### Global Vision, Local Service



QGM Quangong Machinery, which was founded in the year 1979, is the leading supplier of concrete machinery and plant, with 35 years experience.

- 1. 150,000 m<sup>2</sup> factory, 500 workers, 50 R&D engineers and 68 technicians;
- 2. Our company fully implements 6S, ERP, ISO9001 Quality Management System and ISO14001 Environment Management System;
- 3. QGM applies Germany Technologies in our concrete machinery and plant:
- A. Concrete Block and Paver Making Plant;
- B. Concrete Mixing and Batching Plant;
- C. AAC Block Making Plant.
- 4. Our machines, with CE certificate, have independent intellectual property rights, and are granted as "Well-Known Trademark of China";
- 5. QGM has 16 overseas offices and 25 overseas warehouses;
- 6. Our machines are well distributed and can be found in use in more than 108 countries and areas;
- 7. With Quality and Service, We Provide the Integrated Solutions for Block Making and Concrete Mixing.





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We are the specialist in:

Concrete Blocks and Pavers Making Plant; AAC Blocks and Bricks Making Plant;

Ready-mixed Concrete Batching and Mixing Plant.







### Leadership

The endless river eastward flows, with its huge waves are gone all those gallant heroes of bygone years. QGM seizes each and every opportunity of development in the market, to keep competitive in the fast growing industry of construction machinery. We are endeavoring to build the No.1 Brand in China.



### **Company Profile**

- . Founded in 1979, QGM is the leading block machine manufacturer and has the longest history in China.
- Start from 2012, QGM has set up office around the world, include Russia, Saudi Arabia, Oman, Libya, Algeria, Indonesia, India, Brazil, Mexico, with the sales growing, more new offices will be set up soon to serve our clients.
- In 2012, QGM acquired 40 Germany engineers from Germany famous block machine manufacturer and set up global R&D Center in Emden, Germany.
- In 2013, by applying most advanced technology from QGM Germany R&D Center, new model T10 and T15 launched, the T series block machine are well known for its high production capacity and stable performance.
- . In 2014, two new subsidiaries joined QGM Group, which are Zenith Emden and Zenith Neunkirchen.

Benefit from the close collaboration between the above 2 Germany subsidiaries and QGM China manufacturing center, QGM Group is able to provide a wide range products to our users, from simple automatic production line to fully automatic production line, from middle class to high class.







Engineers in QGM Germany Global R&D Center







Engineers in QGM China Manufacturing Center

Service Engineers







Version:2014-09

# CORE **TECHNOLOGIES**

# 01 High-efficient Vibration

Adopt the most-advanced vibration technology from Germany. The vibration table consists of dynamic table & static table, which greatly improve the vibration efficiency and guarantee the high quality of concrete products.



## 04 Fully-automatic Control

Perfectly combine the automation technology and system from Germany. The automatic control is of easy operation, low failure ratio and high reliability.



# 02 High-efficient Hydraulic System

The hydraulic pump & valve are from international brand. Adopt high-dynamic proportional valve and constant output pump to adjust the oil speed & pressure, with the features of high-stability, high-efficiency and energy-saving.



# 05 Compulsory Feeding

Uses two SEW feeding motors, which control two mixing shafts. The feeding frame, bottom plate & mixing blades are made of high-duty HARDOX steel, which strengthen the sealing performance and prevent the material leakage. The discharging gate is controlled by SEW motor.



### Frequency conversional control & Energy-saving

Frequency conversional technology was re-innovated and improved by Germany R&D center. It can save 20%-40% power by adjusting the frequency converter, compared to traditional motor; at the same time, it can greatly improve the quality of concrete products and prolong the motor lifetime.

