machine





Interaction System



Conveyor





Vibration Table

#### Perfect Multi-layer Production

One of the best in economical concept for the mass production of interlocking pavers and similar products of top quality. Model 844 is a fully automatic, stationary multilayer machine. The result of decades of research using the most modern technology. Performance at high level with simple handling and very low maintenance. The innovative Touch-Operator-Panel, using a revolutionary visualized menu navigation, allows easy and self-explanatory operation of all machine functions.

Designed for products ranging from 50 mm to 500 mm. With model 844, pavers are produced as easy as curbstones or landscaping products. Using modular components, the production sequence can be fully automated to final cubes - ready for transport. Storage systems with robot for curing are the perfect answer. In addition, consolidating stations are available to match shipping requirements. Step by step, the manufacturing system can be expanded to a fully automatic production line. When production is focused on paving stones, model 844 is far superior to single pallet plants, concerning the price-performance ratio, duration of installation and simplified handling. The ZENITH team will provide full assistance during an early stage to ensure your success, based on fifty years of experience.

ZENITH - Partner to the best

#### Highlights

#### **Smart Operation**

The machine is controlled via a 15" Touch Panel. This innovative technology with self-explanatory and clearly structured menu navigation helps your operating personnel to familiarize with the machine within shortest time and to work efficiently right from the start.

#### Roller Conveyor

The machine is equipped with roller conveyor, which has the features of accurate movement, stable conveying, low noise level, low failure rate and long using lifetime. Best possible protection of operating personnel is provided by the safety concept which is permanently controlled and upgraded.

#### Quick Mould-changing Technology

With the proven combination of mechanical quick lock, tamper head quick change device and electric height adjustment of filling units, the ZENITH 844 sets benchmarks for multilayer machines regarding mould change times and availability.

#### Adjustable Vibration Table

The flexibility of the machine is provided by the height adjustable vibration table. As a standard, it allows manufacture of products with a height from 50-500 mm. As per customer's requirements, it can produce special height product with special mould.

#### Accurate Feeding

Feeding system consists of hopper, guide platform, feeding car and guide axis. Anti-twist guide platform is height adjustable and sliding rail moves with accurate positioning.



Visual Operating System



Roller Conve



Adjustable Vibration Tab



Feeding Car





#### Project Case



#### **Product Sample**

Curbstone in Residential Areas



Paver in Municipal Engineering

Paver in Parking Area

844 Technical Details

Features		Machine data / Power supply			
Block height		Vibration system			
max.	500 mm	Vibrating table – two part, mounted at right angles to working direction			
min.	50 mm	Vibration force table	max. 80 kN		
The desired cube height stone		Vibrator motors table separately cooled			
max.	640 mm	(double cooling capacity with optional "Tropic	(double cooling capacity with optional "Tropical" package)		
Production area		Vibration force tamper head	max. 35 kN		
max.	1,240 x 1,000 mm	Hydraulics			
Pallet size		System: multi circuit medium pressure			
Standard	1,270 x 1,050 x 125 mm	844 Standard	844 Speed & Comfort		
Back concrete hopper		Capacity (total): 83 I/min.	Capacity (total): 117 I/min.		
Volume	2,100	Operation pressure: 180 bar	Operation pressure: 180 bar		
Should the desired stone cube height, pallet size or produ	uct height not be listed, we will	Cooling capacity (oil cooler): 13 kW	Cooling capacity (oil cooler): 16 kW		
gladly check if we can work out a special solution suiting	your needs best.	With optional package "Tropical"	With optional package "Tropical"		
Machine weight		Cooling capacity (oil cooler): 26 kW	Cooling capacity (oil cooler): 32 kW		
With hard face unit	14,000 kg	Electrics			
Roller and pusher conveyor, operating platform,	0.000 %	844 Standard	844 Speed & Comfort		
hydraulic station, pallet retainer etc.	9,000 kg	Max. power: 55 kW	Max. power: 66 kW		
Machine dimensions		Control system: Siemens S7-300 (CPU 315)	Control system: Siemens S7-300 (CPU 317)		
Max. total length	6,200 mm				
Max. total height (transport)	3,000 mm	Operation via Touch Panel			
Max. total width	2,470 mm				



Technical details are subject to changes without prior notice. Pictures of equipment shown are examples only. Photos may include optionals as per customer's demand.





