INTELLIGENT HIGH-SPEED CASTING

ELEMATIC EXTRUDER E9

NEW 2019
The Extruder E9-1200e is a shear compaction extrusion casting machine for hollow core concrete slabs of 1200 mm in width and a variety of thicknesses (depths).

PRODUCE MORE IN A DAY: EXTRUDER E9

NEXT LEVEL OF EXTRUDER INTELLIGENCE
You can now make more hollow core slabs with one machine. Elematic’s new 5th generation Extruder E9 sets a new benchmark for high-speed casting with low production costs.

Similar to its predecessors, the new Extruder E9 is based on an advanced shear compaction technology. Efficient compaction allows for minimum cement content, because the high density of concrete has an exponential effect on the slab strength.

In the new model, fast casting is achieved with a new design of the extruding screws, independent screw drives and optimized casting parameters.

The new Extruder E9 also features a 2nd generation automatic compaction control system with the resistance of levelling beam as a new additional input parameter.

Automatic compaction control ensures consistent and accurate slab geometry with a minimum amount of concrete. You can cast shaped cross sections smoothly, because concrete placement is even all around.

Casting mode – fast or slow – can be easily selected from the on-board computer screen. Slow speed reduces the need to stop casting when concrete supply to the machine is restricted. Less stops in the process means better slab quality.

The machine also features efficient bouncing prevention which ensures smooth and even slab surfaces.

FACTS IN BRIEF
- Height: 2110–2150 mm
- Width: 1670 mm
- Weight: 7000–9500 kg
- Speed: up to 2.7 m/min
- Slab width: 1200 mm
- Slab thickness: 120–500 mm

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THE TECHNOLOGY BEHIND SPEED

High casting speed means higher casted m² in a year – it maximizes your return on investment.

The new Extruder E9 casts from 80 to 70% faster than its predecessor. The high casting speed of the new Extruder translates into 8 to 10 casted beds in the same time that was previously needed to produce only 6 casted beds. This means even as many as 18 casted beds per day, which brings an extremely high return on investment.

This remarkable speed is achieved not only by automation and optimized casting parameters, but also by a completely new design of the extruding screws and independent screw drives that speed up the production.

The Extruder is also equipped with a separate drive for the center and side screws. This allows the concrete feed to be adjusted accurately, which makes it easier to cast special products.

DIGITALIZATION INCREASES EFFICIENCY

The Extruder E9 has numerous sensors that continuously feed data to an on-board computer. The stored data can be used and analyzed in different applications, remotely or on-site.

The visual user interface is very easy to learn and use. You can adjust all casting parameters or restore them automatically. It also includes concrete ordering automation.

You can easily see the need for maintenance from the running hours for power module and nozzle modules, as well as clear reports for uptime, down-time, alerts, faults etc. easily. Operation manuals are available on screen.
EASY TO MAKE MULTIPLE SLAB TYPES

The new Extruder E9 is a multi-product machine:
• Narrow hollow core slab (Filler slabs)
  • 0.3, 0.4, 0.6, 0.8, 0.9, 1.0 m slabs
• Piles & poles
• Solid slab
  • 140 – 230 mm
• Wing-slab
• Wall and boundary wall
• Sockle
• Stadium slab

Changing slab-type is fast. Thanks to the modular structure of the Extruder, you only need to change nozzle modules or exchange parts.

You can save several sets of casting parameters for one nozzle module. Save different parameters for winter or summer recipes, Fridays etc.

In addition to using the Metric system, it is easy to operate with the Imperial system.

FULLY AUTOMATIC CONCRETE RECYCLING WITH MODIFIER E9

Modifier E9 travels directly after the Extruder. It marks and digs recesses and openings automatically while concrete is unhardened. Cut-off concrete can now be automatically fed back to the Extruder.

Extruder E9 comes with an option for a smart concrete recycling system that saves material considerably.

There is a container and a separate conveyor for the recycled concrete. Once the recycled concrete is transported back into the Extruder, it is slowly mixed with the fresh concrete while constantly monitoring the quality of the material.

The Extruder E9 and the Modifier E9 are a perfect match to increase the efficiency and sustainability of your production.
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