

# THT International Co., Ltd

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*Date: August 22, 2014*

## **To: whom it may concern**

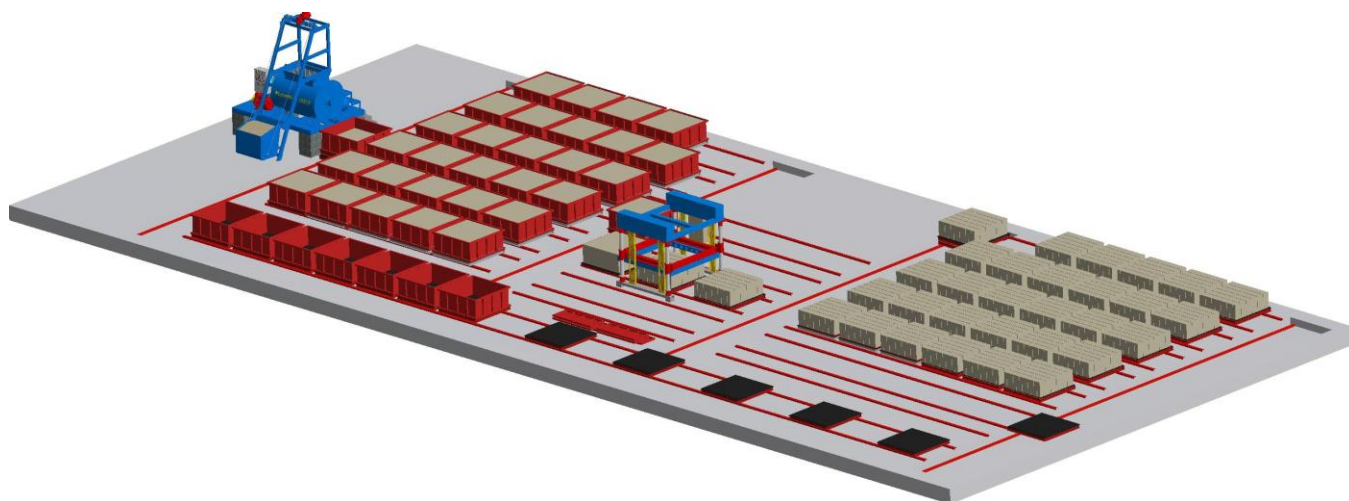
At your request, we would like to submit you the offer for a CLC blocks production plant of capacity min 20 cbm/day with the possibility of upgrading to max. 60m<sup>3</sup>/day in future with the terms and conditions as follows

## **Quotation**

(No 0701014THT)

### **CLC BLOCKS PRODUCITON PLANT AT CAPACITY OF MINIMUM 20CBM/DAY**

#### **GENERAL DESCRIPTION OF THE PLANT**



- The plant is designed for production of clc blocks from the following materials: cement/ fly ash, sand, water, foam. The producer may add the concrete additive.
- Production capacity: min 20cbm/day, extendable to bigger capacity just by increasing the **number of molds**; for 50-60 m<sup>3</sup>/day by adding the automatic weighing system to speed up the loading of materials.

- Power consumption: Max. 25kW

## 1. MAIN COMPONENTS OF THE PLANT:

### 1.1 Skid mounted CLC mixer, All-in-one Model MasterMix -SK1.15ECF, with skip bucket for loading solid materials



#### 1.1.1 Mixer

- Cylindrical form body mixing drum made of steel plate of 6mm thick, diameter of 1.0m, at 1.5m long, giving empty volume of 1,15 m<sup>3</sup> for mixing approx. 1m<sup>3</sup> of CLC mortar.
- Special designed bearing hub with heavy duty Japanese roll bearing, totally closed, isolated from dust and concrete mortar for long service life
- Horizontal shaft with reverse direction ribbon blades, especially designed for foam concrete production to assure the uniform and fast mixing.
- With pipeline coupling for water line supply and tube for foam feeding
- With large materials feeding gate for sand/fly-ash/ cement, with steel grate and cement bags tearing device, covered by steel lid.
- Driven by electric motor 7.5kW through a heavy duty gear box and soft coupler for smooth rotation and easy adjustment.
- Max speed: 65 rpm



- Discharge gate: butterfly manual valve with handle for opening and closing the gate



### Air Supply system:

- Air compressor 3 HP, made in Taiwan, driven by the above motor through flywheel, and V-belt
- Air supply capacity: 350 litter/min, at max. set pressure of 7 Kgs/cm2.
- Equipped air gauge and safety valve



