

Production unit of concrete block and brick

1. General Description :

Fully automated installation for the manufacture of blocks, bricks, pavers, etc.. concrete solid or hollow.

The concrete plant is not part of the equipment for sale

The unit includes :

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|----|--|-------------------|------|
| a. | A media brand type HR Hess 2000-A | Year of service : | 1998 |
| b. | A lift and a descender brand Schlosser | Year of service : | 1977 |
| c. | A ferry brand Schlosser | Year of service : | 1986 |
| d. | A pallet system brand Hess | Year of service : | 1998 |
| e. | A strapping brand Lenzen / Titan | Year of service : | 2000 |
| f. | A set of brand packaging Keller | Year of service : | 1977 |
| g. | A store pallets | Year of service : | 1977 |
| h. | Different brand conveyors Schlosser | Year of service : | 1977 |
| i. | Approximately 3800 production floors regular replacement | | |
| j. | Stock of spare parts. | | |

Description:

a. Type Press Hess Multimot RH 2000-A



Press working on a fixed wooden planks for the automatic production of concrete products, such as solid and hollow blocks, curbs, paving stones and other similar products.

The machine meets all the requirements of manufacturing quality concrete at the highest level.

Features and specifications of the machine, hydraulic equipment and power :

Machine:

Production area useful :	1,300 x 900 mm
Height manufacturing :	50 to 400 mm
Height of mold :	58 to 458 mm.
Dimension boards Manufacturing :	1400 x 950 x 55 mm
Concrete hopper capacity :	1,500 l
Weight :	22 T 800.

Powers engines:

Main hydraulic pump :	55.0 kilowatts
Hydraulic pump secondary circuit :	15.0 kilowatts
Hydraulic cooling circuit :	2,2 kW
Vibrators table :	4 x 7.5 kilowatts
Vibrators ram :	4 x 1.0 kilowatts
Cooler :	0.12 kW
Setting up tray :	2.2 kilowatts
Translation device for filling :	0.75 kW
Concrete Hopper Headsets :	2 x 1.5 kilowatts
Ejector plates :	4.0 kilowatts
Voltage :	400 V, 50 Hz
Control voltage :	230 V, 50 Hz
Power distributors :	24 V DC.

The machine consists of the following:

- The chassis welded rectangular tube and profiles of large section with guides on 4 columns chrome-corrected (\varnothing 100 mm) for guiding the mold and pestle. The guide rings can split an easy change.
The mold carriers are attached to the lifting columns. They are equipped with a quick release clamp tire mold by using 6 cylinders bladder. Divesting by 2 cylinders, mounted on top of the machine. Transmission of forces by synchronizing shafts and connecting rods, crank adjustable.
Pilon very robust performance with integrated vibration plate, mounted on rubber mountings. The silent may be blocked for rigid fixation (eg for the manufacture of blocks). Drive by 2 of the ram cylinders with hydraulic lock incorporated.

- The vibrating table in 2 parts with integrated 4 vibrators mounted on rubber mountings. Grid support height adjustable. Table and grille are fitted with interchangeable wear plates, fixing screws.
- The training devices with vibrators motors, housings synchronization matings gimbals assembly on silent.
- Filling device includes the following:
 - Chassis double translation and lifting performance Welded rectangular tube and high profile section, with training wheels and electro-mechanical translation. Height adjustment by 4 worm embedded in the amounts, timing and drive gear motor and chain. The table drawer and rails reversible (4 positions) are interchangeable.
 - The concrete hopper with a capacity of about 1,500 l, mounted on the sliding frame, 2 helmets dosing aperture electro-mechanical, 2 level sensors to shrink the volume of concrete in the tray and a concrete probe call .
 - The drawer cabinet with adjustable and interchangeable with hardened steel rollers and rollers with axial. Guiding rails by very strong section. Workouts by 12 cylinders, timing device and connecting rods. The tightness of the housing is provided with a frame on springs. Agitator drive hydraulic trolley individual filling grids with 2 height adjustable and easily removable.
 - Introducer-ejector plates driven by geared motor with variable frequency and channel. Ejecting boards on guide rails interchangeable. Progress by cart with a single pawl wide. Monitoring of the board on the vibrating table photo-cell. Individual adjustment of speed and movement acceleration and deceleration, without landing.
- Hydraulic power unit consists of:
 - Reservoir with a capacity of about 1,100 l equipped with pumps and motors, filtration on the back with clogging indicator, heating oil with automatic thermostat, power level, automatic air-oil cooler, 2 blocks drilled with distribution units and settings for 3 circuits, and multifunction gauge pressure tap for each pipe. Pressure: 140 bar.