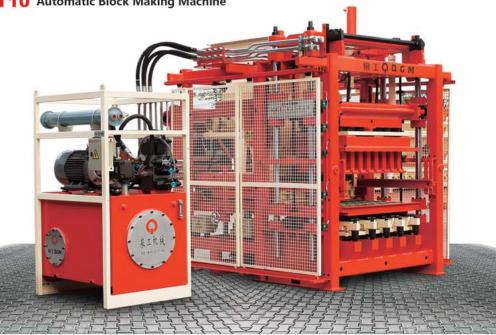


# 06 Remote control(Optional)

Use the most-advanced industrial internet technology, with the advantages of remote control & operation, automatic trouble-shooting & maintenance.



# T10 Automatic Block Making Machine





05







Vibration System	Feeding Sy	rstem Hydraulio	: System (	Control System
	Forming Area	1,100 x 820mm	Bottom Vibration	2 x 7.5kW
Technical Parameters	Height of Finished Products	50-300 mm	Top Vibration	2 x 0.65kW
	Cycle Time	15-25 s ( as per mould )	Electrical Control	Siemens
	Hopper Volume	900L for Base Concrete 750L for Face Concrete	Power	39.85 kW
	Pallet Size	1,200 x 870 x 45 mm 1,200 x 870 x 12 mm	Total Weight	9.0 T (Without Facemia) 12.0 T (With Facemia)

Product	Size	PCS/Mould	PCS/8h	
Hollow Block	400x200x200mm	10	12,000-15,000	•
Rectangular Paver (withface mix)	200x100x60mm	35	42,000-52,500	-
Zig-zag Paver	225x112.5x60mm	24	28,800-36,000	-

<sup>\*</sup> The capacity data are theoretical and are dependent on machine settings, mix design, aggregates used and other environmental conditions











Vibration System	mould	Hydraulic system	Fee	ding system
	Forming Area	1,300 x 1,050 mm	Bottom Vibration	4 x 7.5 kW
Technical Parameters	Height of Finished Products	50-500 mm	Top Vibration	2 x 1.1 kW
	Cycle Time	12-20 s ( as per mould )	Electrical Control	Siemens
	Hopper Volume	3.8m³ for aggregate 3.8m³ for facemix	Power	47.5 kW
	Pallet Size	1,400 x 1,100 x 50 mm 1,400 x 1,100 x 14 mm	Total Weight	18.3 T (Without Facemix) 25.2 T (With Facemix)

Product	Size	PCS/Mould	PCS/ 8h	
Hollow Block	400x200x200mm	15	18,000-22,500	
Rectangular Paver (with face mix)	200x100x60mm	54	64,800-81,000	-
Zig-zag Paver	225x112.5x60mm	40	48,000-60,000	-

<sup>\*</sup> The capacity data are theoretical and are dependent on machine settings, mix design, aggregates used and other environmental conditions





### Six Big Advantages

- 1. Germany Siemens PLC control system, Siemens touchscreen, Germany Siemens electrical components.
- 2. Germany Frequency Conversional Control Technology.
- 3. Double High-dynamic Proportional/Directional Valves to automatically adjust the oil flow and pressure.
- 4. 360° Multi-Shaft Rotating and Compulsory Feeding.
- 5. Heat Treatment on moulds and main parts of the machine.

# Technical Specifications (QT10)

Cycle Time	15-20S	Vibration Force	100KN
Total Power	52KW	Machine Size	8,100x4,450x3,000mm 9,600x4,450x3,000mm
Motor Frequency	50-60HZ	Total Weight	15T
Pallet Size	1,250x850x(8-35)mm	Production Area	1,150x800mm

Block Specification	Production per Mould(pcs)	Production per Shift (pcs)
400x200x200mm	10	11,000-14,000
400x150x200mm	14	15,000-19,000
200x100x60mm	35	38,500-49,000
225x112.5x60mm	27	29,700-37,800



PLC & Touchscreen

Vibration

Transmission Shaft



Electrical Cabinet

Double High-dynamic

Proporsional Valve



Feeding Device

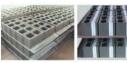






Electrical components Frequency Convertor





Technical Specifications (QT6)