913 SC

The Traveller Block Machine





AUTO Fully Automatic

Operation Mode



System



Frequency Control

#### • Excellent Mobile Technology •

Hollows, solids, foundation and chimney blocks - to mention only a few examples. ZENITH model 913, the ideal concrete block making machine for economical mass production of high quality concrete blocks. Available in semi and fully automatic execution. Outstanding performance in open area or buildings. Safe handling and well proven design principles guarantee efficient operation of ZENITH model 913, even still in decades. Different moulds are easily interchangeable. The machine produces concrete elements directly onto the ground, in lines cycle by cycle. Running wheels of machine are outfitted with Vulkollan coating for protection of concrete floor. Equipped with hydraulic shunting wheel for turning of machine at end of production lines. More than six thousand machines of this type are in operation worldwide.

ZENITH offers for all travellers comprehensive equipment for concrete block handling. Cubers with special clamps are available. Transport of fresh concrete from batching and mixing plant to block machine is preferably made with a forklift equipped with a hopper or with a special concrete loader. Ask ZENITH for the options available. Safety and quality are guaranteed by ZENITH providing original ZENITH parts are used.

#### Highlights

#### Manual Operation Mode

The machine can be manually operated by directional control valve with the features of accurate control, easy operation and high mobility.

#### **Fully Automatic Operation Mode**

The machine is also equipped with automatic control panel. It is easy for operator to operate the machine through visual screen, realizing fully automatic production.

#### Frequency Control

The motor of ZENITH 913 adopts frequency control system, with the feature of low power consumption, stable performance. The system has accurate pressure control. The electric drive unit with frequency control allows a fast and gentle travel.

#### Quick Assembly of Safety Gate

Safety gate is equipped with retractable springs, which has the features of quick assembly and disassembly, convenience for the cleaning and maintenance of mould. Strong and easy lock mode can not only provide convenience, but also guarantee the maximum safety of operator.



Manual Operation Mode



Fully Automatic Operation Mode



Frequency Control



Polystyrene Foam Inserting Device







### Project Case



#### Product Sample



Hollow Block Insulation Block

#### 913 Technical Details

Features	
Hopper volume	1.000
Loader feeding height max.	2.005 mm
Max. production width	1.240 mm
Max. production depth	1.130 mm
Min. production height	175 mm
Max. production height	330 mm
Machine weight	
With mould and vibrators	ca. 5.500 kg
Machine dimensions	
Total length	2.850 mm
Total height max.	3.000 mm
Total width	2.337 mm

Vibration system			
Max. 4 mould vibrators	48 kN		
Max. 2 tamper head vibrators	20 kN		
Hydraulics			
System: high pressure circuit			
Operation pressure	250 bar		
913 Standard	Capacity: 12 I/min		
913 Speed & Comfort	Capacity: 14,2 l/min		
Electrics			
Power consumption with max. nos. of vibrators	18 kw		
913 Standard	Control system: with contactor control		
913 Speed & Comfort	Control system: fully automatic controller with dialogue module and visualisation		

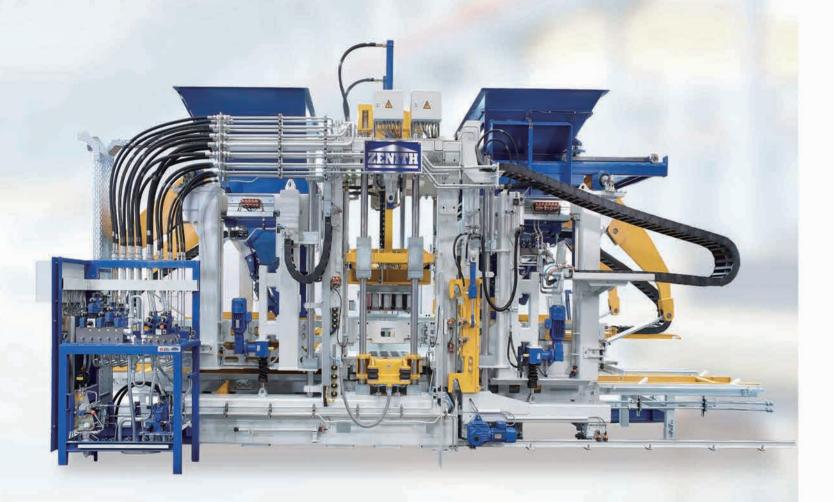
Technical details are subject to changes without prior notice. Pictures of equipment shown are examples only. Photos may include optionals as per customer's





