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Three different solutions to match customers' needs

In building construction there is no such thing as a "common" project. All over the world there is construction going on in different kinds of environments and climates, regulated by different building traditions. Needs for building construction are different, as well as methods used. This applies also to buildings: apartment buildings, villas, office buildings, shopping malls, car parks, schools, hospitals, luxury hotels, you name it.

■ Reetta Salonen, Tulus, Finland ■

If the frames for building construction are so different, isn't it logical that production technology should also be suited for the conditions, targets, and missions according to time and place? This was the main question when Elematic started to develop a totally new approach for offering production technology for precast. As a result, a new concept with three different technology levels for making walls and floors was launched at Bauma 2013.

"Being a customer-focused market leader in high-technology precast machinery means for us that we need to offer solutions for our customers' real needs. We serve customers of all sizes and with all kinds of needs. We see it clearly that in the market where precast building is only taking its first steps, the need for the technology and production level is very different from the established markets. In such cases it would not be reasonable to offer oversized or too automated plant to a customer who is just starting with precast, whereas the most automated solutions are suitable for markets where precast is already commonly used. This is why we wanted to bring a whole new approach for customers investing in precast production. Whether you are a newcomer to precast or you want to invest in production on a large scale, we have a solution to meet your needs. We now have three technology levels to start from together: SEMI, PRO, and EDGE, which, among other things, make it easier to grasp the investment needed right from the beginning," says Elematic's Sales Director Petri Vesa.

What are these new levels?

The main differences between Semi, Pro, and Edge are production capacity and the level of automation. The range of possible precast products increases as well when taking steps from Semi towards Edge.

Customers starting in the precast business or who have a need for easy-to-use machinery will find the Elematic Semi level a tempting solution. Semi offers easy start-up with low investment—it is the lightest level for making high-quality end products such as sandwich panels, solid panels, cladding panels, solid slabs, and hollow-core slabs. Companies that already have some experience of precast are often interested in getting the best benefits from Elematic Pro production lines and machines. Pro is actually a standard for precast and is ideal when there is a need to produce different types and larger volumes of precast products. It makes wall and floor panel precasting professional, efficient, and flexible.

Elematic's Edge production lines and machines are designed for precasters seeking very high capacity, a wide product range, and highly automated precast production.

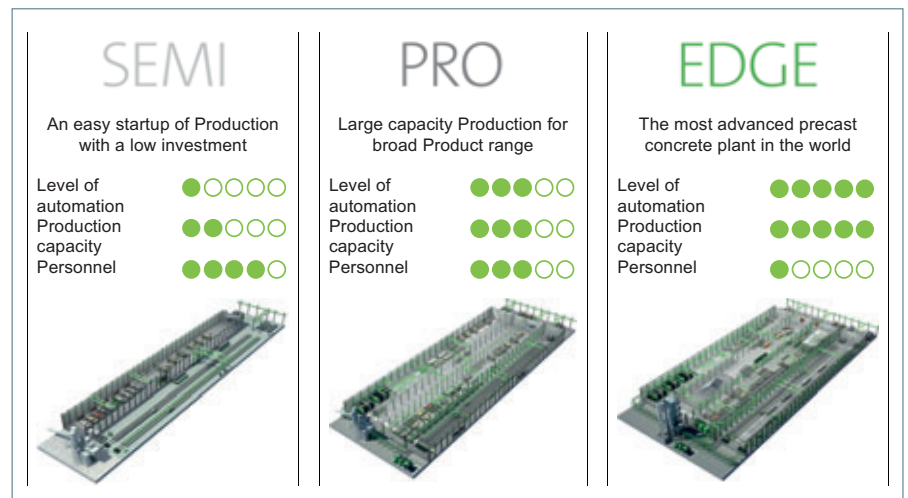
"Edge is a competitive solution especially in markets where precast is a well established building method, production volumes are high, there is a need for various products, know-how is strong, and labor costs are high," says Mr. Vesa.

New solutions keep up with Elematic quality

The new, unique concept applies to whole floor and wall plants, production lines, and individual machines as well.

"This concept is not just a marketing trick for us. It flows all the way from plants to the core machinery of lines. Quite a few new technical solutions have been made to ensure these three levels really serve the way they were meant to. We have also paid a lot of attention to keeping the quality as high as it has always been. Intense product development has brought totally new machinery designed to fit the concept. We now offer, for example, both Semi and Edge level extruders for floor lines, as well as casting machines for both levels in wall lines."

Mr. Vesa refers especially to the new Extruder S5-1200e that has been designed for the Semi floor production line. Extruder S5-1200e uses basically the same shear-compaction-technology as E9-extruders, but it has fewer options and less automation. Also, the user interface is simpler to make its use as easy as possible.



Plant lay-outs



Extruders and casting machines manufactured by Elematic

The Semi level also provides a new feature in casting with the new Comskip S5-3000, a battery controlled casting hopper. Comskip's technical features are based on the Comcaster casting machine. The new Comskip S5-3000 is, however, easier to use and thus designed for the needs of lighter production.