- Air tank of 120 litters
- Supply compressed air to the Foam Generator FoamMaster I

### Foam Generator: model FoamMaster IB, upgraded version for electric and pneumatic drive

- Light and compact foam generator, famous
- Capacity : 200-260l/min
- Installed on a steel base support at the gear box
- The spray lance is fixed on the mixer body for supply the foam directly inside the mixer
- Suction line is made available for drawing the foaming solution from a tank located on the platform.
- Quantity of foam is set automatically by electronic timer installed in the control board



### Water supply system

- **Water pump: Italian Imported water pump Pentax MB200**
- Italian electric water pump of capacity 9.6m<sup>3</sup>/hr
- Electric Motor of 1.5kW / 220V/50Hz
- The exact quantity of water for every batch is automatically set on the control board by electronic timer for setting the pump running time.

**MB**



- The water source for clc production must be supplied on site by user
- Clean water is recommended
- A separate water tank of must be provided by the buyer for supply water to the mixer and foam generator and this water must be clean. Tap water is recommended.

### Control Board:

- Closed control panel with all components mounted inside steel box, isolated from water and dust, with electric/ electronic components from famous brands, easy available on the market
- Equipped with all buttons, gauges, swiches to operate all the equipment on the units
- Allows operator to set and control the mixing time, foam spray time, water pump running time
- Emmergency stop button



### Support Chassis

- Chassis frame made of strong welded steel boxes and bars, to support all the eqmnt and subframe
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- With hook- eye for lifting up with crane to put on small cargo truck to travel to the jobsite

### Skip bucket

- for loading solid materials ( cement, sand, flyash,..) into the mixer
- lifting up by cable through a system including gear-motor, rollers and rails frame
- bucket capacity: 0.42m<sup>3</sup>/ 450kg
- Lifting speed: 18m/min
- Motor capacity: 2.2kW/380V/50Hz

**Dimension** including skip buckerL 1112 (W)x 2845 (L)x3765 mm (H)

Weight: 1650kg

Mixing cycle: 15min/batch

## 1.2 CASTING MOLDS: mobile moulds

- Sizes: 1220x1210x H mm
- 4 wall panels made of steel plate of 2mm thick, strengthen by steel angles, locked by special pins for easy and fast assembling and disassembling
- Each mass block from a mold can cut into 72 BLOCKSs of the size 100x200x Hmm. (Tolerance 1mm)



- The base of the mold is a steel plate of 3mm welded on a steel frame, mounted on the steel wheels with closed bearings, for running on the rails
- On the steel plate bottom there is a foamed rubber layer to keep the mold firmly close to avoid licking
- Quantity of molds panels sets: ... **sets** for a 20m<sup>3</sup>/day plant,
- Quantity of mold tray/base: ... **sets**

### 1.3 Rails\*: *supplied by Buyer*

- *Made of steel angle, in U form, dimensions of 80x 40mm x 6000mm long*
- *With steel bases made of steel plates for installing on the floor.*
- *Length of rails: to be adjusted depending on capacity of plant, will be informed by the Seller in the design of the factory.*

### 1.4 CLC block cutting machine: 01set

- Model name: MasterCut-3, brand new
- Type: stationary type, cutting by steel wires, made by THT International Co., Ltd
- Can cut a block in two directions simultaneously at one time (cutting machine made by other companies can cut only one direction and buyer must use two machines to cut one block in two times). This machine is our patented product!



- Electric power: 380-400V/ 50Hz

Max cutting capacity: up to 10m<sup>3</sup>/hr (only cutting time, not incl the time for transport of molds. Max cutting capacity: up to 10m<sup>3</sup>/hr (only cutting time, not incl the time for travel of molds)

- 02 gear motors to drive the cutting wire system, capacity of 1.1kW and 1.5kW gear motors

- Cutting frame guiding tubes: 4 very high quality alloy steel, chrome plated, life time guaranteed against rust,

- Control board: mounted on the side of the machine, with all control and operation buttons, Emergency safety stop button, ... for easy controlling all the processes of concrete block cutting, frequency invertors for controlling the speed of cutting motor and the speed of lowering and raising of the cutting frame. Electric alarm, lighting switch, etc