## 1500-2

Fully Automatic Stationary Single Pallet Machine





Interaction System

Quick Mould-changing

Servo Vibration



Suspending Feeding Technology

#### • Fully Automatic Single Pallet Machine •

The newly designed high-performance single pallet machine 1500 forms the centrepiece of a state-of-the-art and efficiently working concrete block production. The wide range of production possibilities meets all customer requirements. The 1500 comprises the production of niche products, gardening and landscaping products as well as pavers, kerbstones and bricks.

In addition to a high quality and productivity, our engineers put special focus on guaranteeing a low-maintenance and trouble-free production process. Owing to the continuous use of screw fittings, all wear parts can be easily exchanged within shortest time. Based on the screwable design of the vibration table, the motor cross beam and the frame side parts, this machine is unique on the market as it adapts to the customer's production conditions.

#### Highlights

#### Quick Mould-changing System

The new electrical bracing of the 2nd filling device is unique on the market. This efficient, electrical solution allows for a guick and safe connection of the machine base part with the 2nd filling device. With this, a safe and fully automatically opening and closing of the 2nd filling device is possible. Quick and short mould change and maintenance times are therefore the major advantages.



A self-explanatory and intuitionally visualization concept guarantees for an easy learning of the machine operation. A new diagnostic design supports the machine operators in choosing the best adjustments for the machine. By using the latest database technology, all information can be recorded, evaluated and stored.

#### Trouble-shooting System

Owing to the continuous use of PROFINET and Ethernet, all information is available anywhere and at any time. All controlled axes are monitored via absolute value encoder technology, a time-consuming calibration of the plant in case of a blackout is not necessary anymore. By means of the already installed internet remote maintenance, our world-wide based service engineers from ZENITH can offer support at any time.

#### Scalable Performance

The machine is equipped with scalable performance, meaning it has varieties of convenient and practical program to control scalable device or equipment, such as Quick Mould-changing System, various color-mixing equipment and Tamper Head Cleaning Device.





