EASY AND SMART BLOCK®
lightweight for living comfort

ESB S.r.l.

PLANTS DIVISION

ESB S.r.l.

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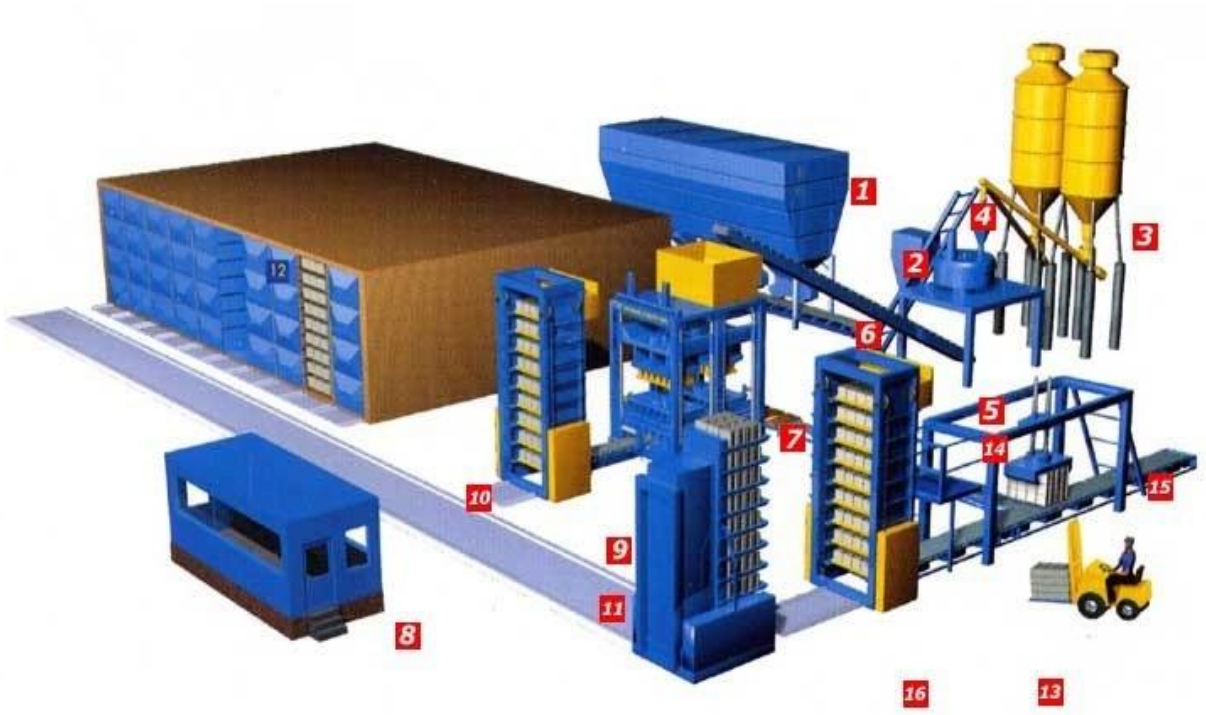

LAYOUT AUTOMATIC PLANT

1. AGGREGATES HOPPERS
2. PLANETARY MIXER
3. CEMENT SILOS
4. CEMENT SCREW
5. PALLETS RETURN CONVEYOR
6. CONCRETE CONVEYOR
7. BLOCK-MAKING MACHINE
8. CONTROL UNIT
9. PRESCHEDULED TROLLEY
10. PALLET LIFTING DEVICE
11. FINGER CAR
12. CURING AREA
13. FORKLIFT
14. CUBING DEVICE
15. ROLLER CONVEYOR
16. PALLET UNLOADER

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BLOCK MAKING MACHINE
ESB.01

Moulding area up to 1,40 sq.m. product height ranging from 40 to 350 mm.
Patented VARIO-POWER vibration system developed by **ESB** to control frequency and amplitude, in order to reduce cement consumption and to increase density of product, thus ensuring higher mechanical strength.
Movable hopper for filling the feeder box adjusted automatically depending on product volume.
Possible production on mobile steel plate , no increase in cycle time, allows improved vibration distribution, a longer lifespan of the wooden pallets and grants superior product finishing.
Quick production switch in is achieved by automated mould clamping and pressing head fixing, together easy set up procedures
Memorization of all parameters setting for every type of production.
Autoadjustment loop system maximizes working parameters even through different mixtures and operating conditions.

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ESB.01 : TECHNICAL DATA

LENGTH *	**7.150**	mm
WIDTH *	**2.500**	mm
HEIGHT *	**3.500**	mm

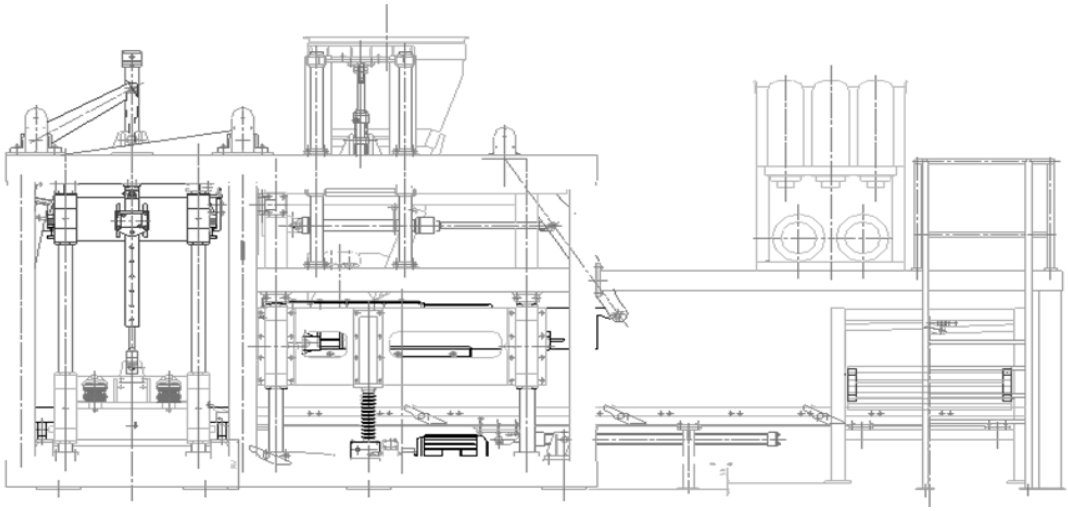
*inclusive of the hydraulic unit

Machine net weight	**28.000** kg.
max moulding area	**1,40** sq.m.
Block height	from **40** to **350** mm.
max. pallet size	**1400**x**1300**x**45/50** mm.

Estimated production cycle of 12 hours

· blocks cm 20 x 20 x 40 : 18.000 pcs.
· paving stone cm 10 x 20 : 1500 sq.m.

Power of vibration system	**22** KW
Power of hydraulic unit	**40** KW
Hydraulic tank capacity	**700** l.



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BLOCK MAKING MACHINE
ESB.02

ESB.02 stationery vibropress whit table turnover has been designed for the production, storage and handling of special manufactures whit the employ of **only one production and control operator**.
The plant makes any kind of ‘’turnover’’ product on steel pallet.
The high automation level, enables to perform the following functions in automatic cycle:

- Automatic mould switch
- Mould filling
- Product pressing, achieved whit pressing head fixing
- Mould turnover
- Products shakeout on steel pallet
- Green products conveying to curing area
- Filling/emptying of green/cured products on pallets from the curing area
- Conveying of cured products to end-product area for strapping
- Automatic conveying of end-product packages to stocking area

ESB.02 plant offers the following advantages:

- Quality of the product: easy product Certification
- Reduced area: 30% of necessary area and production realized on the ground
- Curing area system: does not require steam utilization
- Operation costs: one person in charge of all the production phases
- Employees security and protection: respect of CE Rules.

