



Extruder evo Machines

Products

EXTRUDER *evo* MACHINE

PRODUCTS



The new generation of series EVO 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 machine 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 webs can be varied within certain limits according to the application and the element specifications required.



EXTRUDER EVO

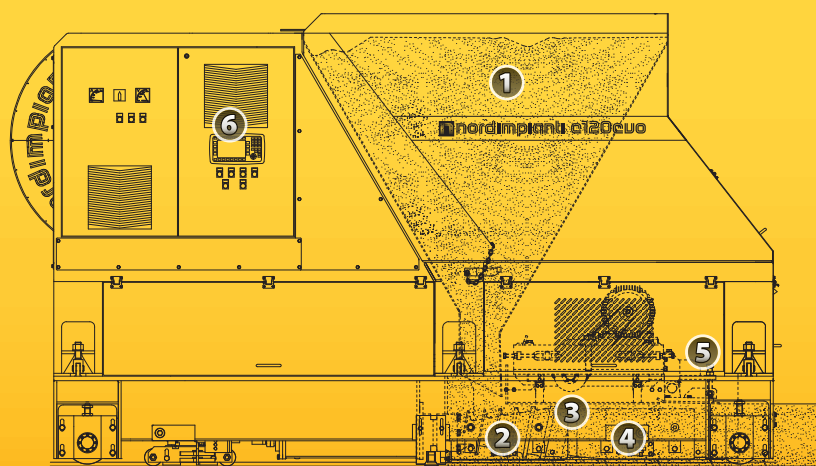
**Modular and
Interchangeable**





Casting Machine

Extruder Technology



The NORDIMPIANTI evo 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 smoothing device (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 evo 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.

Production of prestressed hollow core slabs for Floors and Walls

With the NORDIMPIANTI Extruder evo 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 device 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 evo Extruder can also be equipped to produce hollow core slabs for floors with profile edge keys along the sides of the element.

These enable the elements, when constructed together to resist seismic and other lateral forces.

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



Extruder @UO Modular and Interchangeable



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

NEW DESIGN

e120@UO

Technical data

Length, with cable drum	4050 mm
Width	1650 mm
Height, depending on forming insert	2250 - 2350 mm
Rail gauge, standard Nordimpianti casting bed	1410 mm
Volume concrete hopper	1.8 m ³
Total weight, depending on forming insert	8100 - 9100 kg
Connection power, 400 V, 50 Hz	55 kW
Noise level	< 85 dBA

*DIMENSION CAN BE ADAPTED TO CUSTOMER REQUIREMENTS



Height*	e60	e120	e125	e150	e240	
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

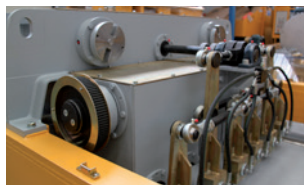
Top Advantages of NORDIMPIANTI's Extruder machines:



EXCELLENT SURFACE FINISH



USER FRIENDLY



TRANSMISSION IN OIL BATH



MINIMUM DOWNTIME FOR FORMING INSERT CHANGING



LOW MAINTENANCE COSTS

High level of concrete compaction

- All the motors are INVERTER driven allowing precise control of the machine;
- Excellent surface finish;
- Precise control of the dimensions of the slab;
- Function to control the level of compaction, adjusting the machine to suit the type of concrete and the elements being produced.

Production flexibility

- Slab heights from 150 mm to 520 mm;
- A vast range of standard or customised cross sections to meet any technical requirement;
- Extruder evo machines can be supplied to produce slabs with widths 2 x 600 mm, 1200 mm, 1250 mm, 1500 mm, 2 x 1200 mm or 2400 mm.

Proven reliability

- Heavy-duty construction;
- NORDIMPIANTI Extruder machines are internationally proven;
- Most of mechanical parts are galvanized for durability and easy maintenance;
- Third party components are sourced from the world's most renowned suppliers.

User friendly

- New operator control panel;
- Production data acquisition to analyse machine use and production costs;
- Wear materials designed for long service life;
- Wear parts engineered to be changed with the minimum of down-time;
- Rapid production changeover to manufacture different profiles and slab heights;
- Machine noise kept to a minimum.

DESCRIPTION

EXTRUDER TECHNOLOGY



The EVO NORDIMPIANTI extruder machine is 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.