Face Mix Unit with Safe Hydraulic Locking



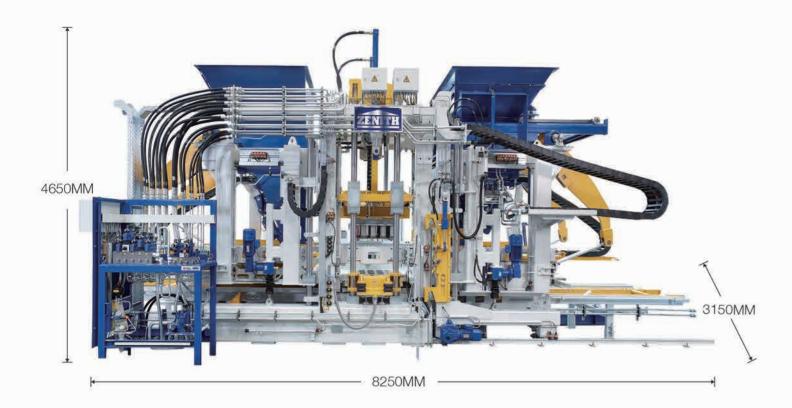
**Fixed Screw Connection** 



Suspending Feeding Technology







Front View of ZENITH 1500-2

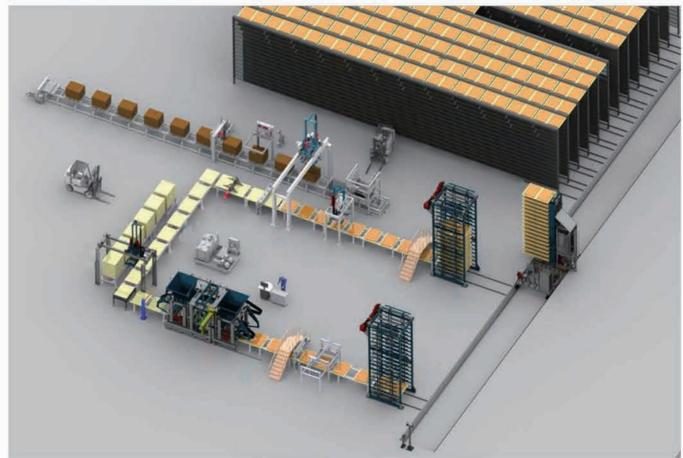
#### 1500-2 Technical Details

Product Height		Machine Size	
Max	500 mm	Max Length	8250 mm
Min	35 mm	Max Height	4650 mm
Stacking Height		Max Width	3150 mm
Max Stacking Height(including Pallet)	1800 mm	Technical Parameters/Consum	ption
Max Production Area(Standard-size Pallet)	1300 x 1050 mm	Vibration System	Servo Vibration System
Pallet Size(Standard)	1400 x 1100 mm	Vibration Table	Max 175KN, 60HZ
Thickness of Steel Pallet	14 mm	Top Vibration	Max 32KN
Volume of hopper for main material		Hydraulic System	
(not including Facemix Hopper)	1500 L	Total Flow	540 L / min
Weight of Machine		Working Pressure	180 bar
With Facemix Device	35 T	Hydraulic System	
Pallet Conveyor	1.6 T	Max Power	140 KW
Hydraulic System	3.2 T	Control System	SIEMENS S7-1500, Touchscreen

Technical details are subject to changes without prior notice. Pictures of equipment shown are examples only. Photos may include optionals as per customer's demand.

#### **1500-2** Layout





## 1800

### Fully Automatic Stationary Single Pallet Machine





Interaction System

Quick Mould-changing

Servo Vibration

Suspending Feeding

#### • Fully Automatic Single Pallet Machine •

The newly designed high-performance single pallet machine 1800 is a model for successful improvement based on the principle of mechanical design with the characteristics of rapid production, high product quality and product diversification. The unique design concept of equipment allows the equipment to own the performances of precise running, easy operation and maintenance, which makes the process of producing pavers with face mix and curbstones more efficient under increasingly strict engineering safety requirements

In order to minimize the molding cycle and optimize the production process, Zenith has made extensive cooperation with well-known components company to improve hydraulic systems and electrical equipment. The improved equipment 1800's four main movements of mold lifting, tamper head lifting, the feeding frame drives of base material and face material are controlled by HNC circuit, which makes the operation more accurate and faster.

Zenith has made new developments for the vibration system of equipment 1800 to break through the capacity limit including using the newly developed frequency control motor vibrator, which make equipment more stable and flexible. The max production area of ZENITH 1800 reaches 1400 × 1400 mm (pallet size).

#### Highlights

#### Visual Operation and Security Device

The operation system is more simple and user-friendly. The brand of equipment controller is SIEMENS. All device components are displayed on a computer monitor with visualization system WINCC and Windows XP professional operation system. The equipment has security device, and some features can only be adjusted by authorized personnel, which guarantees that only authorized personnel can operate the machine and reporter can be saved in the system.

#### Maintenance-free Hinge Shaft Design

Hydraulic cylinder and drive shaft of the equipment are equipped with maintenance-free hinge shaft. On the lifting arm, a rotatable belt with quick-change bolts is installed, which is convenient for bolt replacement and makes the machine easy to be maintained.

#### Optimized Vibration System

Vibration system includes vibration table and vibrator. The vibration table is divided into three parts, and the vibration system is equipped with variable frequency vibrator. The vibration force of 6 single electromechanical vibrators is continuously adjustable. The maximum centrifugal vibration force can reach 179KN. Pre-vibration and main vibration can be combined by different vibrators and can be adjusted on the control panel, which makes the equipment more stable and flexible, and guarantees the required bricks quality control.