- All electronic control components are from famous brand suppliers like Omron, LG, Schneider,
- Cutting mode: automatic / manual at choice
- Number of cutting wire: 7 x 13 wires on two directions, for cutting the BLOCKSs, including 4 surfaces in contact with 4 sides of the molds covered by Icating oil (or demolding agent)
- Size of the BLOCKSs: any size asked by the buyer by adjusting the distance between the cutting wires. The length of the BLOCKS can be 400/500/600mm .
- No of BLOCKSs from one block after cut: depending on the size of the BLOCKS.  
(ex: 72 pcs of the size 10x20x 600mm)
- Electrical power consumption: Max 3,5kW
- Weight: about 1200 kg
- Dimensions: 2200x 2100 x 1990mm
- *Note: the manufacturer may change the specs without prior notice. Any special size of BLOCKSs can be produced if the buyer informs the maker in advance.*



Blocks cut inside the machine



*Blocks after cut*

### **1.13 The mold transfer tables:** for transfer the molds between the rails lines

- Quantity: 6 sets

### **1.16 Technical document:** The seller will supply the following document:

- Operation manuals of batching plant, cutting machine, foam generator,
- Detailed design drawing for buyer to build the installation foundation of the equipment

## **2. Installation, Commissioning And Training**

- The Seller will send 3 technicians to the Buyer Factory for max. 7 working days to supervise and assist the Buyer to install the machines and make commissioning, training the operators. If there is any delay caused by the Buyer, then the Buyer must pay all the accommodation cost for The Seller's technicians plus a fee of USD 150/day/person.
- Buyer to be responsible for all civil engineering works, including foundation for each machine (cutting machines, rails fixing on floor), supply of electricity, air and water to the machines. Buyer also supply the necessary materials and facilities like welding torch, standard tools, lifting cranes, forklift, power tools... requested by The Seller's technicians.

- During the time of installation, Buyer shall provide enough experienced manpower for installation works. At least there must be two (2) electricians, two (2) welders, and six (6) technicians to carry out the installation works and learn the operation procedures.
- The Buyer technical peoples must follow the instructions of The Seller's technicians. Any damage resulting from the fault caused by the buyer's technicians during installation and commissioning shall be buyer's responsibility. The Seller's technicians will repair or replace such damaged part upon request, and all expenses for such services shall be borne by the buyer.
- All raw materials and consumable parts such as Power Cables, welding rods, cutting tools, electric power, cement, sand, foaming agent, etc. for test run shall be provided by the Buyer and consequential losses are for the account of Buyer.

### **C. Other terms and conditions:**

**1. Price:** Pls contact us for detailed price to suit your planned capacity and specs

#### **Above price does not includes:**

- Factory building, infrastructure, foundation work, overhead cranes, power and water supply, lighting or any other facility not mentioned in our scope of supply
- 3 phase power supply lines to the control board and cutting machine, clean water line to the water tank, air compressor
- Raw production materials like cement, sand, foaming agent during the test production
- Works and material needed for rails fixing, plant erecting (like cement, steel bars, cables) hand tools, equipment, lifting crane, electrical power, manpower, consumption materials (like welding rod, cutting disks, grinding disks, torches...) needed for installation, commissioning and test production.
- Any other items, work, expenses, cost...occurred at the installation of the plant not mentioned in this quote.
- Accomodation (3 stars hotel minimum), meals, local transport for seller's technicians during the time working in Buyer's country. All these costs must be paid by the Buyer.
- Flight tickets for three persons from the Seller to the Buyer's premises for the guideline in installation, commissioning and training of the buyer operators during max. 7 days
- Fee the transfer of the technology in CLC BLOCKS production
- Design of the factory layout, foundation of the plant for buyer to build his factory prior to the arrival of the equipment ( silos foundation to be provided by silo supplier)

#### **3. Shipment:**

- Shipment time: max 90 days from the Seller's receipt of L/C
- Port of shipment: Haiphong Port
- Partial shipment should be allowed
- Packing: in 1x 40ft container

#### **4. Payment:**

- 30% by TTR as down payment after contract signing
- 70% by TTR before shipment

Or payment by L/C A/S:

- 100% by irrevocable confirmed Letter of Credit opened by a first class bank in favor of the Seller, payable against the presentation of shipping document

**5. Warranty:** all goods are warranted against any fault in material or workmanship for 6 months from the shipment date.

**6. Validity of the quote: 30 days.**

We hope our offer has met your expectation and looking forwards to receiving your valuable order.

Please do not hesitate to contact us against if your have any question.

Yours truly,

Luong Si Tuan- Director