Cycle Time	15-20S	Vibration Force	60KN
Total Power	31KW	Machine Size	5,210x3,530x2,780mm
Motor Frequency	50~60HZ	Total Weight	7.5T
Pallet Size	850x680x(8-35)mm	Production Area	800x630mm

Block Specification	Production per Mould(pcs)	Production per Shift (pcs)
400x200x200mm	6	6,600-8,400
400x150x200mm	8	8,800-11,000
200x100x60mm	21	23,000-29,400
225x112.5x60mm	15	16,500-21,000





### 1. Fully Automatic Production Line

- Silo Screw Conveyor
- Mixers for Main Material and Color Material **6** Belt Conveyor
- Elevator Finger Car
- (B) Cuber
- Pallet Turning Device
- (B) Control Room & Control System

Shipping Pallet Magazine



8 Batcher for Main Material

**(ii)** Lowerator

(6) Chain Conveyor

(E) Curing Room









Pallet Conveyor

Batcher for Color Pigment

Transporting Conveyor Belt

Lengthways Latch Conveyor





### 2. Automatic Production Line with Central Control System

Cement Weighing System

Silo

(9) Central Control system

- Screw Conveyor
- **6** Mixer
- Aggregate Weighing System

- (6) Belt Conveyor
- Automatic Block
   Making Machine
- Facemix Device
- (B) Piler

- 3. Automatic Production Line
- Aggregate Weighing System
- **Belt Conveyor**
- **Making Machine**

Mater Weighing System

**Control System** 







# **Our Users All Around the World**







### Africa

























# Southeast Asia



















### **Middle East**



















# Block Samples All Dimensions: mm

### **Middle East**









### **South America**









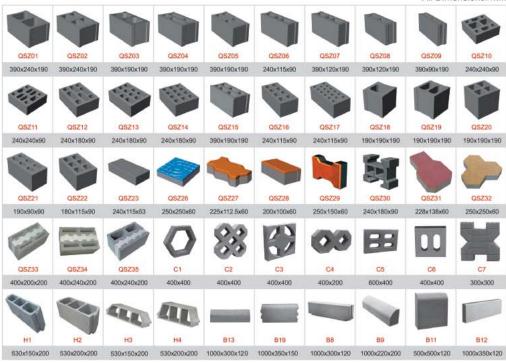












The technical specifications in this catalogue is subject to change without prior notice



# **AAC Blocks & Bricks Making Plant**

QGM designs and manufactures AAC block making plant, to meet the specific requirements of the market and customers. As a new building material, AAC block fulfills the demand of concrete industry, which requires to save the natural resources and protect the environment. With Germany technology and our own R&D, we provide our customers state-of-the-art AAC block making plant.

AAC is produced out of a mix of cement, lime, fly ash, gangue, river sand and aluminium powder etc., through batching, mixing, casting, cutting and autoclaving. AAC has the advantages of extremely light weight, high compressive strength, excellent thermal insulation, great acoustic insulation and high fire resistance. AAC can be produced in a large variety of sizes, from stand blocks to large reinforced panels, and it can be cut, sawn, drilled, nailed and milled like wood, making it an extremely workable product. AAC is environment-friendly and new building material.

Annual Capacity (300 days)	Power	Daily Capacity	Cycle Time	No. of Autoclaves
50,000 m <sup>3</sup> /year	400 KW	166 m <sup>3</sup> /day	10 hours	2 (Ø2 x 31)
100,000 m <sup>3</sup> /year	500 KW	333 m <sup>3</sup> /day	10 hours	4 ( Ø2 x 31 )
150,000 m <sup>3</sup> /year	630 KW	500 m <sup>3</sup> /day	10 hours	6 (Ø2 x 31)
200,000 m <sup>3</sup> /year	720 KW	666 m <sup>3</sup> /day	10 hours	8 (Ø2 x 31)
300,000 m <sup>3</sup> /year	1186 KW	1000 m <sup>3</sup> /day	10 hours	8 ( Ø 2.85 x 32.5 )





