



# **Extruder Machines** Products

# EXTRUDER EVO2 MACHINE

## PRODUCTS



The new generation series of EVO2 extrusion machines represent the state of the art in the production of prestressed hollow core panels.

Available in 5 versions depending on the type of elements to be produced, the NORDIMPIANTI Extruder offers cost-effective solutions for companies who are looking for a flexible approach to produce hollow core slabs in various sizes.

The Extruder casts elements in a single phase using the extrusion method without the need for vibration thus keeping the noise of the machine to a minimum.

The machine is modular and the power unit together with the hopper can easily be transferred to another forming insert to enable a slab with a different height to be produced.

Standard heights range from 150 mm to 520 mm while the widths available are 600 mm, 1200 mm, 1250 mm, 1500 mm and 2400 mm.

The heights of the elements, as well as the thickness of the vertical ribs can be varied within certain limits according to the application and the element specifications required.



EVO2 EXTRUDER

**Modular and  
Interchangeable**





**EVO2**

Design and Engineering Made in Italy

The "Made in Italy" design signature and refined mechanics are the basis of a new Nordimpianti Extruder machine for the production of pre-stressed hollow core slabs.

# NON STOP INNOVATION

A completely revised design in perfect harmony with new mechanical solutions such as a new transmission system which further improves concrete compaction and optimises the wear parts to last as long as possible.

A new intelligent management software allows you to change, in real time during the casting, the working parameters of the machine according to the concrete mix design.

The Extruder uses "smart" solutions to make this machine as practical as possible for end-user operation. The EVO2 Extruder is synonymous with convenience, flexibility and quality.

# DESCRIPTION

## EXTRUDER TECHNOLOGY



EVO Extruders from Nordimpianti are made up of 3 main units, a universal control and power unit, a universal hopper and an interchangeable forming insert module.

### Power unit

The universal power unit houses the main motors, the drive motors and the control panel. The power unit, together with the hopper can be easily and quickly transferred to another forming insert to produce a different element.



### Hopper

The concrete is delivered to the machine's hopper. The concrete then falls onto the Archimedean screws of the forming insert.

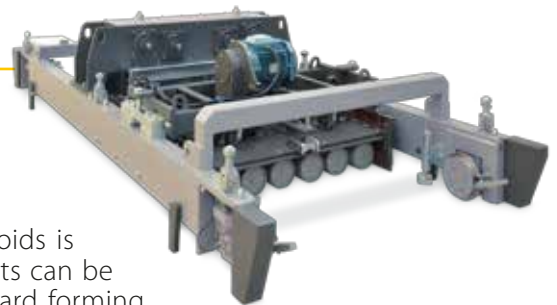
The hopper has a minimum level sensor which stops the machine if there is not enough concrete. This device stops the machine in order to avoid the situation where element damage can occur if the machine is completely out of concrete.

When the hopper is refilled the Extruder automatically restarts.

### Forming insert

The forming insert contains the special gearbox with an oil bath for the transmission components. It also contains the Archimedean screws, forming tubes, side formers, smoother and the wire guides.

The height of the hollow core slabs and the number of voids is determined by the forming insert. Different element heights can be manufactured by changing the forming inserts. The standard forming inserts produce hollow core slabs with 8, 6, 5 or 4 holes.



**8 screw** forming insert  
HC slabs 150 mm high



**6 screw** forming insert  
HC slabs 200 mm high



**5 screw** forming insert  
HC slabs 265 mm high



**4 screw** forming insert  
HC slabs 320-500 mm high

### Production flexibility

The 4 screw forming insert is capable of producing hollow core slabs with different heights by simply changing some components supplied as an accessory set.

This accessory set consists of the following:

- Forming tubes (1)
- Smoother (2)
- Concrete conveyor (3)

For the 4 screw forming insert, accessory sets can be supplied to enable panels between 320 mm and 500 mm high to be produced.

Special accessory sets are also available for other forming insert types.