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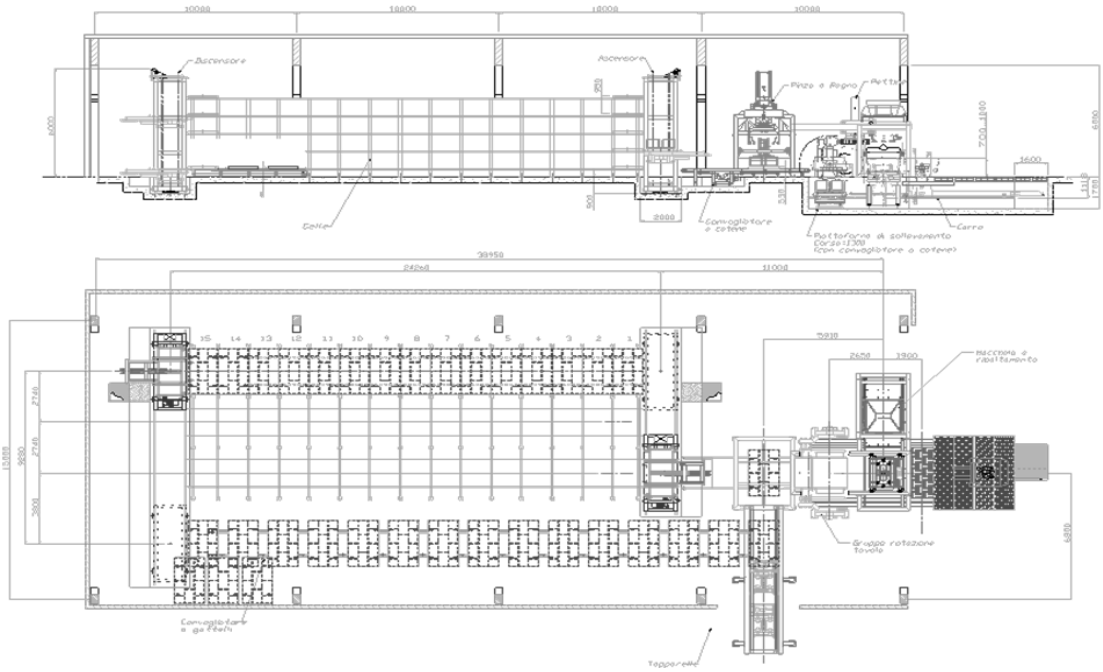
ESB.02 : TECHNICAL DATA

Machine net weight	**16.000** kg.
max. pallet size	**1500**x**2500**x**80** mm.
Max. moulding area	**3** sq.m.
Block height	from **90** to **1.000** mm.
Installed power	**50** KW
Vibration sistem control	**SEMIAUTOMATIC**
Vibration intensity	Kg. **8.000** at **3.800** r.p.m.
Handling equipment	**AUTOMATIC**



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BLOCK MAKING MACHINE
ESB.03

ESB.03 stationery vibropress whit table turnover has been designed for the production, storage and handling of special manufactures whit the employ of **only one production and control operator**.
The plant makes any kind of ‘’turnover’’ product on steel pallet.
The high automation level, enables to perform the following functions in automatic cycle:

- Automatic mould switch
- Mould filling
- Product pressing, achieved whit pressing head fixing
- Mould turnover
- Products shakeout on steel pallet

ESB.03 plant offers the following advantages:

- Quality of the product: easy product Certification
- Reduced area: 30% of necessary area and production realized on the ground
- Curing area system: does not require steam utilization
- Operation costs: one person in charge of all the production phases
- Employees security and protection: respect of CE Rules.

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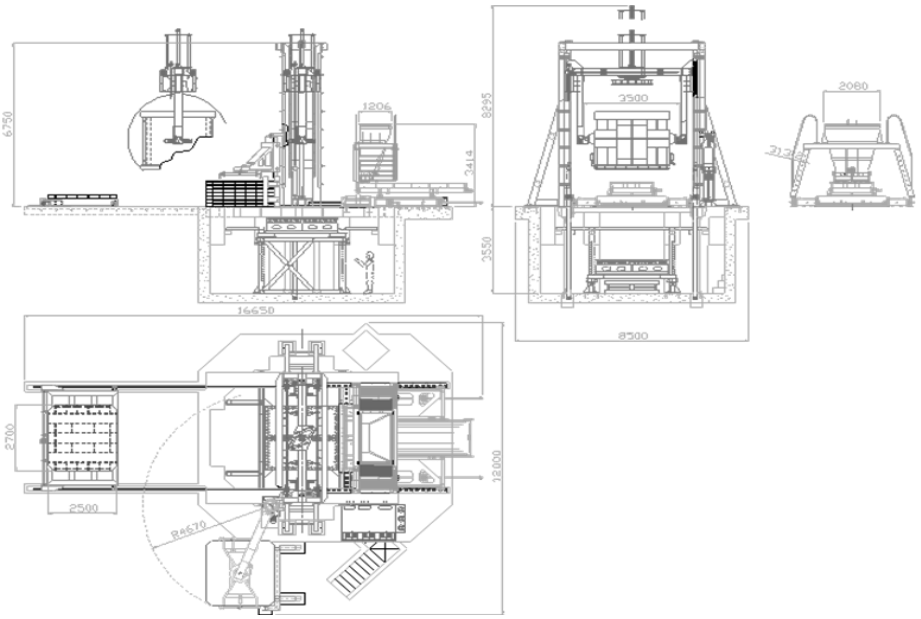
ESB.03 : TECHNICAL DATA

Machine net weight	**16.000** kg.
Max. pallet size	**2700**x**3000**x**200** mm.
Max. Moulding size	**2500**x**2500**x**2000** mm.
Block height	from **90** to **2.000** mm.
Installed power	**50** KW
Vibration sistem control	**SEMIAUTOMATIC**
Vibration intensity	Kg. **8.000** at **3.800** r.p.m.
Handling equipment	**NOT AUTOMATIC**



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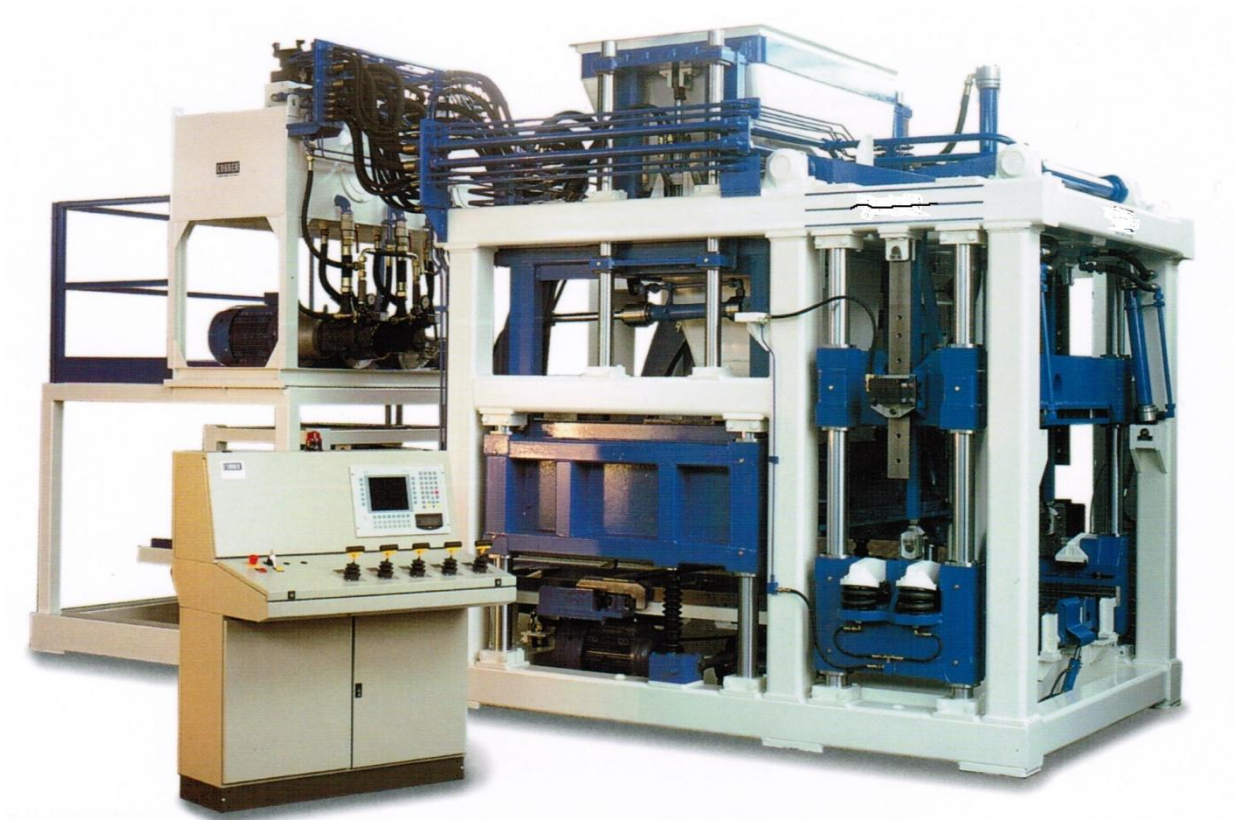
BLOCK MAKING MACHINE
ESB.04

Moulding area up to 0,75 sq.m. product height ranging from 40 to 300 mm.
Patented VARIO-POWER vibration system developed by **ESB** to control frequency and amplitude, in order to reduce cement consumption and to increase density of product, thus ensuring higher mechanical strength.
Movable hopper for filling the feeder box adjusted automatically depending on product volume.
Possible production on mobile steel plate , no increase in cycle time, allows improved vibration distribution, a longer lifespan of the wooden pallets and grants superior product finishing.
Quick production switch in is achieved by automated mould clamping and pressing head fixing, together easy set up procedures
Memorization of all parameters setting for every type of production.
Autoadjustment loop system maximizes working parameters even through different mixtures and operating conditions.