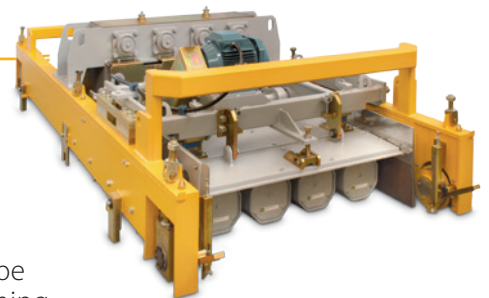
The hopper has a minimum level sensor which stops the machine if there is not enough concrete. This device stops the machine in order to avoid the situation where element damage can occur if the machine is completely out of concrete.

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 device 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.

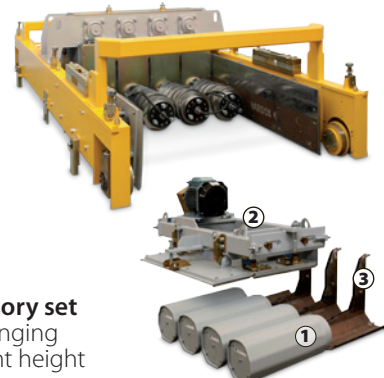
This accessory set consists of the following:

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

For the 4 screw forming insert the 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

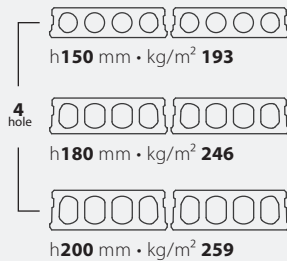


We have a range of machines capable
of meeting all your needs.
THE CHOICE IS YOURS!



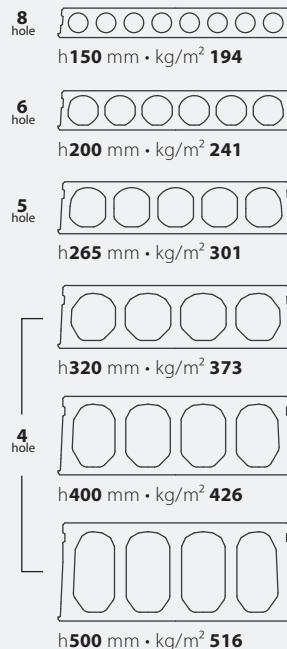
c60cvo

2x600 mm wide



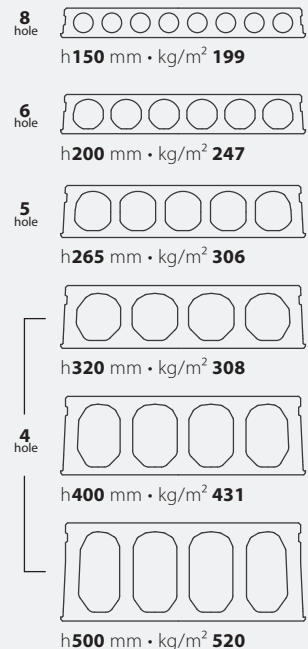
c120cvo

1200 mm wide



c125cvo

1250 mm wide



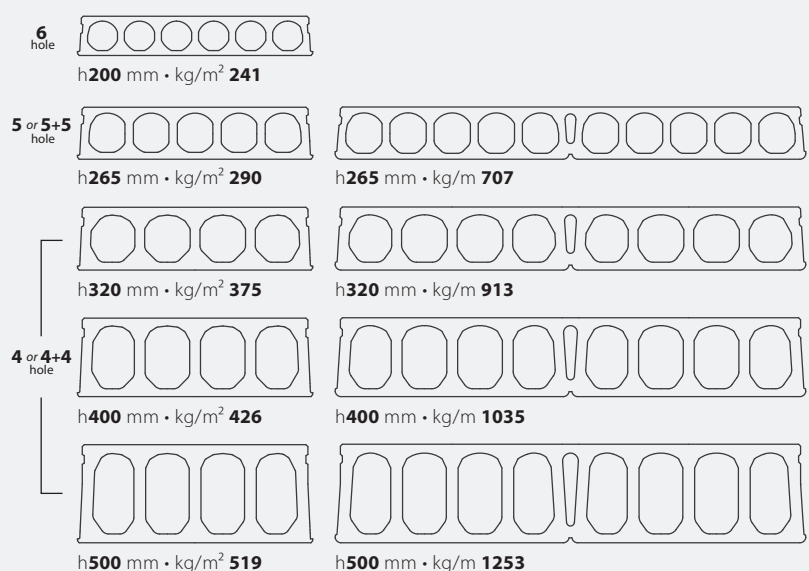
c150cvo

1500 mm wide



c240cvo

2x1200 mm wide or 2400 mm wide



**Concrete
Experience**



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