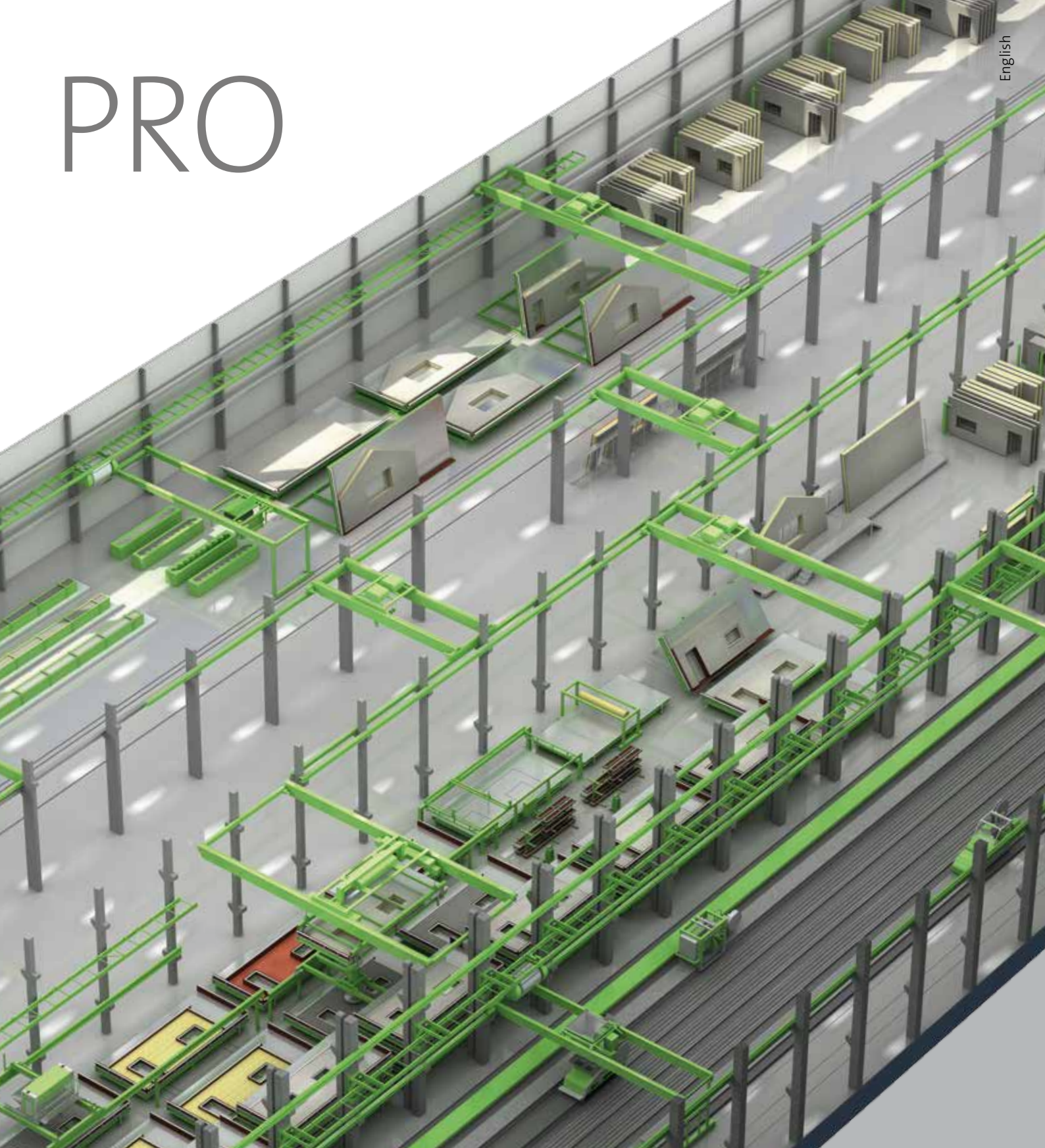


# PRO

English

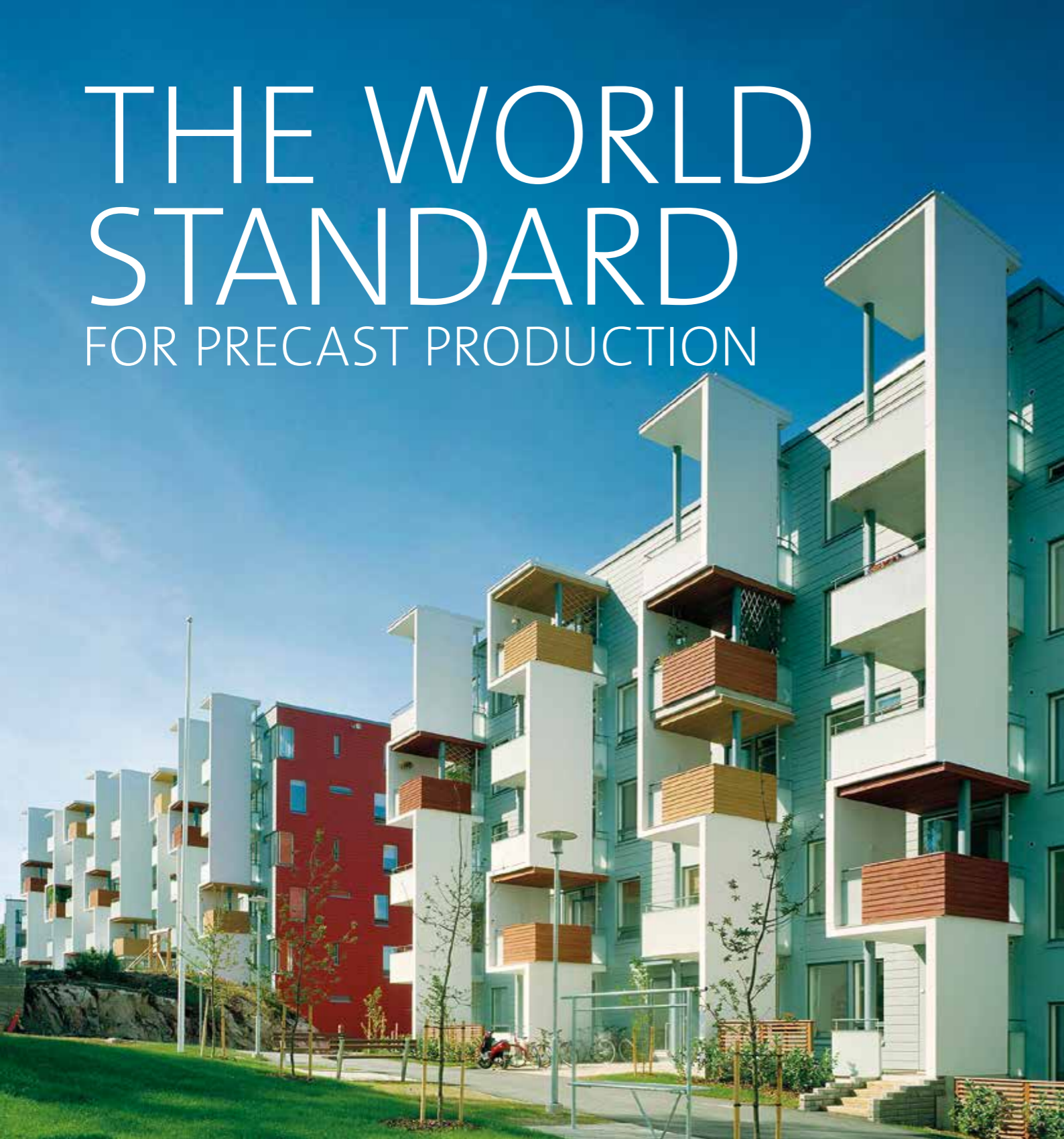


COMPLETE PRECAST PLANT

The logo for ELEMATIC, featuring a 3D cube icon above the word "ELEMATIC" in a bold, black, sans-serif font.



# THE WORLD STANDARD FOR PRECAST PRODUCTION



Precast concrete is one of the world's most common building materials. It is adaptable and affordable – and saves a significant amount of materials and resources.

### Saving concrete

Precast hollow-core slab is a good example. Production saves up to 50 percent in concrete compared to cast-in-situ floors. And with Elematic's shear compaction technology, consumption is reduced even more.

### Combining looks and economy

Precast can be both beautiful and cost-efficient – like sandwich panels produced with Elematic technology. The panels are insulated, which reduces energy consumption for cooling and heating. And the outer layer of the façade can have a variety of looks, such as brickwork, polished marble or granite.

## THE PRO PLANT

Elematic's PRO production lines and machines are especially designed for precasters who need to produce different types and larger volumes of precast products.

The PRO plant is the most common solution with the highest number of precasters in the world. It is ideal for companies that already have some experience of precast. PRO offers large capacity production for quality conscious precasters with a need for a broad product range. It features sophisticated machines and a medium level of automation. If further automation

is required, PRO can easily be upgraded. PRO offers flexible production with a fast return on investment.

To optimize production and become more cost-efficient the whole process is carefully monitored by ELIPLAN ERP. The software, developed by Elematic, has been especially designed for real-time control of production flows and material consumption.