SEMI keeps it simple

Elematic's Semi is based on straightforward and easy-to-learn technology with a low level of automation. The maximum capacity of the Semi line can be reached with a crew of ten, and no highly-skilled labor is required. A flexible Semi plant is designed for producing the most typical precast in a building project. Semi is also a very practical solution that can even be placed in the open air. A Semi plant can also be transferred from one place to another, which brings production closer to the construction site. Produce with SEMI:

Wall products	Floor products
Sandwich panels	Hollow-core slabs
Solid panels	
Cladding panels	
Solid slabs	

SEMI in figures:

	Capacity/day	Personnel
Wall	280-600 m ²	10
Floor	144-576 m ²	9

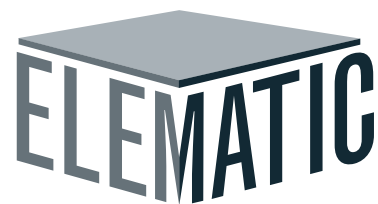
All figures are estimates

PRO – a world standard for precasting

The Pro plant is actually the most common solution. It offers large capacity production for quality-conscious precasters with a need for a broad product range. With Pro you'll have flexible production with a fast return on investment.



SUPPLYING
OPTIMIZED SOLUTIONS –
WORLDWIDE



SMART EVOLUTION

Pro features sophisticated machines and a medium level of automation. If further automation is required, Pro can easily be upgraded, even to Edge level.

What you can produce with PRO?

Wall products	Floor products
Sandwich panels	Hollow-core slabs
Solid panels	Solid slabs
Cladding panels	Ribbed slabs
Solid slabs	T-beams

PRO in figures:

	Capacity/day	Personnel
Wall	680-1200 m ²	15-20
Floor	1080 m ²	7

All figures are estimates

Advanced EDGE for high capacity

Edge includes state-of-the-art machinery and the highest possible level of automation, which also increases safety. Edge is as flexible as it gets, which is the key with a broad product range. Different products can be run smoothly on the same line without any production flow conflict.

What you can produce with EDGE?

Wall products	Floor products
Sandwich panels	Hollow-core slabs
Solid panels	Solid slabs
Cladding panels	Ribbed slabs
Solid slabs	T-beams

EDGE in figures:

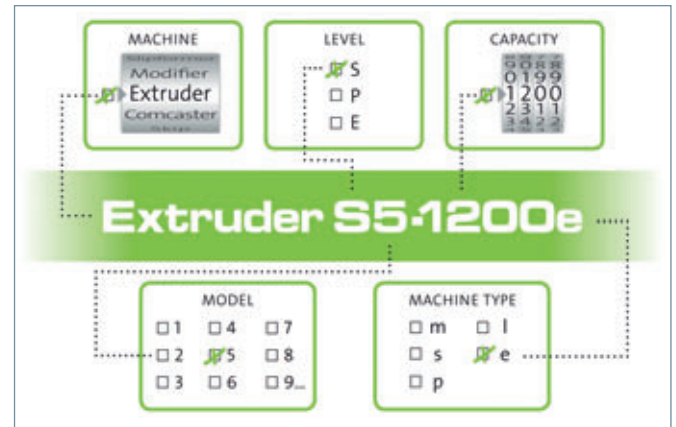
	Capacity/day	Personnel
Wall	1600-3024 m ²	30-35
Floor	2880 m ²	10

All figures are estimates

New names to improve the identification of machines

“As a part of designing our new concept we asked our customers how our machinery should be named. The result was clear: the name should explain what the machine does. This is why the new Protocol for naming was needed in our new concept. If, for example, the machine prepares the bed for casting, it should be named Preparer instead of BedMaster”, says Petri Vesa.

Elematic’s new machinery naming code consists of five sections: 1) Function of the machine in the precasting process, 2) Technology level (Semi, Pro, or Edge), 3) Machine model (5, 7, or 9), Machine capacity (i.e., liters, max Product height, width, or lifting capacity), 5) Machine type (e.g., m, s, p, l, e). This further improves the identi-



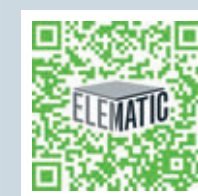
Elematic machinery naming protocol

fication of the machine. For example, Extruder S5-1200e is an extruder for the Semi level, its machine model number is 5, capacity 1200 liters, and machine type e.

The familiar machinery names of Comcaster, E9, Acotec, and FaMe will stay untouched.

Each customer is unique

At Bauma 2013, where the new concept was introduced, Semi level solutions especially raised enormous interest. “It is no wonder, as Semi can be a very cost-effective starting package with a low investment level but high quality. Try precasting with Semi and if it turns out to be a success, nothing will stop you from going on with Pro or Edge. This has happened, for example, with one of our Russian customers, soon to be making walls in our Edge plant,” says Mr. Vesa and continues “After introducing the concept for three different levels of solutions, we still serve each of our customers individually and our solutions are always customized to match the exact needs of the customer. The concept of Semi, Pro, and Edge is a tool that helps us together ask the right questions and find the most critical features in our customers’ business that production solutions need to fit. At the same time, it guarantees that, no matter what the level, Elematic solutions always come with high quality. So choose a level and we’ll take care of the next step!”



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