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ESB.04 : TECHNICAL DATA

LENGTH *	**6.200**	mm
WIDTH *	**2.500**	mm
HEIGHT *	**3.500**	mm

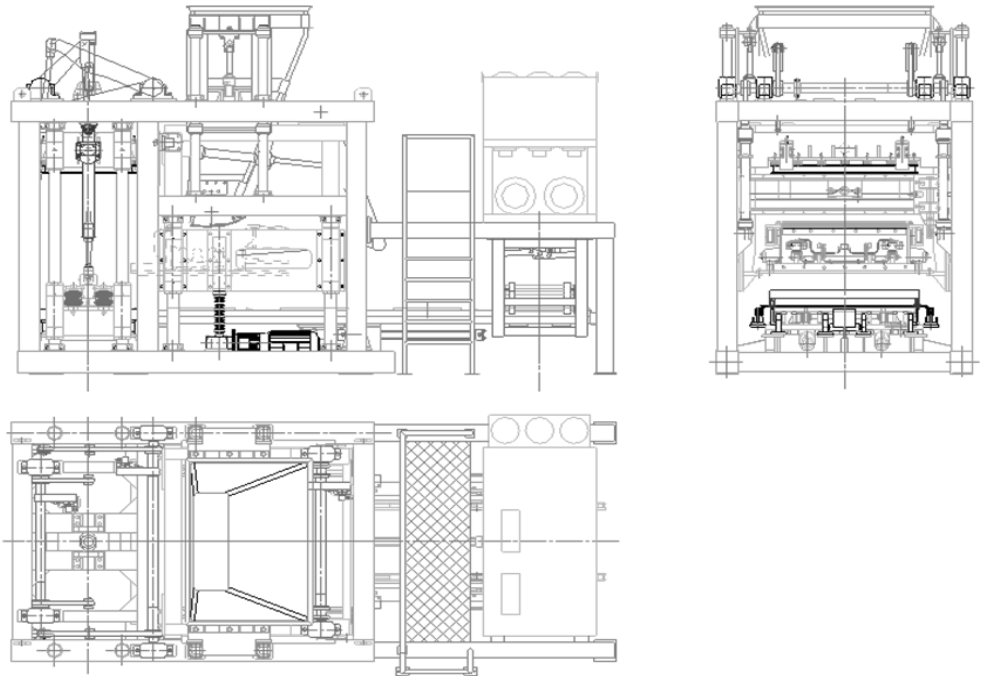
*inclusive of the hydraulic unit

Estimated production cycle of 12 hours

· blocks cm 20 x 20 x 40 : 9.300 pcs.
· paving stone cm 10 x 20 : 950 sq.m.

Machine net weigth	**22.000**	kg.
max moulding area	**0,75**	sq.m.
Block height	from **40** to **300**	mm.
max. pallet size	**1400**x**650**x**40/45**	mm.

Power of vibration system	**22** KW
Power of hydraulic unit	**36** KW
Hydraulic tank capacity	**600** l.



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BLOCK MAKING MACHINE
ESB.04/SMART

ESB.04/SMART is a line of stationary plants, innovative and surprising.

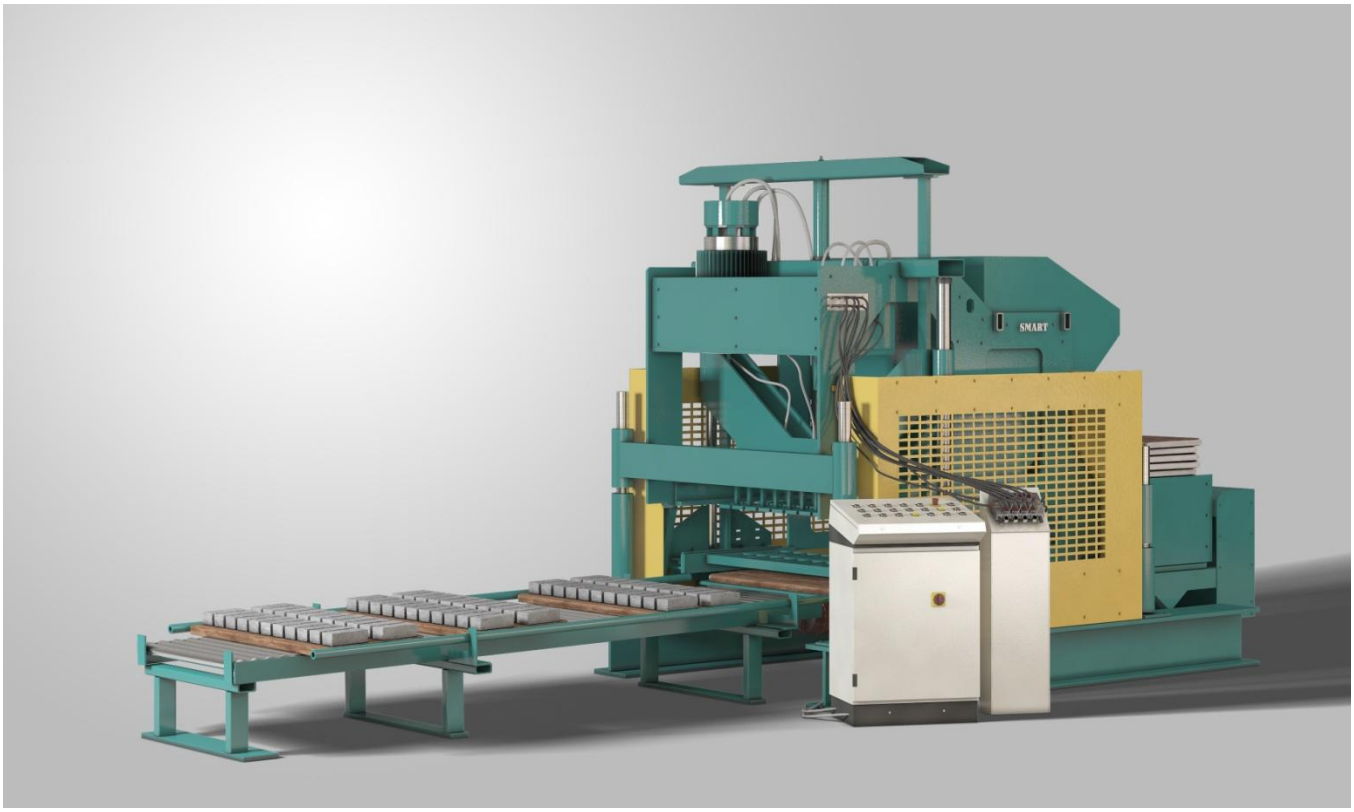
ESB can supply by the only pressing unit to a full complete turnkey plant.

ESB.04/SMART is ispired by the philosophy of ESB.07/SMART. This machine allows high quality artifacts in ensuring flexibility, compactness, simplicity, rationality and reliability.

Complete with power supply of empty tables. The system is affordable and modular; ie it may have a very reduced cost staut-up and be integreted in time.

Mold area production of 125x54 cm whit height from 40 to 250 mm.

Cycle time: 22÷30 seconds



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ESB.04/SMART : TECHNICAL DATA

LENGTH *	**3.600**	mm
WIDTH *	**2.520**	mm
HEIGHT *	**2.600**	mm

*inclusive of the hydraulic unit

Estimated production cycle of 8 hours

· blocks cm 20 x 20 x 40 : 5.000 pcs
· paving stone cm 10 x 20 : 400 sq.m
· Curbs cm 15 x 25 x 100 : 2.500 pcs

Machine net weigth	**4.840** kg.
max moulding area	**0,75** sq.m
Block height	from **40** to **250** mm.
max. pallet size	**1250x540x40/45** mm.
Hydraulic tank capacity	**250** l.

