

## EXTRUDER

### Extruder EL900E



*Key words: Elematic Extruder EL900EW, extruder, hollow-core slabs, wide hollow-core slabs, Hollow-Core-wall panels, prestressed flooring.*



<b>Content</b>	<b>page</b>
1. Introduction .....	3
1.1. Advantages .....	3
1.2. General data .....	4
1.3. Detailed data .....	4
2. Key features .....	5
3. Product components .....	5
3.1. Power unit .....	5
3.2. Nozzle module .....	6
3.3. Additional required components .....	6
4. Technical data .....	6
5. Additional information .....	7

## 1. Introduction

An extruder is a production machine for a variety of sizes of hollow-core floor slabs. It is the right solution for a producer who needs to manufacture varying quantities of different sizes of hollow core slabs.

### Key Elematic Extruder features:

- Cross-sections available from 150 mm to 500 mm
- A wide range of standard, heavier and lighter slab cross-sections
- Most function parameters are factory-set
- Robust and well-engineered heavy-duty construction

### ELEMATIC EXTRUDER EL900E

The Elematic EL900E is designed to not only be good-looking but to also be the most practical solution, to be easy to keep clean, and it has several technical advancements.

### 1.1. Advantages

#### PROVEN RELIABILITY

- Hundreds of EL900E extruders has been delivered in the past 10 years to five continents

#### TOP SURFACE QUALITY AND ACCURACY OF DIMENSIONS

- The original shear compaction technology with the latest inventions in machinery development optimizes the compaction of concrete and produces high-quality end products

#### HIGH WEAR RESISTANCE

- The main wear parts are engineered to be maintenance-friendly and are made of the most wear-resistant materials to achieve a long service life

#### MINIMIZING DOWNTIME

- The EL900E consists of a universal power unit and slab-specific, exchangeable nozzle modules, which make it possible to quickly and effortlessly change over from one slab size to another

#### EASY OPERATION

- The functions and their parameters are preset, requiring no monitoring of the casting stages

**1.2. General data**

The ELEMATIC Extruder EL 900E is used to produce prestressed hollow-core slabs with 8 to 4 voids and wall panels with 8 to 5 voids.

Casting width: 1.2 m.

Thickness

- Hollow-core slabs 150 – 500 mm
- Hollow-core wall panels 150 – 265 mm

**1.3. Detailed data**

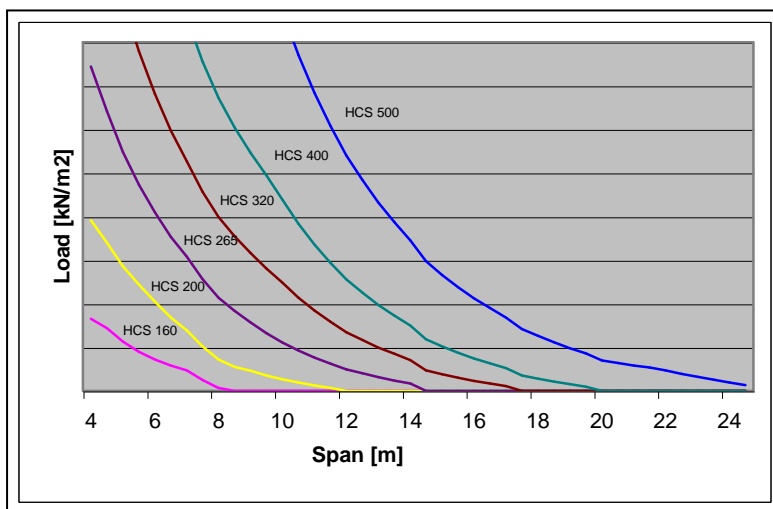
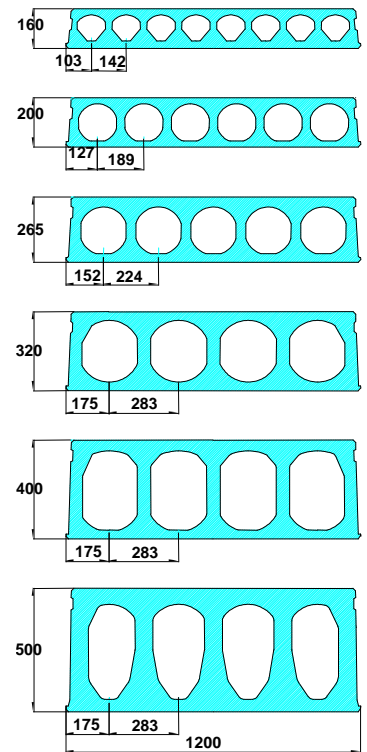
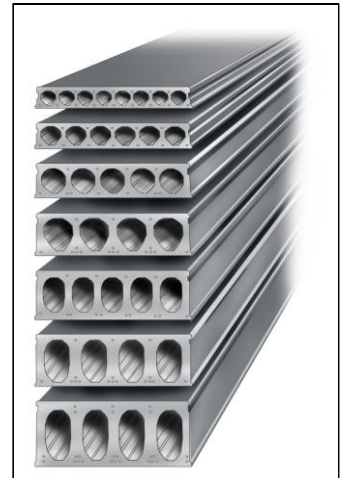
**Extruder hollow-core slabs**

Modular hollow-core slab sets

	Height mm	kg/m <sup>2</sup>
8-voids	160	226
6-voids	200	236
5-voids	265	328
	320	367
4-voids	320	365
	400	415
	500	600