**4 screw**  
forming  
insert



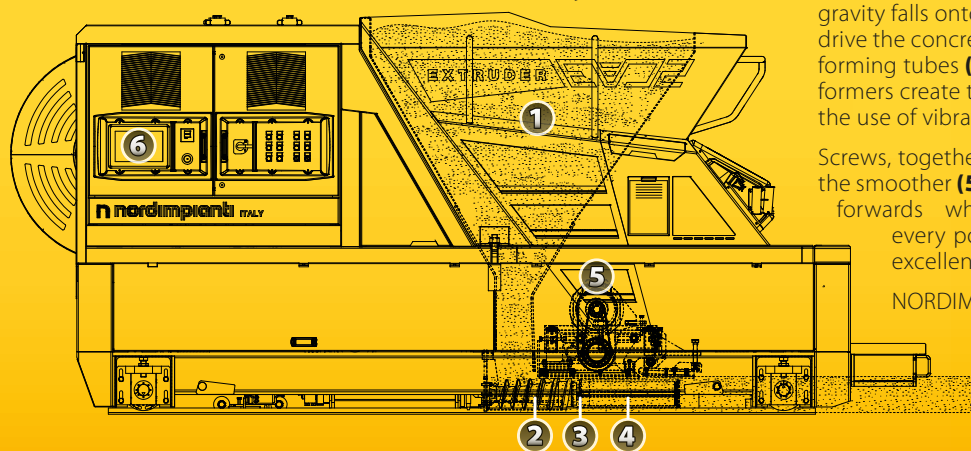
**Accessory set**  
for changing  
element height







## The NORDIMPIANTI EVO2 Extruder system



Concrete is delivered to the extruder's hopper **(1)** and by gravity falls onto the Archimedean screws **(2)**. The screws then drive the concrete into the compaction chamber **(3)** where the forming tubes **(4)** are situated. The forming tubes and the side formers create the shape and the voids of the element without the use of vibration.

Screws, together with the forming tubes, the side formers and the smoother **(5)** have an oscillating movement backwards and forwards which give excellent concrete compaction at every point along the element ensuring the element's excellent technical characteristics.

NORDIMPIANTI's EVO2 extruder is equipped with a compaction control system **(6)** that allows the operator complete control of the machine in order to reduce or increase the concrete compaction when required.

## THE NEW EVO2 A GOOD MACHINE JUST GOT BETTER

- 1** New design
- 2** Reduction in maintenance costs
- 3** Improved product quality
- 4** Improved machine operation



New Design



Independent screw motors



New control panel



New cardan joint system between shafts and transmission



New hopper



Improved rear work platform



New led lamp



Inspection lamp in the extrusion zone

**nordimpianti**

# EVO2 Extruder: Modular and Interchangeable



The best extruder machine available for the production of hollow core slabs.

DESIGN AND ENGINEERING MADE IN ITALY



## Technical data

Length, with cable drum	5100 mm
Width	1680 mm
Height, depending on forming insert	2240 - 2360 mm
Rail gauge, standard Nordimpianti casting bed	1410 mm
Volume concrete hopper	1.8 m <sup>3</sup>
Total weight, depending on forming insert	8000 - 8600 kg
Connection power, 400 V, 50 Hz	52 kW
Noise level	< 85 dBA

HEIGHT mm	ELEMENTS WIDTH mm					
	600	1200	1250	1500	2x1200	2400
150	X	X	X			
180	X	X	X			
200	X	X	X		X	
220		X	X	X	X	
265		X	X		X	X
320		X	X		X	X
360		X	X		X	X
400		X	X		X	X
450		X	X		X	X
500		X	X		X	X

\*DIMENSION CAN BE ADAPTED TO CUSTOMER REQUIREMENTS



Transmission in oil bath



New screw designs



Dynamic machine control  
DMC (Optional)