- Electrical control consists of:



- Control panel and cabinet containing all the controls and components for engines, hydraulic and pneumatic distribution and the bodies of protection and surveillance. A control console is mounted on the machine for mold changes and daily maintenance. The course of the cycle is provided by a Siemens PLC S 5 115 U.
 - An analysis system for Dimos Avus-setting the machine and the installation, including storing data for approximately 50 products. Data Management and taken on consignment, analysis and information on the criteria
 - errors, viewing instructions for maintenance depending on the service time of the machine.
 - The desks, cabinets and machines are installed and wired to the terminal of departure. In the desk are installed, a screen system for Dimos Avus-keyboard setup, a synoptic table with LED indicators for all functions, push buttons and levers.
 - The monitoring system includes all proximity sensors and photo-cells needed, including sensors on the brush guards, linear encoders for pan, pestle and tray filling.
- Auxiliary components:
 - Protective grill machine, cart with rails for mold changes.

- Operative puller plate with trolley and drive hydraulic cylinder, with columns and adjustable stops mounted on 4 hydraulic cylinders for wrenching the mold, allowing the retraction of pull-plate.
- Vibration system with electronic synchronization providing the following benefits:
 - The motors and vibrators rotate continuously
 - The choice of the vibrating force necessary is done electronically without power and therefore no wear
 - The speed (frequency) varies
 - For each cycle of vibration during a molding operation, an individual value or frequency, or strength can be selected
 - The control system is ensured by a separate computer from the PLC.
- Hydraulic brake pestle.
- Shop for boards to receive 20 plates from the cross conveyor (item h). Rectangular tube chassis and profiles, sheet metal walls. Equipped with a clamping system and hydraulic lift for the maintenance of boards during the extraction of the last plank. Hydraulic independent switch.

b. lifter and downlifter to brand Schlosser



Capacity: 8 tons
 10-levels with 2 boards
 Doubling (lift) and break-up (descender) floors.

c. Finger car Brand Schlosser



Capacity: 10 tons
Lifting height: 1,000 mm

Higher ferry equipped with a cable drum with asynchronous motor.

Transporter trained by top and bottom of gear motors with DC inverter.
Control panel and current lead by 1 cable suspended about 60 m runway.

d. Automatic Palletizing brand Hess



Performance with large sections of rectangular tubing with thick walls and gate bi-beam equipped with steel rails welded to the carriage translation. The carriage drive is by means a gear motor with brake and a rod-crank. Path translation is approximately 2,200 mm. The lifting frame is powered by a hydraulic cylinder, a race of about 1,500 mm, guidance is provided by 16 special rolls with plastic coating easily adjustable. The cylinder control is done using a proportional valve system with digitized collection of the race. This allows acceleration and deceleration.

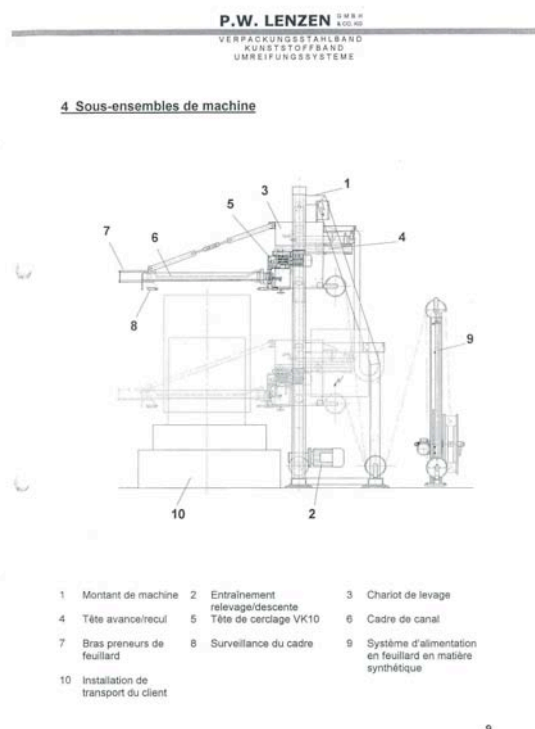
This and the crank-connecting rod system ensuring rapid cycling and also a delicacy of products and equipment.