Modular hollow-core wall panel sets

8-voids	150	207
6-voids	200	251
5-voids	265	367



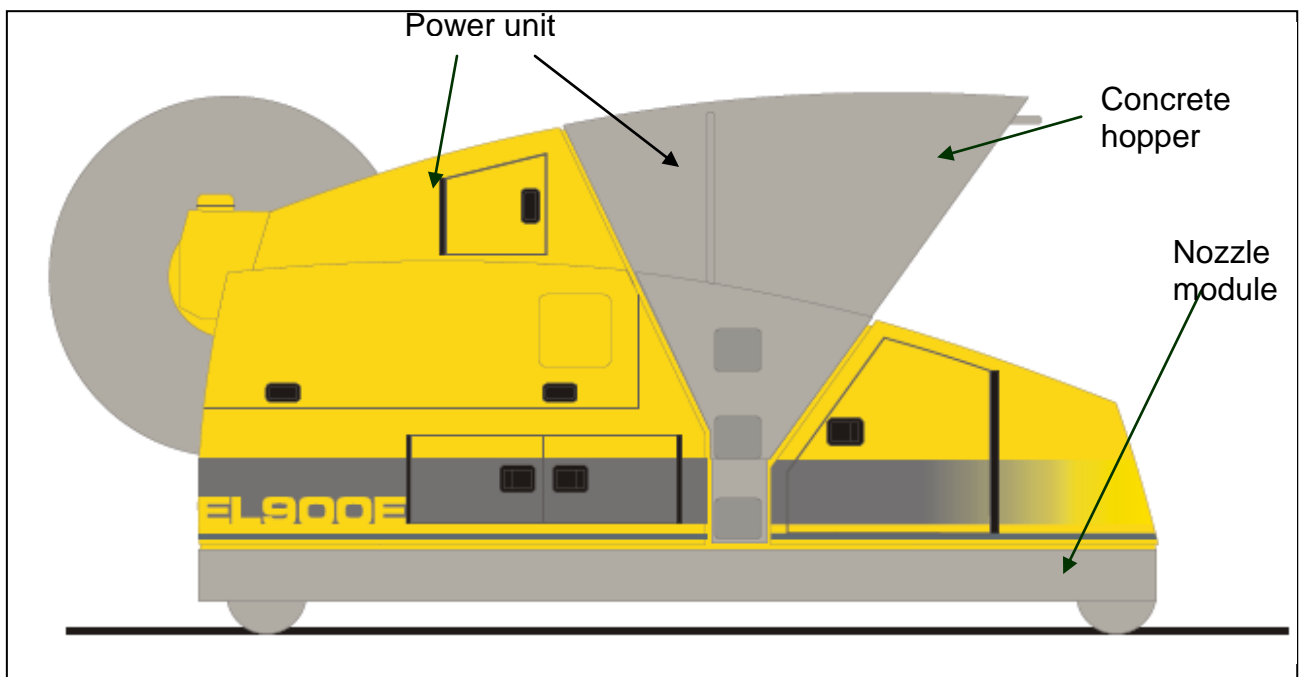
## 2. Key features

The extruder technique is based on the shear compaction method. Due to the method, the extruder is noiseless. The extruder cast the slabs in one phase and the voids are formed through the pressure that the feeding screws apply and through the mechanized moved hollow tubes.

Elematic extruder is designed for a casting width of 1.2 m.

The ELEMATIC Extruder EL900E consists of two main parts: a universal power unit and a slab-specific nozzle module.

The power unit contains one concrete hopper, out of which concrete is fed into the feeding screws of the nozzle module, and main operating motors. The number of feeding screws that the nozzle modules have varies according to the number of voids the HC slabs are to have. The concrete mix being fed onto the screws is compacted in the nozzle module. The extruder moves during the cast in reaction to the pressure created by the feeding screws. The power unit can be removed so it works with another nozzle module.



## 3. Product components

The Extruder EL900E includes a power unit and a nozzle module.

### 3.1. Power unit

The power unit includes the concrete hopper, the main motors, the main electric box, and the control panel.

### 3.2. Nozzle module

The nozzle module includes a set of feeding screws, side plates, leveling beam, and strand guides. The nozzle module defines the slab height and the shape of voids. For producing other slab types, the nozzle module or the set of exchange parts must be changed. The standard nozzle modules are for 8-, 6-, 5- and 4-void hollow-core slabs.

### 3.3. Additional required components

- Cable drum and power cable
- An extension part for concrete hopper of the power unit.
- Additional exchange parts to change the module so it produces different slab cross-sections that still have the same number of voids.
- Service Modem for Extruder.

## 4. Technical data

Extruder EL900E				
Dimensions				
Length	4400	mm	With cable drum	
Width	1650	mm		
Height:	2100-2300	mm	Depends on the nozzle module	
Wheelbase	3325	mm		
Rail gauge	1290	mm	(Standard Elematic bed)	
Concrete hopper	1.8	m <sup>3</sup>		
Weight:				
Total	5800-8500	kg	Depends on the nozzle module	
Power unit	2640	kg	With cable drum and 130 m cable	
Nozzle module	3500-5860	kg	Depends on the nozzle module	
Electrotechnical Data				
Connection power	49	kW	400 V, 50 Hz	

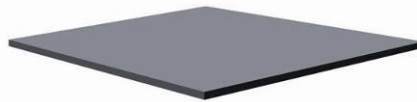
## 5. Additional information

Elematic EL900E extruders help our customers turn a profit in more than 40 countries across the globe.





**Elematic** is a leading supplier of precast concrete machinery and equipment as well as the only supplier capable of delivering complete production plants anywhere in the world. Elematic's superior technology and industry expertise is currently in use in more than 100 countries across five continents. Elematic is headquartered in Toijala, Finland.



**ELEMATIC GROUP**

**[www.elematic.com](http://www.elematic.com)**