



Stationary U800LA Block Plant

**STATIONARY CONCRETE BLOCK / PAVER production plant
based on PiTAC's main machine
UNIVERSAL 800 LA - FULL or SEMI Automatic
[Full Export Edition]**

With your stationary machine UNIVERSAL 800 LA - FULL or SEMI Automatic, the following concrete products are produced efficiently:-

1. Hollow Blocks
2. Solid Blocks
3. Curbstones
4. Edge Stones
5. Paving Stones
6. Board Stones



Following specification for the UNIVERSAL 800 LA - FULL or SEMI Automatic

1. Stone Height from 400mm to 330mm
2. Production surface 1200mm x 800mm



CONCRETE BLOCK/PAVER MAKING MACHINE

UNIVERSAL 800 LA

PROMETAL

HIGH PRODUCTION EFFICIENCY
UP TO **1000** **20x20x40**

2 LAYER SYSTEM

elite group
www.elite-group.co.uk

Filling system base concrete:
The base filling system is a heavy frame structure made of square tubing. Mounted on it is a concrete hopper with silo gate and a level indicator.

Hydraulically (electromechanical) powered silo gate that is filling the filler box with concrete. Opening of the concrete hopper is controlled by PLC and opening time can be programmed. The wear resistant filler box floor plate is 15 mm thick and easily exchangeable.

The filler box is driven by hydraulic cylinder with direct acting. It runs on combination rollers in heavy profile and is equipped with a plastic/steel brush to clean the tamper head.

Tamper head vibration

Consists of 2 compact vibrators of 1,1 kW. The vibrators are bolted to the main tamper head plate.

Mould clamping: Mould is fixed by 4 easy change screws.

Tamper head: The tamper head plate is attached to the tamper head bridge with rubber buffers and equipped with 2 compact vibrators.



1200 blocks/h
size **20x20x40 cm**

Drives:

Hydraulic, main pump:	11,0 kW
Silo gate drive (option):	1,1 kW
Compact vibrators tamper head:	2x 1,1 kW
Vibration table vibrators:	2x 7,5 kW
Transport chain system:	1,5 kW

Vibration system with frequency shifting - SYNCHROTRONIC

Consists of 2 vibrators with two shafts, synchronized and powered by 2 motors. The motors are connected to the vibrators through a synchronizing gearbox and driveshafts. Vibrator is closed type with gears in oil bath. The motors are mounted on a base plate, which is attached to the machine frame and isolated by rubber buffers and frequency controlled. Different frequencies can be used for pre and main vibration. In-between vibrations the motors run on a low rpm. Maximum frequency is 60 Hz.

www.e-g-prometal.com

Two layer pallet machine for production of different types of concrete products for example: paving stones, curbstones, hollow blocks, chimney blocks, slabs and similar products. This machine meets all requirements to produce concrete products of the highest quality.

Hydraulic equipment:

Separately from the machine frame there is oil tank with a capacity of 400 liters. The pumps and motor are mounted on the side of the tank. Furthermore there is a return filter with dirt indicator, oil level indicator, oil cooler (option) and an oil heater (option) to prewarm the oil. Maximum pressure is 160 bars.

Proportional valves:

The main functions (tamper head, mould and both filler boxes) can be controlled by proportional valves (option). This guarantees fast and smooth movements.



Electric control:

Automatic operation with warning for lack of material or wooden pallets. It consists of a main board, control panels and bus stations for decentralized input and output modules. All 3-phase wiring, inverters switch and control units are housed in the main board.

The PLC control is FATEK (or it can be Siemens S7)

The wiring is simple and can be extended anytime. Switches and pushbuttons for manual and setup mode are installed in the control panel.

The control interface is with touch sensitive display easy to use and diagnostic system that indicates errors.

Safety features:

The machine is protected by safety gates, which when opened will shut down the automatic mode.

Technical data:

Pallet size:	1400 x 900 mm
Production area max:	1100 x 800 mm
Product height:	25 - 330 mm
Hopper volume base concrete:	1.300 l
Hopper volume fine concrete:	900 l

WEIGHT
8.000 kg

General technical data of machine **UNIVERSAL 800 LA:**

pre-silo contents – core concrete	1.3 m ³
filling box contents – core concrete	0.25 m ³
MEASUREMENTS	
length	5.500 mm
width	2.200 mm
height filling unit above	3.000 mm
height filling unit below	2.650 mm
lifting height unit	350 mm
Board size (massive wood)	1.400 x 900 x 50 mm
Usable mould width	1200* mm
Usable mould depth	800 mm
Maximum mould height	330 mm
Minimal mould height	40 mm
WEIGHT	
Net weight	8.000 kg
HYDRAULICS	
Rotary current motor I for pump I	
Driving performance	15 kW
Speed	1450 U/min
tension	400 V / 50Hz
Rotary current motor II for pump II	
driving performance	5,5 kW
Speed	1450 U/min
Tension	400 V / 50Hz
Pump I	
performance	55 l/min
Pump II	
performance	23 l/min
OIL TANK	
filling volumes	400 l
maximal pressure	200 bar
ELECTRO TECHNOLOGY	
Network tension	400 V / 50 Hz
Nominal performance	70 kW
Pre-fuse	160 A
Control voltage	230 V / 50 Hz
Control voltage hydraulics valves	24 V
Automation system	Siemens S7



Universal 800 LA - block / paver making machine

Block / paver making machine Universal 800 LA is available in semi-automatic and fully automatic version.