The product has the clip sliding chrome bronze columns. This is a clamp on 4 sides with rubber jaws. The clamping pressure is adjustable. The 2 pairs of jaws can be ordered separately. The rotation of the clamp is adjustable from 90 ° to 180 ° in 2 directions of rotation.

The hydraulic unit with pump, cooler, all valves and control distribution is incorporated into the structure of the gantry.

The programming controller allows the screening of the height of product, the number of beds, the direction of rotation, etc..

e. brand Lenzen strapping strapping head with brand Titan



Strapping plastic strapping for fully automatic for the installation of horizontal strapping.

Specifications :

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|----------------------------|---|
| ▪ Packages : | Packages of concrete products on pallets or without
Distance sequential pallet: 2.000 mm. |
| ▪ Dimensions : | Base area: 1,200 x 800 mm
Height of pallet: 1.350 mm
Possible length: 1,100 to 1,250 mm
Possible width: 800 to 900 mm
Possible height: 800 to 1250 mm (with pallet) |
| ▪ Strapping Temperature : | Cold |
| ▪ Strapping position : | 1 to 6 per package |
| ▪ Distance between hoops : | variable |
| ▪ Capacity : | 50 pallets / hour with 3 to 4 hoops |
| ▪ Features banding : | PET or PP 16 x 0.8 mm |
| ▪ Voltage : | 400 V, 50 Hz |
| ▪ Control voltage : | 24 V DC |
| ▪ Power distributors : | 24 V DC |

f. A set of brand packaging Keller



The set includes a hooding machine and an oven to heat shrink.

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|--------------------------------------|--------------------------|
| ○ Maximum dimensions of the pallet : | 1250 x 850 x 1,000 mm |
| ○ Capacity : | 46 pallets / hour |
| ○ Dimensions shrink tube : | 1.400 + 2 bellows 500 mm |
| ○ Maximum roll diameter sheath : | 1.000 mm |
| ○ Roll Weight : | approx 850 kg |

- Fuel for the furnace : heating oil
- Maximum temperature of the oven : 200 ° C
- Voltage : 380 V, 50 Hz
- Control voltage : 220 V, 50 Hz
- Power distributors : 24 V DC

g. Store vane brand Schlosser



Capacity : about 15 pallets 1,200 x 800 mm.

h. Various conveyors brand Schlosser

Wet side (press release)



- 1 chain conveyor with a length of 7 m resulted in 1 gear motor with frequency converter.
- 2 rotary brushes for deburring are studying demoulded
- 2 braking and positioning under the truck (item b)
- 1 control panel.

Dry side



- 1 moves ratchet hydraulic trolley continuous gauge corresponding guide rail with a length of 13 m
- 1 rotary wire brush for cleaning the plates empty
- 1 Turn-up boards with lift height 1300 mm
- 1 transverse conveyor 5 m long with hydraulic feed and guide rail and support mechanical knocking the planks in the press shop (Pos. a)



- 1 common hydraulic
- 1 control panel.
- For the delivery of palletised goods, 1 carrier plate with a length of about 12 m, starting from pallet store, bringing the packages successively under the sealer, the hooding and the oven. It is extended to the outside by a dynamometer for the accumulation of 6 packages palletized one beside the other, thus facilitating the handling by a lift-equipped dual forks.



h. Plates Manufacturing

The facility includes about 3,800 plates have renewed several times.

i. Stock of spare parts

A stock with many spare parts is available.

This stock includes:

- Geared (SEW mainly) for press, ferries, etc..
- Drive motors (Baumüller) for vibrators
- Distributors and hydraulic pumps
- Chains, pulleys, sprockets, rollers various
- Electro-pneumatic valves
- Miscellaneous Electrical Equipment