#### Hydraulic Drive of Feeding Device

The feeding device and the main machine frame are connected by a hydraulic clamping device, and the feeding device can be easily adjusted to the individual feeding height by electric jack. The feeding car is driven by leveraged shaft hydraulic oil cylinder. The connecting rod is adjustable, which guarantees the parallel movement of the feeding car. The front of feeding car is equipped with a pneumatic scraper, and the movement path of the scraper can be adjusted to ensure effective cleaning.

#### Hydraulic Accumulator Buffer Device

The equipment can be equipped with hydraulic accumulator buffer device optionally. The device can realize the fast and precise operation of the equipment, and make the equipment operate accurately and at low wear state during operation by HNC control circuit.







Hydraulic Drive Feeding Device



Hydraulic Accumulator Buffer Device

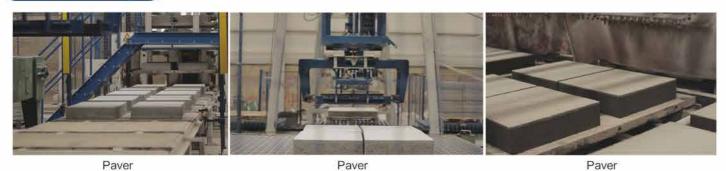
## 3300MM 3150MM 9100MM

#### Front View of ZENITH 1800

#### Project Case



#### Product Sample



#### 1800 Technical Details

Features		Machine Data/po
Max. block height	500 mm	Vibration system
Min. block height	50 mm	Vibration table (Palle
Optional production height(min.)	20mm	6 vibrators (Max. ce
Standard pallet size		Vibration table (Palle
Max.	1400×1400 mm	8 vibrators (Max. ce
Different pallet		Tamper head vibrato
sizes are possible		2 vibrators (Max. ce
Back concrete hopper		Hydraulics
Volume	2400 L	System: multi circuit
Different hopper executions depending on product	tion pallet are possible	Capacity (total)
Hard face hopper		Max. operation pres
Volume	**	Optionally accumulat
Different hopper executions for muti-color produc	tion pallet are possible	Electric data
Max. feeding hight	3900 mm	Connection power (s
Machine weight		Control system (Sier
With hard face unit	32.000 kg	Desk-/board version
Machine dimensions		
Max, total length	9100 mm	
Max. total height	3300 mm	Total of Jackson 1881
Max. total width	3150 mm	Technical details are subject your reference only. Photos

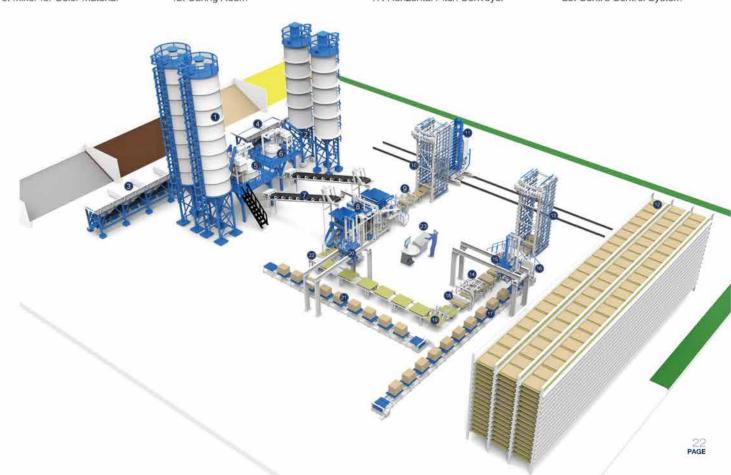
Machine Data/power supply	
Vibration system	
Vibration table (Pallet depth up to 1200 mm)	Three parts
6 vibrators (Max. centrifugal force)	170 KN
Vibration table (Pallet depth over 1200 mm)	Two parts
8 vibrators (Max. centrifugal force)	230 KN
Tamper head vibrators	
2 vibrators (Max. centrifugal force)	35 KN
Hydraulics	
System: multi circuit, medium pressure	
Capacity (total)	315 L/min
Max. operation pressure	180 bar
Optionally accumulator buffer	
Electric data	
Connection power (standard) with hardfacing unit	210 KW
Control system (Siemens)	\$7-400
Desk-/board version PC visualization system (WinCC)	

