ELEMATIC Designed for modular building construction



MODULAR BUILDING Produce indoors. Build indoors.

Transfer work from the construction site into your factory with the modular building method, officially known as PPVC - Prefabricated and prefinished volumetric construction.

Elematic module line is a highly automated production line designed for sustainable indoors production of complete modules.

RESOURCE EFFICIENT TECHNOLOGY

Compared to cast-in-situ, prefabrication uses less of everything - less cement, less water, less steel, and less labor. It produces less waste on site. This makes the CO2 footprint of precast much smaller than cast-in-situ construction.

MODULAR BUILDING on construction site

Save time on site.

Most work is done in the factory, so the time you spend on the construction site will shrink from months to weeks.

Less manpower on site.

By transferring many steps of the construction process indoors, you can offer more expert positions and a safe, convenient working environment.

More safety on site.

When you build with modules, the number of lifts decreases significantly, and personnel spend less time working at heights.

Increased quality.

As modules are produced in your factory, the quality stays consistently high and you avoid weather-related delays.

Neighbor friendly.

There's no fabrication on site for the modules, so noise and dust are minimized.



COMPLETE **3D MODULES** With the flexibility of 2D



You can build homes of many shapes and sizes by using the Elematic module production line. The design of the modules is flexible because the 3D volumetric precast units are assembled from 2D elements.

The free-standing 3-dimensional modules are completed in your factory. Even the internal finishes, fixtures and fittings will be put in place before the module is transported to the site for installation.

PRODUCTION LINE

The Elematic module line consists of a circulation mold line with 4×10 m tables as standard, the number of which depends on the box module formats.

The whole process can be controlled with Elematic Plant Control, the world's most advanced ERP system designed for precast plants.

MODULE LINE BENEFITS

- Excellent production flexibility
- Better productivity
- Controlled process cycle
- High level of automation
- Organized quality control
- Efficient use of raw materials

PRODUCTION PROCESS

The production for wall, floor and ceiling elements is done on the circulation mold line. Structural reinforcement is added into the molds before the concrete is cast, compacted, and cured.

Floor casting with casting skip and a caseby-case customized nozzle.

ASSEMBLY AND FINISHING

The precast wall, floor and ceiling elements are transferred to the assembly area where they are assembled into a free-standing 3-dimensional module. The storage area includes a rack storage for a 3-day buffer as default but this can be customized to meet the needs of each factory.

The matured box module is then transferred to the finishing area. Windows, internal finishes, fixtures and fittings will be put in place before the module is transported to the site for installation.

TRANSPORTATION

Check your local regulations - what are the maximum transportation dimensions and weight limits on public roads?

The Elematic module line produces box modules with a typical size of width 4m x length 8m x height 3.6m, but the module size can be customized. The weight of the module depends on the materials used.

ASSEMBLY

INSTALLATION

TRANSPORTATION

ELEMATIC MODULE LINE 3D box modules

with the flexibility of 2D

Stockyard for box modules Finishing area Bat



Concrete transportation

Batching and mixing plant

Transfer wagon

Wall line (wall, ceiling, floor)

SAFETY

All machines on the Elematic module line meet EC Machine Directive requirements. The line comes with thorough and clear user, maintenance and safety manuals in the required language.

DIGITAL FACTORY MANAGEMENT

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ELEMATIC MODULE LIN

Elematic Plant Control is a production planning system especially designed to meet the needs of precast concrete factories. It consists of independent modules which enable a step-by-step approach in factory process digitalization.

> The independent modules connect and support different production lines, sales, storage, logistics, and total plant operation.

FAME SHUTTERING SYSTEM

Elematic FaMe is a unique, patented shuttering system that offers versatility and a wide range of benefits from high quality results and cost-efficient production to safe working methods and beyond.

- The system consists of light aluminum side profiles, various types of magnets for creation of drawings and bills of materials.
- Thanks to the simple process, you can save nearly 70% of the total shuttering time.
- Pay attention to safety: Elematic push button magnets are designed to enhance safety and, in particular, to prevent finger injuries.





PLANT AND BUILDING DESIGN

We'll help you with end-to-end structural engineering for all kinds of buildings. As a result of a design project, you will receive a detailed design for developing framing plans, connection details, quantities and a tender package, as well as construction/fabrication drawings and documentation.

Elematic BIM modelers can help you with building information modelling for building and infrastructure projects. Our BIM services include 3D visualizations and modelling or clash detection and coordination of your project. Services for construction management, scanning to BIM, energy simulations and virtual/ augmented reality are also available.

We can support you in navigating every step of the precast plant and building planning and design processes.

EXTENDING FACTORY LIFETIME

Well-planned maintenance secures your production targets, increases your production by removing bottlenecks, and ensures access to the highest quality products. We offer service agreements and service visits, as well as both onsite and remote support.

The Elematic service agreement covers helpdesk support, regular maintenance visits, machine and equipment audits, and training. The content of the agreement is tailored to your needs.



ELEMATIC MODULE LINE

Designed for modular building construction

BENEFITS AT A GLANCE

ELEMATOR

- Production is safer indoors
- High productivity and flexibility
- Controlled process cycle
- Organized quality control
- Efficient use of raw materials

GREEN QUALITY for tomorrow's builders

Elematic precast technology has enabled hundreds of thousands of building projects in over 100 countries. That's millions of people living in safe homes that withstand decade after decade.

Precast producers – our customers – make it possible to build modern buildings resource-efficiently. To meet their needs and exceed their expectations, we've listened carefully to the beat of the industry, developed pioneering precast equipment, offered lifecycle services, and refined manufacturing processes for more than 60 years.

Today, many people in the precast industry describe Elematic equipment with two words: green quality. We feel very proud of this. Our equipment is green not only in color but also by nature. With the help of Elematic precast production technology and experts, precast producers around the world can make their processes not only more productive and cost-efficient – but also save energy and resources.

If the future could choose, it would run greener processes with green equipment.



Please visit elematic.com for more information and follow us



