

Semiautomatic mobile block making machine CR70SP



Blockmaker CR70/SP series

Semiautomatic block making machine – mobile (egglayer type) with steel drop plate

Products Height: ranging from 60 to 300 mm

Solution of demoulding: directly on the concrete or track

Easy mould change

Reduced Maintenance

- BLOCKMAKER CR 70/SP is the ideal machine for the modern prefabrication sight whose aim is to fully satisfy all the demands of the client. In fact the possibility to produce concrete elements with variable height from 60 to 300 mm permits you to cover all the dimensions generally required by the End User
- High technology, low maintenance, efficiency and productivity guaranteed for a long time, are just some of the principal features that make the BLOCKMAKER CR 70/SP the ideal machine for the modern prefabrication sight intended for the production of concrete elements.



High hourly productive capacity: Approx 400 blocks/h (200x200x400 mm – inch. 8'x8'x16')

Moulding area for stacking as per European Standards: 500x1000 mm

Production per cycle: 5 blocks dim. mm 200x200x400 per cycle – inch. 8'x8'x16'

Double demoulding possibility: The great versatility of the BLOCKMAKER CR 70/SP allows the operator to choose from the classic moulding system on the concrete track (still ideal for solid blocks, kerbstones, interlocking paving stones, that for evident supporting and weight reasons cannot be produced differently and the demoulding system on the steel drop plate and subsequently on the concrete track. The advantages of the production on the steel drop plate:

- 1) The collection of the blocks from the ground is facilitated since the elements do not stick to the ground during the drying period
- 2) Better finishing of the elements: All the walls of the blocks are smoother and compact.

Easy and quick change of the moulds: We have designed the BLOCKMAKER CR 70/SP keeping in mind the simplicity of the interchangeability of the moulds. In fact with only 3 quick operations the mould is changed: 1) mould unhooking – 2) hooking of the new mould – 3) eventual contemporary adjustment of the hopper and feeding drawer when the substituted moulds are different in height

Performance

Type	Semi-automatic - Mobile
Max moulding area	mm. 500x1000
Cycles per hour	No 80
Blocks per cycle cm. 20x20x40	No 5
Blocks per hours* Blocks cm. 20x20x40 - 2 holes	Approx No. 400
Production 8 working hours* Blocks cm. 20x20x40 - 2 holes	Approx No. 3200
Min products Height	mm. 60
Max products Height	mm. 300

* The effective production capacity depends on the type of material, consistence, design of concrete element, machine setting and the technical skills of the operators.

MOULDS

standard blocks moulds

hollow blocks, full blocks, ceiling blocks, kerbstones



Moulds for interlocking paving stones

standard drawing and from client design



Moulds for special blocks

Garden concrete blocks, concrete slabs





Semiautomatic mobile block making machine CR70SP (Technical data)



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Steel drop plate	No. 1
Vibrators (high frequency)	No. 2
Approximate weight: - without mould	Kg. 3800
Approximate weight: - with mould(20x20x40 cm.)	Kg. 4400
Volume	mc. 13,5
Oil tank	Lt. 70
Hopper's Capacity	Lt. 600
Iron wheels	n. 4 + 1
Max pressure	Bar 130 /150
Hydraulic system motor	Kw. 7,5
Vibrator Motors	Kw. 2,25 + 2,25
Displacement Motor	Kw. 1,5
Max power installed	Kw. 13,5
Electric motors' power	V 400 / Hz 50 / Threephase(Different voltage on request)



PRODUCTION CYCLE

Manual phases

Automatic phases

Blocks production on the steel plate or on the vibrating table

- Feeder box loading from concrete hopper
- Forwarding movement of the feeding box over the mould
- Mould Feeding and contemporary starting of agitator for a its compulsory feeding
- **Vibration starts during moulds feeling**
- Return of the feeding box to its starting point (under the hopper)
- Compression durino tamperhead fall
- **Vibration during concrete pressure**
- Return of the steel plate (table) to its starting point (under the hopper)
- Mould's lowering to the round for acting the demoulding phase
- Tamperhead lowering on the concrete blocks for their keeping during demoulding phase
- Mould raising for the blocks releasing phase
- Vibration (optional according to blocks shape)
- **Machine forwarding**
- Contemporary advancement of the steel plate to be ready for next cycle
- Mould's lowering on the steel plate



Semiautomatic mobile block making machine CR70SP (Characteristics)



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SEMI-AUTOMATIC Operations – Mobile machine

Hourly output:

400 blocks/hour based on size 200x200x400 mm

Product's height:

min 60 mm – max 300 mm

Mould area:

500x1000 mm

Self locking system for the tamper head

COMPONENTS

Frame

made of high quality electrowelded structural steel shapes reinforced in the points of maximum stress

No. 8 Hard chrome plated guide columns

ensure exact moulding and tamperhead guiding

Steel drop plate

The machine is equipped with a steel drop plate on which the blocks are formed. With this system, the production of light weight concrete elements such as hollow blocks, ceiling blocks etc are manufactured directly on the plate and consequently released on the track. Heavier elements such as kerbstones, solid blocks, pavers etc. are produced directly on the track. The steel drop plate slides on rails thanks to bearings.

4 wheels Vulkolan

1 turning steel wheel

Electric motor-speed reducer group

for the fully automatic advancement at the end of the production cycle

U-turn

the lateral hydraulic movement is activated by an electric motor. When the 5th central wheel is activated, the operator begins to make the U turn by using the hydraulic and electric comand levers

Track correction sensor

(D.E.C.: Direction Electronic Control) permits the automatic correction of the forward direction

CECCONI vibrators::

2 heavy duty high frequency vibrators individually adjustable (r.p.m.: 6000) Their simultaneous activation gives a high rate of compaction to the concrete. 2 phases of vibration (pre-vibration and final vibration) are carried out automatically by timer's control. A 3rd automatic vibration, during the blocks clearing phase, can be activated manually on the control panel, then it will be repeated automatically from its disactivation

Hopper

approx 6000 lts. complete of a mechanical operated discharging hatch

One feeder box

with GRILLS to fill uniformly and quickly the mould

One concrete probe

positioned inside of the Hopper – the probe will automatically stop the machine when the hopper does not contain sufficient material to make a complete cycle

Hydraulic system composed by

hydraulic plant, electric motor, hydraulic pump, cylinders, electrovalve group, set of high quality rubber and steel hydraulic pipes

Oli tank

capacity approximatly 70 Ltrs to ensure a constant cooling of the oil. Complete of suction and discharging filters

Electric control panel board

with low tension devices: Waterproof control panel board containing main switch, thermal protections and working presetters. Complete with timers, selectors, joisticks – synoptic control panel with lights for limit switches and electrovalves check up, allowing a constant control of the cycle.

Seat for the operator

placed in front of the control panel

SECURITY SYSTEMS

Protection grills CE standards



Steel drop plate



feeder box - hopper group



Moulding Area 1000x1000 cm