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#### Production line layout of 1800 blocks making machine

- Screw Conveyor
   Batcher for Main Material
- Batcher for Color Pigment
   Mixer for Main Material 6. Mixer for Color Material
- 7. Belt Conveyor 8. Block Making Machine
- 9. Wet Product Cleaning Conveyor
- 10. Elevator
- 11. Finger Car 12. Curing Room

- 14. Dry Product Conveyor
- and Pre-clamping Device 15. Palletizer
- 16. Wooden Pallet Separator
- 17. Horizontal Pitch Conveyor
- 18. Scraper Device19. Pallet Turning Device
- 20. Pallet Palletizing Device 21. Pallet Buffer Device 22. Pallet Storage Bin
- 23. Centre Control System





#### 940 Production Capacity S&C Version

040	Max Production Area: 1240x1000mm				
940	Production Height: min 50	mm - max 1000mi	m		
Block Type	Dimension (mm)	Picture	Qty/Cycle	Cycle Time	Production Capacity (Per 8h)*
Hollow Block	400x200x200		12	40 s	8,640pcs
Rectangular Pavers (with facemix)	200x100x60		54	38 s	817m²
Rectangular Pavers (without facemix)	200×100×60		54	36 s	864m²
UNI Pavers (with facemix)	225x112.5x80	•	40	38 s	757m²
Curb Stone	150x1000x300		4	46 s	2, 504 pcs



#### 844 Production Capacity S&C Version

044	Max Production Area: 124	40x1000mm			
844	Production Height: min 5	0mm - max 500m	m		
Block Type	Dimension (mm)	Picture	Qty/Cycle	Cycle Time	Production Capacity (Per 8h)*
Rectangular Pavers (with facemix)	200x100x60		54	28 s	1,092 m²
Rectangular Pavers (without facemix)	200x100x60		54	25 s	1,248 m²
UNI Pavers (with facemix)	225x112.5x80	•	40	28 s	1,040 m²
I I shape Pavers	198x163x60	Ŋ	30	38 s	1,040 m <sup>2</sup>
Curb Stone	150x1000x300		4	46 s	2,496 pcs



#### 913 Production Capacity

913	Max Production Area: 12	40x1130mm				
313	Production Height: min 175mm - max 330mm					
Block Type	Dimension (mm)	Picture	Qty/Cycle	Cycle Time	Production Capacity (Per 8h)*	
Hollow Block	400x200x200		12	35 s	9,792 pcs	
Hollow Block	400x150x200		16	35 s	13,165 pcs	
Hourdis	520x160x200		12	35 s	9,792 pcs	
Solid Block	400x200x200	9	12	35 s	9,792 pcs	



<sup>\*</sup>The above capacity data is approximate indications and depends on machine settings, mix design, type of aggregates, batching plant & handling and other environmental conditions.

#### 1500-2 Production Capacity

1500-2	Max Production Area : 1;	300×1050mm			
1500-2	Production Height: min 35	5mm - max 500mi	m		
Block Type	Dimension (mm)	Picture	Qty/Cycle	Cycle Time	Production Capacity (Per 8h)*
Hollow Block	400x200x200		15	15 s	28,800 pcs
Rectangular Pavers (with facemix)	200x100x60		60	1 <mark>4</mark> s	2,419 m²
Rectangular Pavers (without facemix)	200x100x60		60	11 s	3,110 m²
Curb Stone	1000x250x150		6	20 s	8,640 pcs



<sup>\*</sup>The above capacity data is approximate indications and depends on machine settings, mix design, type of aggregates, batching plant & handling and other environmental conditions.