Power lateral vibration	**42** KN
Table vibration	**49** KN
Power pressing	**20** KN

Power of hydraulic unit	**15** kw
Total installed power	**19,5** KW

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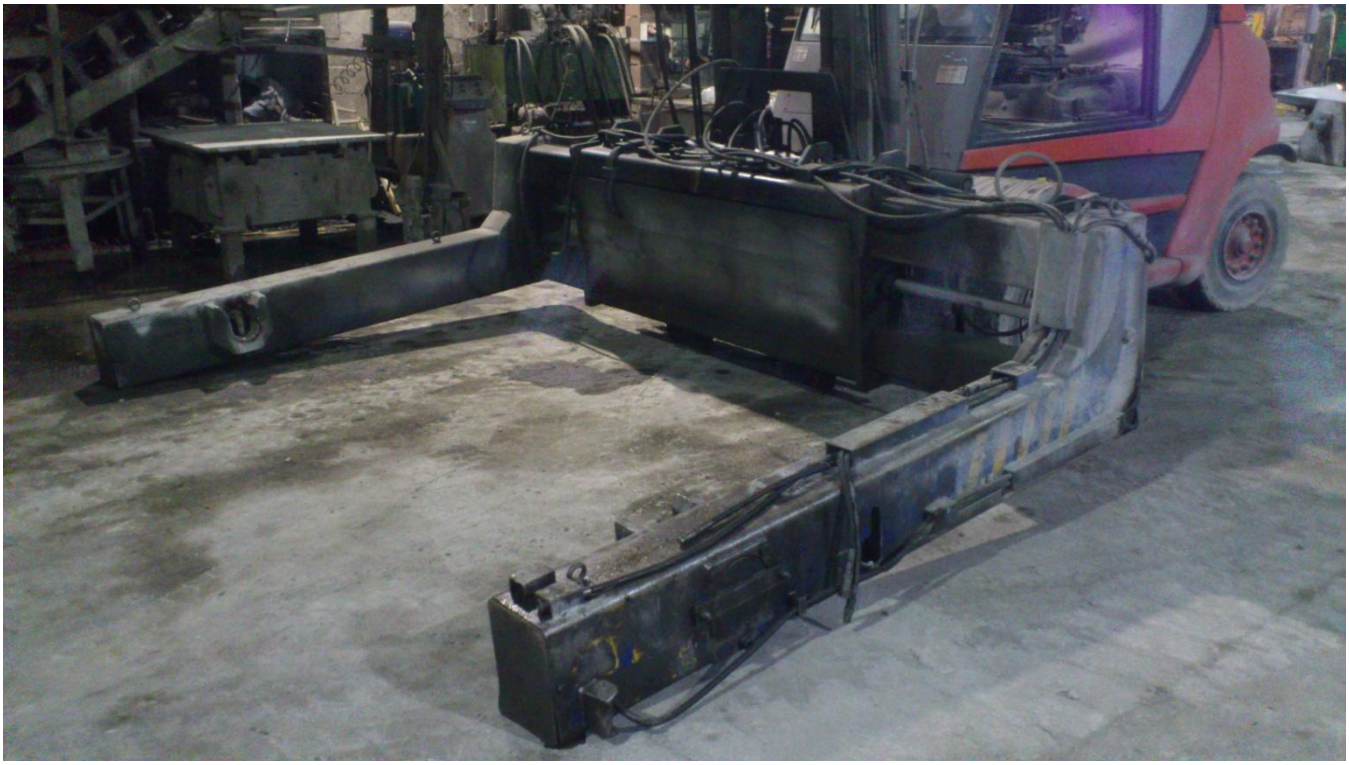
BLOCK MAKING MACHINE
ESB.05

HYDRAULIC TILTING MECHANISM

Universal hydraulic tilting mechanism for the application to forklift in order to form hydraulic moulds, adjustable, complete with control valve and fast couplings for the forklift.

The hydraulic tilting mechanism turns the mould of 180° through a rack hydraulic cylinder.

The equipment can be used for every kind of hydraulic mould: manholes, block moulds and moreover moulds for light poles plinths, curbs, floorings, hydraulic pits, etc.



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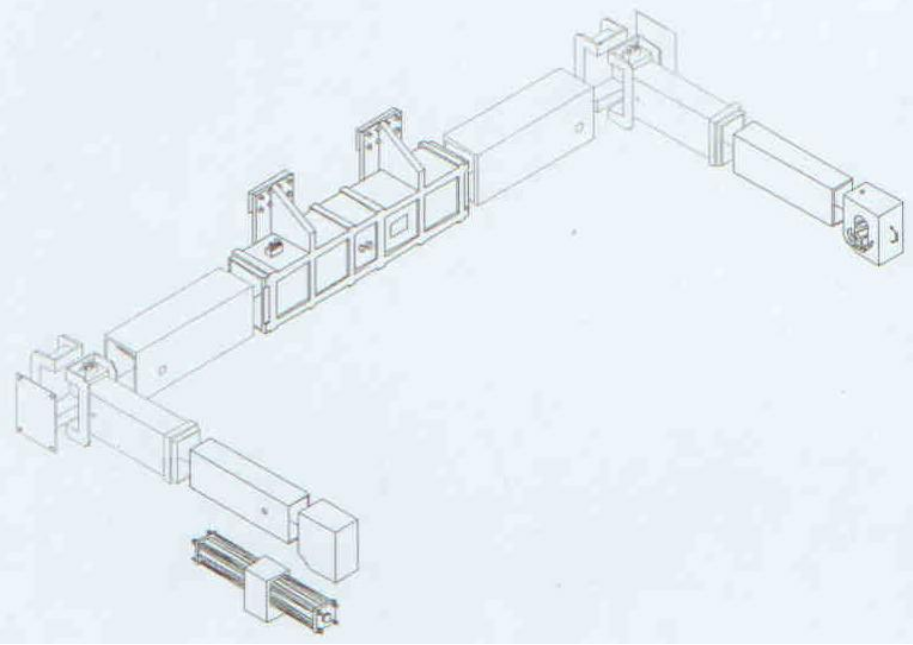
ESB.05 : TECHNICAL DATA

WIDTH	Min. **1.740** mm – Max. **3.040** mm
DEPTH	Min. **950** mm – Max. **1.490** mm
WEIGTH	**980** Kg.
CAPACITY	**4.000** Kg.

ESB.05 : COMPONENTS

As follows a list of the used or to use component in case of extraordinary maintenance:

- Two pistons of 650 mm with a steam of 30mm diameter and a stator of 50 mm diameter suitable to pressures of 150 bar.
- Two pistons of 510 mm with a steam of 25 mm diameter and a stator of 40 mm diameter suitable to pressures of 150 bar.
- E2 model Actuator.
- High pressure 3/8 tubes with a flow rate of 180 bar R2T - AEREOQWP GH781 type..
- FPD 3/8" pilot check valves.



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BLOCK MAKING MACHINE
ESB.06/1015E

- **The Block-making machine ESB.06/1015E** is a CE approved machine for the production of hollow concrete blocks with variable height **between 200 mm and 270 mm.**
- It's a fully automatic machine, self-propelled machine, with vibro-compression operation, working on a sliding, wear resistant steel plate. This solution is better than working directly on a track. The steel plate gives in fact better finishing and size control. Pressing performance is also better, and any problem of the material sticking to the track is avoided.
- Lateral vibration using special vibrators; optional upper vibrator on the stripper, using electric vibrators; frequencies can be easily and continuously adjusted, depending on concrete mould and material mix type.
- Useful production area:

  standard 1050 mm x 1070 mm;
  special 1250 mm x 1070 mm.
- Cycle time: **33÷35 seconds**.
- No. 2 mechanical vibrators, with adjustable rotating weights, driven by electrical motors, are fitted on the outside of the mould.
- A electromechanical-hydraulic system, consisting of a series of cams and limit switches, is used to ensure safe operation also in bad conditions (humidity, dust, inconsistent voltage).