Machine has new developed system of transport palette which is in line with concrete bunkers.

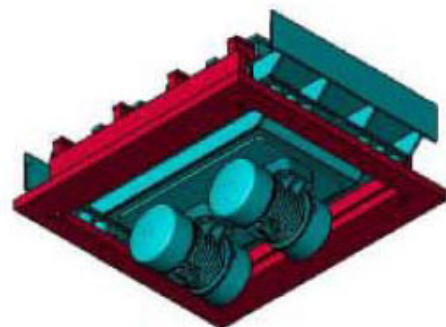
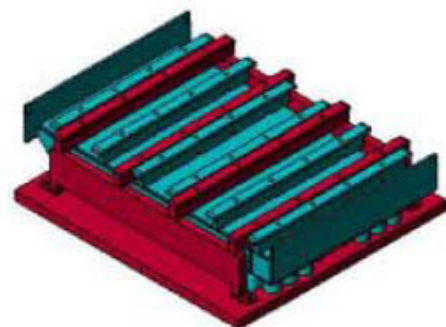
Concrete block making machines UNIVERSAL 400 - 800 LA are typically used for production of paving bricks, curbstones, slabs, building blocks, chimney flues and others. UNIVERSAL line machines are stationary machines producing elements on wooden pallets. Block making machines UNIVERSAL have a solid frame, stable guide for mould and compacting head and they are equipped with two concrete hoppers - for coarse and fine concrete.

Device for face mix is movable, which is useful for mould changing and cleaning. Face filing device provides coloured face layer in the paving bricks and slabs. In automatic machine versions SIEMENS PLC control and display enables the operator to set a large number of important machine parameters and also indicate alarms. Block making machines UNIVERSAL are in standard version equipped with pallets feeding device.

Universal line machines can produce all types of dense concrete blocks, both solid and hollow, paving stones with or without face mix, curbstones and also products used in garden landscaping.

Full or semi automatic operation. Touch screen operator panel for working parameter adjusting. Robust frame construction with strong, chromed guide columns.

Face mix device for two layer paving stones production.



Technical data

Automation	Semi or full / automatic
Max. block height	330 mm
Min. block height	40 mm
Max. production area	1200 x 800 mm
Back concrete hopper volume	1300 l
Face concrete hopper volume	900 l
Machine weight	10.800 kg
Installed power	34 kW

Production

Blocks 400 x 200 x 200 mm	1200 blocks/h
Paving stones	750 m ² /8 h shift



ACTIVE TRANSPORT TRACK 6 m long – 2 pcs.

Active transport tracks are equipped with electromotor and chains. Track can be long 4-8 m, depending of space, needed capacity production etc.

Track at the entering side of the main machine U800 LA is transporting pallets [with dry concrete elements] that LOWERATOR drops on the track, and worker on the CUBER unload pallets, empty pallets go into the main machine, where machine produces concrete elements on the pallet. On the exit side of main machine is another one active transport track which takes pallets [loaded with fresh concrete elements] from the machine and drives them into ELEVATOR.

Transport system is driven by a power-reducer in oil bath 1.5 kW, and is equipped with hi product (hollow blocks) cleaning brush.



EXIT transport track.



Pallet under the mould in the main machine.



ENTER transport track with empty pallets.



Elevator at the exit of main machine.



Elevator takes pallets with fresh elements.

ELEVATOR

Elevator is the device which takes pallets with fresh [just made] concrete elements and prepares them [put them in 10 levels] for the coming of the forklift vehicle [equipped with rack] that takes all pallets with concrete elements and drives them on the drying place.

With power reducer in oil bath, motor power 3 kW.

LOWERATOR - 10 PALLET HIGH

The Lowerator is used when the blocks come out of the curing room, Lowerator's chain driver system places boards on the conveyor, the cuber removes the blocks from the board.



CUBER - PACKING DEVICE

CUBER is used for palletizing the blocks from the wooden board. It then places the stacked blocks on a conveyor, which then takes the blocks for packing to the stock yard.

Cuber has a pneumatically clamping system.

Air compressor needed for CUBER - 200 lt/ min flow.



AGGREGATE HOPPERS and CONVAYOR

Aggregate Hoppers are controlled by PLC - Siemens
Scaling of aggregate is done by load cells



MOLDS for the machine UNIVERSAL 800LA

MOLD CASE

1. Cut by heat from one piece of high-yield and high carbon steel and successively surface hardened by means of heat treatment.
2. Very high wear resistance.
3. To a hardness of about 60 / 62 HRC with 1 mm / 1.5 mm depth.
4. Plates, supports and other parts from Fe 430 material.

TEMPER HEAD

1. Special steel tempers, milled and polished by precision automatic machines and surface hardened by means of heat-treating.
2. To a hardness of about 60 / 62 HRC with 0.5 mm / 0.8 mm depth.
3. Plates, supports and other parts from Fe 430 material.

Mold Case and Temper Head pieces made by specialized company for molds

PEGASO STAMPI - ITALY

Molds are only assembled in Serbia