# **Advantages of AAC**

### Large variety of sizes:

AAC can be produced in a large variety of sizes, from standard blocks to large reinforced panels;

#### Excellent thermal insulation:

AAC has a very low thermal conductivity and therefore a very high thermal energy efficiency is achieved. This results in savings on heating and cooling costs;

### Extreme lightweight:

AAC weighs approximately 50% less than other comparable building products;

### High compressive strength:

AAC is a solid product, therefore making it highly load bearing. The entire surface area is used in structural calculations;

### High dimensional accuracy:

As a result of its dimensional accuracy, AAC is extremely easy to install, as no thick set mortar is required;

#### Great acoustic insulation:

The porous structure of AAC provides a high acoustic insulation;

### High fire resistance:

AAC has an extremely high fire rating of at least 4 hours and more;

### Termite resistance:

AAC can not be damaged by termites or insects;

### High workability:

As a result of the excellent size/weight ratio, constructing with AAC is very rapid. Even though AAC is a solid building material, it can be cut, sawn, drilled, nailed and milled like wood, making it an extremely workable product.

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# AUTOMATIC BLOCK MAKING MACHINE Designed in Germany, Produced in China

### **Batcher for Main Material**

tem Model	PL800	PL1200	PL1600	Item Mode	PL800	PL1200	PL1600
CBM of Weighing Bin	0.8m <sup>3</sup>	1.2m³	1.6m <sup>3</sup>	Loading Height	2,300mm	2,400mm	3,000mm
CBM of Aggregate Bin	2x4m3	3x4m³	3x6m3	Weighing System	Electronic	Electronic	Electronic
Productivity	48m3/h	60m3/h	80m³/h	Power	4.5kw	10.6kw	11.7kw
Weighing Accuracy	± 2%	± 2%	±2%	Total Weight	2,250kg	3,760kg	4,820kg
Maximum Weighing	1,500kg	2,000kg	3,000kg	Machine Size	F 000-4 F00-0 700	0.000.0.000.0.000	0.500-0.000-0.000
Type of Aggregate	2	3	3	(LxWxH)	5,600x1,560x2,760mm	8,390x2,000x2,800mm	9,500x2,300x3,300mm









Parameter Model	JN-350	JS-500	JS-750	JS-1000
Discharging capacity	350L	500L	750L	1000L
Feeding capacity	560L	800L	1200L	1600L
Theoretic productivity(m3/h)	≥15	≥25	≥35	≥60
Maximum Diameter of Aggregate (cobble/crushed stone)	≤20/30	≤40/50	≤40/60	≤60/80
Cycle Time	100	72	72	60
Total Weight	3,500	4,000	5,500	8,700

Parameter Model	MP500	MP1000	MP1500
Discharging Capacity	500L	1000L	1500L
Input capacity	750L	1500L	2250L
Mixing power	18.5	37	55
Discharging power (kW)	2.2	3	3
Planet / Paddle	1/2	2/4	2/4
Weight (Kg)	2,000	6,000	7,000











Batcher

Aggregate Weighing Device

Water & Cement Weighing System

Water Discharge and Cement Discharge Device







Discharging Gate

Control Room

Control System

Electrical components

### **Technical Specification**

Model	Production (m³/h)	Mixer			Aggregate	Weighing System				Aggregate	Discharging	Total	Total
		Model	Power (kw)	Volume(m³)		Aggregate	Cement	Water	Additive	Diameter	Height (mm)	Power (kw)	Weight (kg)
HZS-50	50	JS1000	2X18.5	1	3X13	±2%	±1%	±1%	±1%	≤60	≥3.8	68	32000
HZS-75	75	JS1500	2X30	1.5	3X15	±2%	±1%	±1%	±1%	≤60	≥3.8	110	48000
HZS-100	100	MAO2000	2X37	2	3X20	±2%	±1%	±1%	±1%	≤80	≥3.8	117	53000

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