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ESB.06/1015E : TECHNICAL DATA

- **A hopper with a 1200 litre capacity**, for concrete dosing, fitted with a sensor that detects the presence of the material;
- A mobile feeder for filling the mould, with mechanism for the opening of the hopper, and a grid with alternate movement;
- A sliding plate, with interchangeable wear resistant plate, to support the products during moulding;
- Double speed mould lifting for optimum de-moulding, guided by 4 large columns;
- Hydraulic lock of the pressing stripper during de-moulding;
- No. 2 Telemecanique inverters for vibration frequency optimisation for any type of mould.
- 4 sliding guides stripper, with automatic hydraulic lock for easy and optimum adjustment during the de-moulding stage.
- An advancement/translation motor-gear driving unit;
- 35 mm wide Adiprene rubber wheels (DU PONT);
- A hydraulic unit for single and double effect cylinder movement, whit heat exchanger and thermostat cooling system
- Grids, protection bonnets and front bar for obstacle detection, connected to the machine protection circuit, ensure consistently safe working conditions thanks to safety circuit breakers with forced opening of the normally open contact;
- The machine is fitted with a safety devices designed to stop immediately in case of contact with any objects along its path;
- The electric system complies with CEI standards: EN 60204-1 (CEI 44.5) EN 60529 (CEI 70.1)

MACHINE SIZE			SHAKE-OUT SIZE		
LENGTH	4.650	mm	LENGTH	860	mm
WIDTH	2.170	mm	WIDTH	1.050-1.250	mm
HEIGHT	2.520	mm	HEIGHT	200-270	mm

HOPPER CAPACITY	1.200	Lt.	
TIME CYCLE	35	sec.	
TOTAL WEIGHT	5.450	kg.	WITHOUT MOULD
TOTAL VOLUME	16,50	mc.	WITHOUT MOULD
STEERING DIAMETER	8,5	m.	
DRIVE SPEED	17	m/min.	
TOTAL INSTALLED POWER	27	kW.	
TOTAL ABSORBED POWER	18	kW.	
HYDRAULIC UNIT POWER	11	kW	
TANK OIL CAPACITY	100	Lt.	

LATERAL VIBRATOR POWER	2x3	kW.
optional		
UPPER VIBRATOR POWER	2x2,3	kW.
DOWN VIBRATOR POWER	2x2,3	kW.

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BLOCK MAKING MACHINE
ESB.07/1021

- **The Block-making machine ESB.07/1021** is a CE approved machine for the production of concrete blocks with variable height **between 60 mm and 300 mm.** The range of applicable moulds is virtually endless. Any type of concrete products may be produced, from selflocking blocks to road kerbs.

- It's a fully automatic, self-propelled machine, with vibro-compression operation, working on a sliding, wear resistant plate. This solution is better than working directly on a track. The steel plate gives in fact better finishing and size control. Pressing performance is also better, and any problem of the material sticking to the track is avoided. In case of solid and particularly heavy, such as kerbstones, direct on track operation is also possible.
- Lateral vibration using special vibrators; upper vibration on the stripper, using electric vibrators; frequencies can be easily and continuously adjusted, depending on concrete mould and material mix type.
- Useful production area: **1050mm x1070mm.**
- cycle time: **40÷45 seconds.**
- Double frame, one fixed and one mobile section, driven by hydraulic systems. Fixed steel plate position. This enable switching to moulds with different heights (e.g. kerbstones after moulds) in just a few minutes.
- The vibration of the steel plate, independent of the frame, is caused by the mould. This optimises vibration power and product finishing.
- An electromechanical-hydraulic system, consisting of a series of cams and limit switches, is used to ensure safe operation also in bad conditions (humidity, dust, inconsistent voltage).

ESB.07/1021 : TECHNICAL DATA

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- **1500 litre hopper capacity**; the feeder material is delivered from the hopper in a uniform and precise way. The quantity can be easily adjusted based on the products being manufactured.
- Inside the moving feeder, the material shaking grid, with alternate, symmetrical, and adjustable movement, with dedicated cylinders, ensures appropriate and even filling; the moving feeder forward and backward sliding guides are outside the dirty area, and are fitted with special high performance wheels. During filling of the mould, the filler box is hydraulically locked in position. Only the grid inside the filler box itself shakes.
- Double speed mould lifting for optimum de-moulding, guided by 4 large columns.
- Hydraulic lock of the pressing stripper during de-moulding.
- No. 2 Telemecanique inverters for vibration frequency optimisation for any type of mould.
- 4 sliding guides stripper, with automatic hydraulic lock for easy and optimum adjustment during the de-moulding stage.
- An independent motor-gear assembly for advancement and translation; Since the machine can advance at twice the working speed, rapid changes of position can be accomplished during the movement along the track.
- 35 mm wide Adiprene covered rubber wheels (DU PONT).
- A hydraulic unit for single and double effect cylinder movement, with heat exchanger and thermostat cooling system.
- A low voltage (24 V a.c.) control panel, fitted on a swivelling arm and easily accessible from the control platform.
- Grids, protection bonnets and front bar for obstacle detection, connected to the machine protection circuit, ensure consistently safe working conditions thanks to safety circuit breakers with forced opening of the normally open contact.

MACHINE SIZE			SHAKE-OUT SIZE		
LENGTH	4.930	mm	LENGTH	1.070	mm
WIDTH	2.250	mm	WIDTH	1.050	mm
HEIGHT	2.300	mm	HEIGHT	60-300	mm

HOPPER CAPACITY	1500	Lt.			
TIME CYCLE	40	sec.			
TOTAL WEIGHT	6.370	kg.	WITHOUT MOULD		
TOTAL VOLUME	21,22	mc.	WITHOUT MOULD		
STEERING DIAMETER	8,8	m.			
DRIVE SPEED	20,7	m/min			
TOTAL INSTALLED POWER	31,1	kW.	LATERAL VIBRATOR POWER	2x3	kW.
TOTAL ABSORBED POWER	19,8	kW.	UPPER VIBRATOR POWER	2x2,3	kW.
TANK OIL CAPACITY	100	Lt.	HYDRAULIC UNIT POWER	11	kW.

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BLOCK MAKING MACHINE
ESB.07/SMART

- **The concrete block machine ESB.07 / SMART** is the project of a team of Italian engineers among the most experienced in this field. The result is a robust machine, whit a synthetic and rational design of the molding , easy to use, with maintenance costs and downtime reduced.

- ESB.07/SMART is the most advantageous and compact solution for the production of concrete items with **hight from 6 cm to 25 cm**.

- Created to satisfy the customers who want to start producing all types of concrete with a reduced price, maintain unchanged the forces of vibration and pressing of the automatic machines

- It's a egg-layer semi-automatic machine, whit presser and feeder box. **ESB.07/SMART** moves on the wheels of steel and covered in Adiprene rubber.

- The machine vibro-compressed directly to ground. This solution also allows the production of heavy elements such as curbs and solid blocks.

- Useful production area:
  1250 mm x 540 mm

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- Cycle time: **22÷30 seconds**

ESB.07/SMART : TECHNICAL DATA

MACHINE SIZE				SHAKE-OUT SIZE		
LENGTH	LENGTH	3.250	mm	LUNGHEZZA	540	mm
WIDTH	WIDTH	2.510	mm	LARGHEZZA	1.250	mm
HEIGHT	HEIGHT	2.500	mm	ALTEZZA	60-250	mm

HOPPER CAPACITY	800	Lt.				
TIME CYCLE	22-30	sec.				
TOTAL WEIGHT	4.840	kg.	WITHOUT MOULD			
TOTAL VOLUME	-------	mc.	WITHOUT MOULD			
STEERING DIAMETER	4	m.				
DRIVE SPEED	-----	m/min				
TOTAL INSTALLED POWER	12	kW.	LATERAL VIBRATOR POWER	5	kW.	
TOTAL ABSORBED POWER	10	kW.	HYDRAULIC UNIT POWER	5,5	kW.	
TANK OIL CAPACITY	250	Lt.				

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AUTOMATIC PICKER
ESB.08/1036

- The **ESB.08/1036** is a CE marked machine, for automatically picking up concrete elements produced in a vibrating mould machine.

- It is fully automatic and self-propelled on steel wheels with an “adiprene” rubber layer. It only requires the operator to enter the program and possibly insert the pallet, this operation to be performed only with the specific device delivered with the machine. In fact, the machine’s program allows it to work with or without a pallet.

- The front part of the machine is provided with introduction guides that allow it to follow a row of concrete products even if they are not perfectly aligned.

- Having both a block valve and an hydraulic accumulator, the machine allows for fi ne pressure adjustments that remain constant over time, allowing it to pick up weak or not fully cured concrete products.