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# AUXILIARY SYSTEM FOR BLOCK MACHINE





#### Batcher

Various types of aggregates are weighed automatically according to the pre-set recipe of aggregates in the batching system, and then delivered to mixer for mixing through belt conveyor.

Bin Volume 4x13m3/bin(aggregates)+2x9m3/bin(facemix)

Weighing accuracy and scope

1 Batcher for basemix

2 Batcher for facemix

Weighing scope: 4x400-2000Kg Weighing accuracy: ≤ ± 2% Weighing scope:180-1800kg Weighing accuracy: ≤ ±2%

Belt conveyor

1) Basemix batcher power: 7.5kw+2.2kw, Width B800

2 Facemix batcher power: 2.2kw, Width B500

Batching Cycle Time: 40S

Note: The batcher is customized according to customer requirement



#### **Humidity Sensor**

Microwave humidity measuring sensor is applied to control the humidity of the concrete and the system will automatically calculate the water consumption for the concrete mixing and feed back to the water weighing system. The humidity controlling system is equipped with automatic water-adding device, meaning when the humidity is less than the data pre-set in the system, the system will automatically add water to guarantee the quality of product.



#### Forklift Hopper

Forklift hopper is applied in the concrete feeding into the block machine. It is installed with the forklift. The volume of the hopper is around 1000L and the weight is around 350kg.





#### Hydraulic 4-side Block Clamp

The block clamp needs 2 sets of separate hydraulic systems, installed with the forklift.

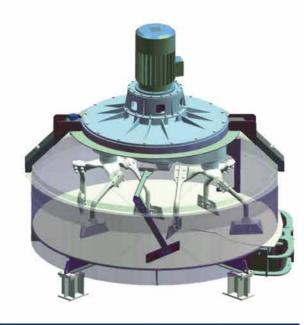
- 1. Opening range in width direction: 550-1240mm
- 2. Opening range in length direction: 900-1400mm
- 3.Height inside: 850mm
- 4.Clamping weight: 2600kg
- 5. Weight of Block Clamp: 740kg





#### Planetary Mixer





Paramet Item	er Model	MP330	MP500	MP750	MP1000	MP1500	MP2000
Discharging Capacity		330 L	500 L	750 L	1000 L	1500 L	2000 L
Feeding Capacity		500 L	750 L	1125 L	1500 L	2250L	3000 L
Theoretic Productivity ( m³/h )		6.6	10	15	20	30	40
Maximum Diameter of Aggregates (crushed stone)		< 40mm	< 40mm	< 60mm	< 60mm	< 60mm	< 60mm
Cycle Time(S)		180	180	180	180	180	180
Total Weight(kg)		1700 kg	2400 kg	3900 kg	6300 kg	7700 kg	9600 kg
Dimension(mm)	Length	1871 mm	2224 mm	2581 mm	2891 mm	3223 mm	3625 mm
	Width	1862 mm	2071 mm	2336 mm	2602 mm	2902 mm	3230 mm
	Height	1855 mm	1910 mm	2195 mm	2217 mm	2425 mm	2630 mm
Mixing Blade	Rotary Speed	46	46	44	35	35	31
	Number	2	2	3	4	4	6
	Theoretical Using Lifetime	10,000 times	10,000 time				
Lining Board	Side Lining Board	20	24	120	120	144	180
	Bottom Lining Board	5	10	50	69	82	99
	Theoretical Using Lifetime	20,000 times	20,000 time				
Power of Mixing Motor ( kW )		15	18.5	30	37	55 kW	75
Power of Hoisting Motor ( kW )		4	4	7.5	11	15 kW	22
Speed of Lifting Hopper ( m/s )		0.25 m/s	0.25 m/s				
Power of Hydraulic Motor ( kW )		3	3	3	3	3	4
Power of Water Pump ( kW )	Pressure Pump	0.55	0.55	2.2	3	4	6.5
	Intake Pump	1.1 kW	2.2 kW	2.2 kW	2.2 kW	4kW	
Maximum weighing range of cement		200L	300L	400L	500L	650L	800L
Maximum weighing range of water		90L	90L	200L	200L	300L	400L

### **Project Case**