New smoother



New side formers



No need for extra  
access ladder



Tool holder  
compartments



Hook holders



Production  
schedule support



Auxiliary power socket  
repositioned



New system for wire guide  
plate movement



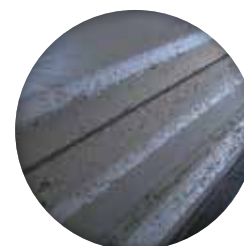
New concrete conveyor



Water tank with spray  
system on upper cables



Low maintenance cost

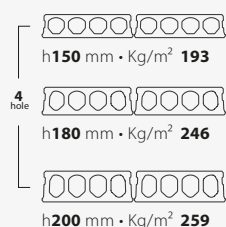


Excellent surface  
finish

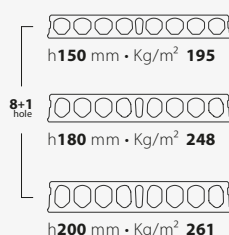
# We have a range of machines capable of meeting all your needs.

*The choice is yours!*

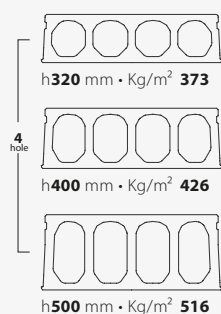
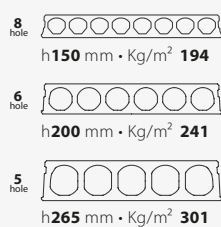
## 2x600 mm wide



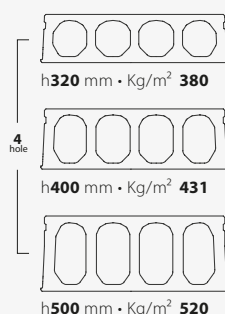
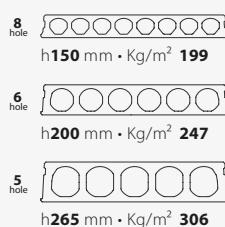
## or 1200 mm wide



## 1200 mm wide



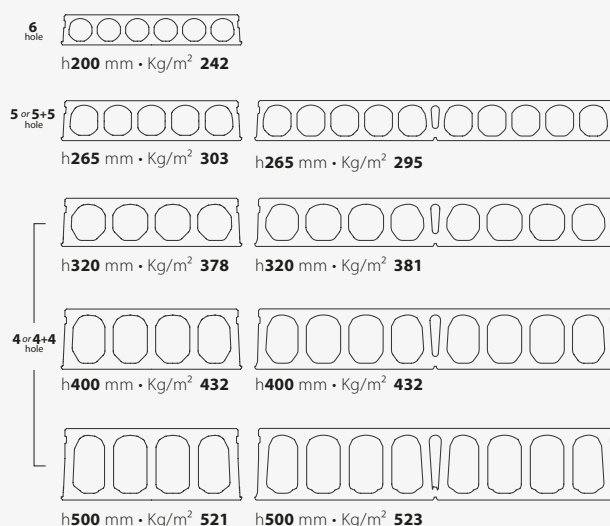
## 1250 mm wide



## 1500 mm wide



## 2x1200 mm wide or 2400 mm wide



## Production of prestressed hollow core slabs for Floors and Walls

With the NORDIMPIANTI EVO2 Extruder machine it is possible to produce hollow core slabs for floors and for walls.

The production system gives a good surface finish on both sides of the element (one side is smooth because of the steel casting bed and the other side is given an excellent finish by the smoother on the casting machine). It means that the panel is finished, ready for painting if required.



**Floor Slabs**



**Wall Panels**

## Production of special elements

NORDIMPIANTI's EVO2 Extruder can also be equipped to produce hollow core slabs for floors with profile edge keys along the sides of the element.

This type of side edging, when used with the correct construction methods enable the elements to meet seismic requirements.

The particular corrugated side edge is made by special edge cog rollers.







## **Extruder Machines**

Products



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