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ESB.08/1036 : TECHNICAL DATA

- Concrete products are picked up by mechanical arms furnished with rubber sleeves whose pressure is adjusted with a manual valve.
- The EPROM that controls the machine allows the operator to select different types of packaging of the desired dimension with simple digital input to the pre-installed programs. The operator need only select the type of packaging and whether it is with or without a pallet.
- The EPROM also has a self-test subroutine capable of detecting functional anomalies.
- The machine can pick up the entire daily production of a vibrating-mould machine in half a day.

MACHINE SIZE			PALLET SIZE		
LENGTH	3.100	mm	LENGTH	1.000	mm
WIDTH	1.550	mm	WIDTH	1.000	mm
HEIGHT	2.400	mm	HEIGHT	1.200	mm

MACHINE WEIGHT	2.600	kg.
TOTAL VOLUME	11,53	mc.
STEERING DIAMETER	4,5	m.
DRIVE SPEED	13	m/min.
TOTAL INSTALLED POWER	6,9	kW.
TOTAL ABSORBED POWER	4,2	kW.

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ACCESSORIES FOR BLOCK MAKING MACHINE ON REQUEST

ESB also offers its clients also a range of accessories for loading hopper plant harvesters and packaging of finished products.

- **PICKER ESB.08/1062**

- **PICKER ESB.08/1063**

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- **PICKER ESB.08/1038**

- **BUCKET ESB.08/1090 Capacity Lt. 750**
- **BUCKET ESB.08/1091 Capacity Lt. 1500**
- **BUCKET ESB.08/1092 Capacity Lt.1000**

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BLOCK SPLITTER LINE
ESB.13

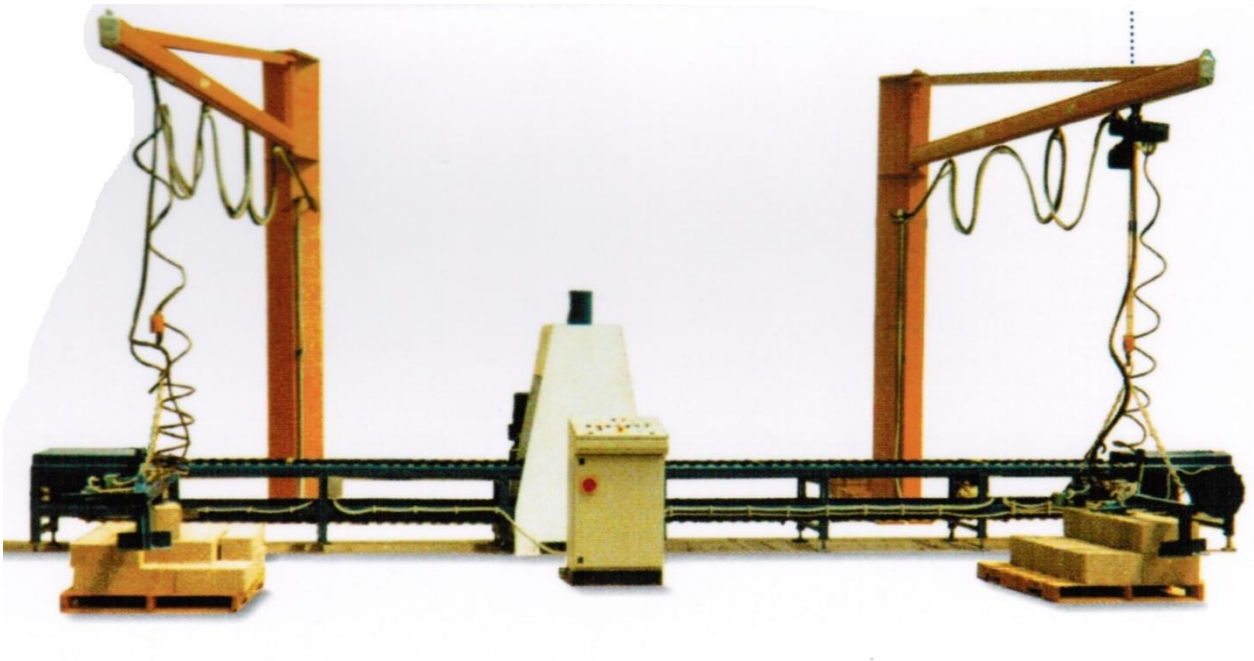
Hydraulic control of the upper splitting blade with fixed lower contrast blade, with self-leveling system both made by interchangeable sectored hardened steel.

Automatic positioner of the elements under the splitting blade made by the roller chain driven by electric motoreducer.

Automatic and manual control system by means of PLC, with programmable number of cutting for each element to be splitted

Hydraulic grabs with manual control to lift the elements to be splitted and recompose the cube with splitted blocks.

Possibility of production with one or two operators.



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BLOCK SPLITTER LINE
ESB.13: TECHNICAL DATA

DIMENSIONS MACHINE		
LENGHT **WIDTH*** **HEIGHT** *inclusive of the hydraulic system	**8.670** **3.500** **3.200**	mm mm mm
MACHINE NET WEIGTH	**3.000**	kg.
PRODUCTS HEIGHT	Da **40** a **300**	mm.
NOMINAL PRODUCTION FOR HOUR Blocks 20x20x40/50	**500**	Pcs.
POWER OF HYDRAULIC UNIT	**11**	KW
HYDRAULIC UNIT TANK CAPACITY	**200**	Liter

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ESB.30.EVOLUTION
POLITERM POWER SUPPLY SYSTEM FOR BLOCKS PRODUCTION

- **ESB.30.Evolution** is a storage – dosage – power supply system to activate upstream of the planetary mixer of the traditional plants which is able to produce concrete blocks with the aim to realize the range of ESB products.

- The line has CE marking and is designed according to the needs of every single client by adapting the components to the production requirements and to the available productive areas.

- The plant model **ESB.30.Evolution** is designed to produce POLITERM in a modern, flexible and with high quality standard with the following improved features whit high production capacity, fully automatic and electronically controlled additive dosage, fully automatic pre-dosage of the bags' or mixer material volume.

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- It is fully automatically, integrated into the computer programs of every single plants and allows you to optimize the production cycles by ensuring an optimal mix among the necessary components during the production of the ESB product ranges.

- It does not require additional operators to those who are already present on a normal block production plant. Its insertion upstream of the production line does not affect at all the normal productions.

- The program of the machine allows to work both as in presence of traditional cycles as during the production of thermal blocks using the ESB technology.

- The storage of the POLITERM virgin polystyrene beads is in a specific silo with one or more rooms that automatically supply the mixer.

- The dimensions of the mixer depend on the productivity of the block production plant. It works in an automated continuous cycle during the power supply and discharge phase.

- The plant has necessity of 1 or 2 worker for each shift of 8 hours (see also ‘’production capacity’’)

ESB.30.EVOLUTION : TECHNICAL DATA

Production capacity: figures based on a 8 working hours shift

- approximately **240 m^3** with one worker
- approximately **480 m^3** with two workers

.

- The nominal power for feed the plant is about 6 kW/hour

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ESB.31
EPS EXPANSION LINE

- **ESB.31** is the expansion line designed by Edilteco Spa.

- The line has CE marking and is designed according to the needs of every single client by adapting the components to the production requirements and to the available productive areas.
- Automated and easy to maintain, if necessary can be connected in line with the plant **ESB.30.EVOLUTION**
- The plant is studied to functionally answer to necessities of production easiness, high quality control, homogeneous features of the final product.Furthermore the maintenance of the plant is very small and easy to execute
- The technical features of the final products are:
    - Low density
    - Constant dimensions
    - Waterproofing
    - Precise weight
- **DIAGRAM OF THE PLANT:**
    - Steam generator and water purifier
    - Steam transport line
    - Expander
    - Kit for second expansion
    - Fluid bed
    - Air blowers

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- Eps transport lines
- Silos for eps (n°8 for 30m^3 each)
- Electrical plant
- Software and controls panels

ESB.31 : TECHNICAL DATA

- **Production capacity:** Around 9 working hours to produce 100 m^3 of eps at 10 kg/m^3 density:
  - Capacity of **300 kg/h** in first expansion (14 gr/lt).
  - Capacity **150-200 kg./h** of 150-200 kg/h in second expansion (9-10 gr/lt).
- **Electrical power:** The nominal capacity needed by the plant is around 18 kW/h at 380v.

Foam chamber:	Diameter	mm	600
	Height	mm	1.500
	Volume	m^3	0.4
Steam connection		Ø	DN 25
Condense connection		Ø	½"
Compressed air connection		Ø	1 ½"
Compressed air inlet		Ø	½"
Pre-expander external size		mm	1300 x 1150 x 3000
Approximate weight		Kg	700
Saturated steam consumption at medium density		Kg/h	80-120
Compressed air consumption		m^3/h	1,0
Installed power: Pre-expander + Fluid-bed		kW	6+4
Productivity :			
First expansion at:	14 gr/lt	Kg/h	~300
	17 gr/lt	Kg/h	~400
	20 gr/lt	Kg/h	~450
Second expansion at:	9-10 gr/lt	Kg/h	150 ÷ 200

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POLIBLOCK MACHINE H20 TIPO 1000
ESB.32

MIXING MACHINE PUMP FOR LIGHTWEIGHT CONCRETES WHIT ELECTRICAL POWER SUPPLY

TYPE OF MACHINE
Equipment completely in stainless steel for the preparation (mixture) and for the pumping of lightweight mortar prepared with virtual inert materials like virgin expanded polystyrene beads, regenerated expanded polystyrene beads, perlite, vermiculite and cork, also when mixed with foam made with appropriate equipment (type Foam Maker).
The equipment is supplied with “Manual of installation, utilisation and maintenance” and “Declaration of conformity CE”as the current Directive.

EQUIPPED WHIT
- Tank included for 200 lt. storage of mixing water with device stating de maximum level.
- Digital device for de dosage of mixing water with direct introduction in the mixing tank.

ESB.32 : TECHNICAL DATA

MIXING MACHINE SECTION

Mixing tank:	• capacity 1.000 lt.
Motor:	• 3,0 kW - 380V/-50 Hz
Mixing blades:	• Double crossed flow

PUMP SECTION

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Pump motor:	• 5,5 kW - 380V/-50 Hz
Transmission:	• clutch belt transmission
Pump capacity:	• 500 lt. water/min.
Pumping maximum distance:	• approximately 120 meters
Pumping maximum height	• approximately 30 meters

GENERAL

Weight:	• approximately kg. 700
Dimensions:	• cm. 210 x 130 – height cm. 100

HANDLING DEVICES

• Eyes bolt for cranes' cables
• Openings for forklift

STANDARD EQUIPMENT

• n° 3 reinforced pipes for carrying de mortar (30 metres in total) connections included
• n° 3 light plastics pipes for carrying the mortar (30 metres in total) connections included
• 25 metres of water pipe
• 25 metres of electrical cable with 3 phases hold + earthing 32A
• n° 1 additional water tank (capacity 300 litres) with tap
• n° 1 pump remote-control in parallel
• n° 2 "trollini" for the laying on the surface of the pumped mortar.

CUSTOMIZED VERSION

Available on demand

- Metallics pipes and ellbows (for the mortar pumping)
- Extracting tool for stator
- Politerm Machine Screw powered (motorized for loading of cement into the tank):

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POLIBLOCK MACHINE ECO TIPO 1000
ESB.33

MIXING MACHINE PUMP FOR LIGHTWEIGHT CONCRETES WHIT ELECTRICAL POWER SUPPLY

TYPE OF MACHINE

Equipment completely in stainless steel for the preparation (mixture) and for the pumping of lightweight mortar prepared with virtual inert materials like virgin expanded polystyrene beads, regenerated expanded polystyrene beads, perlite, vermiculite and cork, also when mixed with foam made with appropriate equipment (type Foam Maker).
The equipment is supplied with “Manual of installation, utilisation and maintenance” and “Declaration of conformity CE”as the current Directive.

ESB.33 : TECHNICAL DATA

MIXING MACHINE SECTION

Mixing tank:	• capacity 1.000 lt.
Motor:	• 3,0 kW - 380V/-50 Hz
Mixing blades:	• Double crossed flow

PUMP SECTION

Pump motor:	• 5,5 kW - 380V/-50 Hz

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Transmission:	• clutch belt transmission
Pump capacity:	• 500 lt. water/min.
Pumping maximum distance:	• approximately 120 meters
Pumping maximum height	• approximately 30 meters

GENERAL

Weight:	• kg. 550
Dimensions:	• cm. 210 x 130 – height cm. 100

HANDLING DEVICES

• Eyes bolt for cranes' cables
• Openings for forklift.

STANDARD EQUIPMENT

• n° 2 reinforced pipes for carrying the mortar (20 metres in total) connections included
• n° 2 light plastics pipes for carrying the mortar (20 metres in total) connections included
• 25 metres of electrical cable with 3 phases hold + earthing 32A
• n° 1 additional water tank (capacity 300 lt.) with tap
• n° 1 pump remote-control in parallel
• n° 2 "trollini" for the laying on the surface of the pumped mortar.

CUSTOMIZED VERSION

Available on demand

All the indications provided in this technical data sheet are purely approximate and not binding for legal purposes. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on building sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installation. The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all the methods and instructions for use generally referable to "workmanlike" execution. Edilteco S.p.A. reserves the right to change the contents of this technical data sheet on its final judgement. The spreading of this data sheet, through any media, supersedes and cancels the validity of any other technical data sheet previously published.

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VIBRANTING WORKTOP
ESB.79

Vibranting worktop ESB.79 is in mild steel **200 x 100 cm**, to pair with quarterdecks for panels

Characteristics of vibrating worktop:

- top surface 3 cm thickness,

- equipped with 1 electric vibrator 400V, 3800 Watt, "Somai" with Following characteristics:
  - Power supply 400 V
  - Frequency of 75 Hz
  - Power W 3800
  - Current A 6.1 - Turn \ 1 '4500
  - Centrifugal force KN 42.98 - eg: KGmm. 193.56
  - Connection cable to the vibrator lg 5 mt with mobile key

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QUARTERDECK FOR PANELS
ESB.86

Quarterdeck made of steel for manual manufacturing of LWC panel, through casting of lightweight concrete made of Politerm®, into vibrating mold of 10 panels unit (vibrators included), with final dimension each panel:

length 70 cm x width 60 cm x thickness 7,5 cm.

The LWC panels produced with this system are smooth, without any joints and/or basement, with a working cycle of 4 batches/hour.

Characteristics of quarterdecks:

- Surface for vibrating table
- Panels plates equipped with eyebolts
- Piking system for forklift

The final panel has to be checked with a final executive layout/drawing

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QUARTERDECK FOR PANELS
ESB.87

Quarterdeck made of steel for manual manufacturing of LWC panel, through casting of lightweight concrete made of Politerm®, into vibrating mold of 10 panels unit (vibrators included), with final dimension each panel:

length 225 cm x width 90 cm x thickness 5 cm.

The LWC panels produced with this system are smooth, without any joints and/or basement, with a working cycle of 4 batches/hour.

Characteristics of quarterdecks:

- Surface for vibrating table
- Panels plates equipped with eyebolts
- Piking system for forklift

The final panel has to be checked with a final executive layout/drawing

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QUARTERDECK FOR PANELS
ESB.88

Quarterdeck made of steel for manual manufacturing of LWC panel, through casting of lightweight concrete made of Politerm®, into vibrating mold of 10 panels unit (vibrators included), with final dimension each panel:

length 240 cm x width 120 cm x thickness 5 cm.

The LWC panels produced with this system are smooth, without any joints and/or basement, with a working cycle of 4 batches/hour.

Characteristics of quarterdecks:

- Surface for vibrating table
- Panels plates equipped with eyebolts
- Piking system for forklift

The final panel has to be checked with a final executive layout/drawing

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QUARTERDECK FOR PANELS
ESB.89

Quarterdeck made of steel for manual manufacturing of LWC panel, through casting of lightweight concrete made of Politerm®, into vibrating mold of 10 panels unit (vibrators included), with final dimension each panel:

length 200 cm x width 100 cm x thickness 5 cm.

The LWC panels produced with this system are smooth, without any joints and/or basement, with a working cycle of 4 batches/hour.

Characteristics of quarterdecks:

- Surface for vibrating table
- Panels plates equipped with eyebolts
- Piking system for forklift

The final panel has to be checked with a final executive layout/drawing

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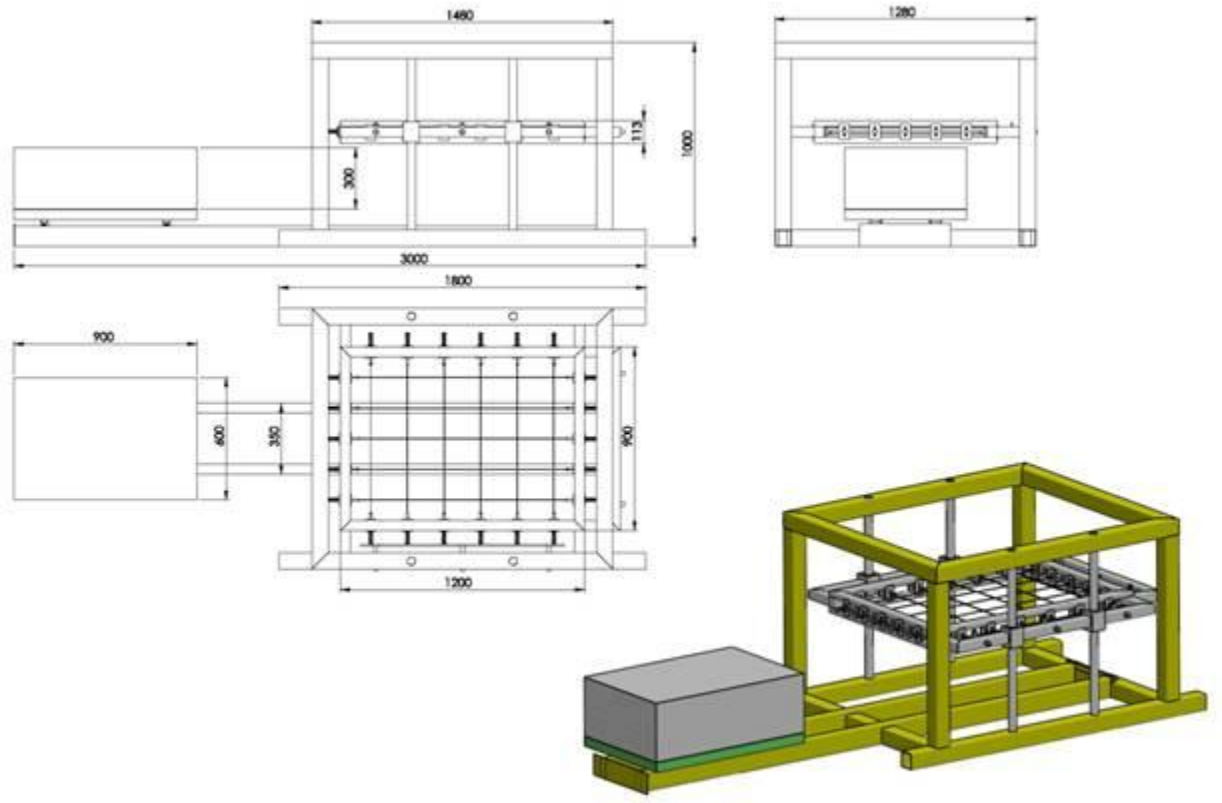
MULTIWIRE MACHINE
ESB.97

Drop-down wire machine cutting of artifacts made of cement mix lightened with virgin polystyrene.



Painted or galvanized steel frame and structure

Automatic/ manual functioning

Maximum dimension of the block : 600 mm x 900 mm x 300 mm

Power supply: 2 Kw - 400 V - 50Hz - **Auxiliaries power supply** : 24 V

Machine dimension : 1800 x 1300 x 1000 mm - **Average weight** : 1200 Kg.

Fully certified and CE marked

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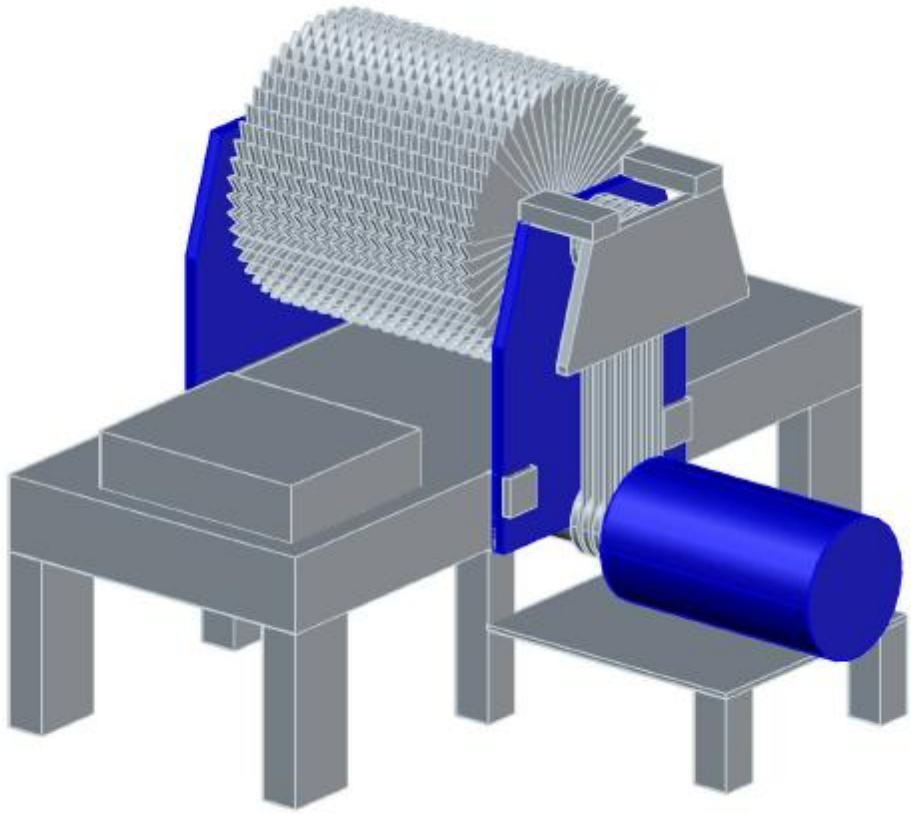
MULTI-CUTTING MACHINE
ESB.98

Multi blade machine designed for dry cutting of manufactured in lightweight concrete



Full of N° 20 WIDIA disk diam. 700x4.2/3.2x30 mm for ESB brand block cutting with **density 260-350 Kg/mc.**.

The number of disks is changeable in accordance with the cutting width request

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Power driven on steel rollers covered with PVC

Painted or galvanized steel frame

Maximum height cut : 255 mm

Power : 22 Kw - 400 V- 50Hz

Torque : 216 Nm

Cutting feed rate: 0,08 m/sec e/o 0,1 m/sec in function of the density of the material (as per customer request)

Average machine weight : 1200 Kg.

Fully certified and CE marked.

OPTIONAL :

Industrial dust suction point

Electronic system for the federate

Official approval from ICEPI Srl (Institute European certification industrial products)

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BRIDGE MILLING MACHINE
ESB.99

Operation

Automatic machine suitable for cutting the slabs and the paving stone by means of a diamond disk. The cast iron bridge runs along two tracks fixed on concrete walls. The disk motorspindle supporting trolley runs along the bridge. All the movements are lubricated and protected by means of carter.

Forward and backward cutting stroke (X axis)

The system for the trolley forward and backward stroke is included in the bridge. The movement is pinion/rack driven, along V shaped guides with slides in oil bath. The stroke speed and length are adjustable on the control panel.

Bridge crosswise stroke (Y axis)

The tracks include the hardened steel guides for the bridge crosswise stroke. The movement is driven by means of two pinion/rack systems, synchronised by means of a shaft.

Motorspindle slide upward downward stroke (Z axis)

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Motorised movement, driven by means of a precision screw/nut system. Running along swallow-tail slides.

Controls

Working cycles setting by means of a PLC, programmable logic. Axis running controlled by means of encoder. Included climatized electrical panel, in a separate position from the machine. IP 54 (EN60529) dust and water protection.

Paint treatment

Surface protected with two coats of bi-component epoxy paint, applied after sanding and washing.

ESB.99 : TECHNICAL DATA

Maximum machinable thickness	mm	200
Cut/backward maximum stroke (X axis)	mm	3600
Bridge crosswise stroke (Y axis)	mm	3600
Motorspindle slide stroke (Z axis)	mm	420
Disk with maximum diameter	mm	625
Disk motor	kW	18,3 / 4 P
X axis motor	kW	1,5
Y axis motor	kW	0,55
Z axis motor	kW	0,75
X axis speed	m/min	0÷16
Installed electrical power with 50 Hz	kW	21
Cooling water (minimum pressure 1.5 bar)	l/min	50
Rotating bench dimensions (not included)	mm	3500x1800
Machine length (L)	mm	6000
Machine width (W)	mm	4900
Machine height (H)	mm	2800
Approximate mass	kg	4000

Machine kit

Cooling water control hydrostat	x
Guard for 625 mm diameter disc	x

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