### Benefits at a glance

- Fast return on investment
- Flexible production
- High-quality end products

### Wall Products

- Sandwich panels
- Solid panels
- Cladding panels
- Solid slabs

### Floor Products

- Hollow-core slabs
- Solid slabs
- Ribbed slabs
- T-beams

In figures	Capacity/day	Personnel
Wall	680–1200 m <sup>2</sup>	15–20
Floor	1080 m <sup>2</sup>	7

All figures are estimates



# THE PRO WALL PLANT

PRO Wall plant consists of the PRO Wall production line, Battery molds and Tilting tables

## PRO Wall production line

To boost productivity the tables circulate between the different process steps. Tables run smoothly thanks to roller tracks and strategically placed cross transfer beams.

Concrete transportation is entirely automatic and mold preparation is swift using our special shuttering system, FaMe. This saves valuable time and keeps up productivity.

Casting is done with a casting machine designed for efficient compaction and accurate dosing to save concrete. During curing the molds are stacked to save space and make room for the next round of casting.

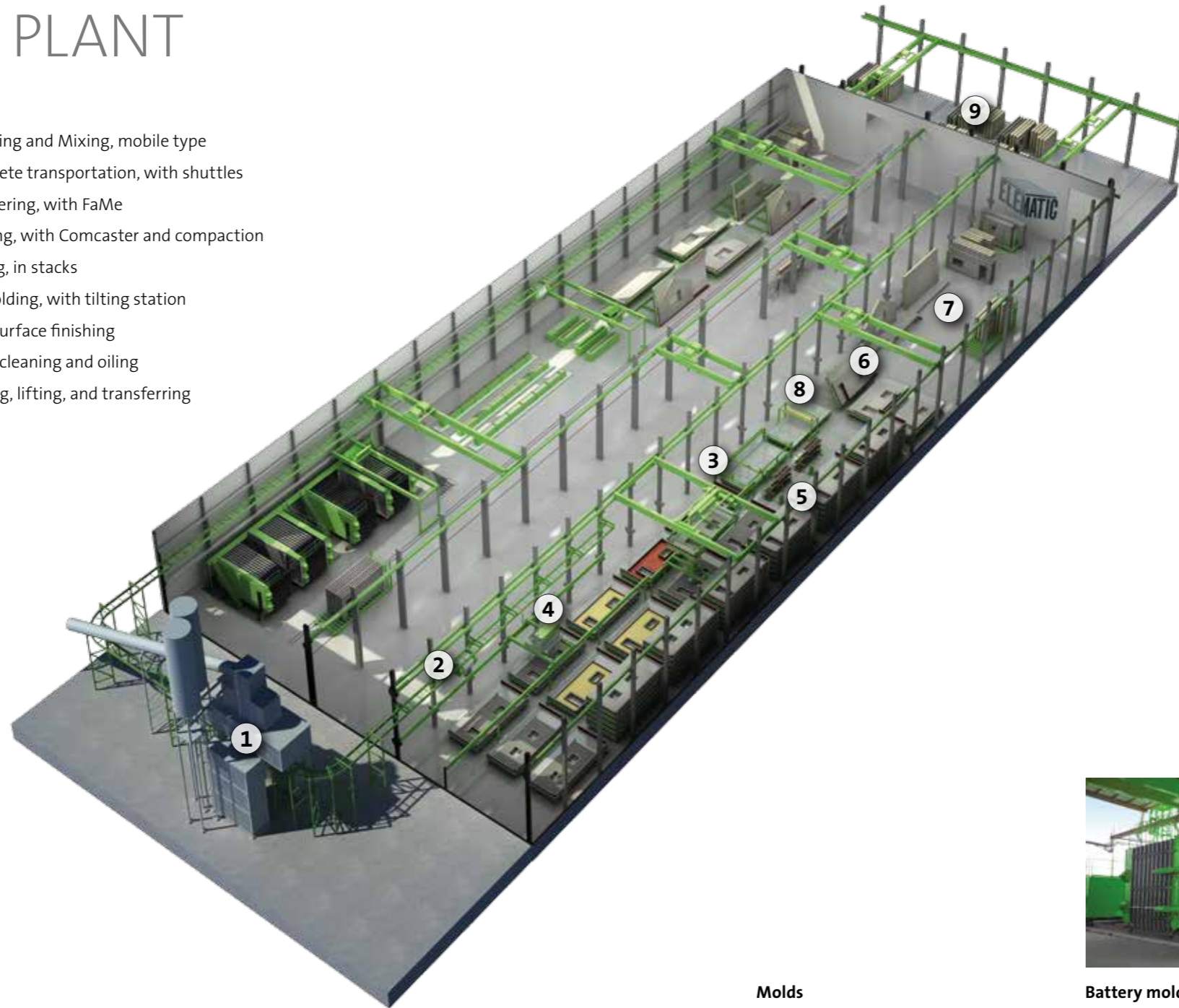
The tables are sturdy steel constructions with high load-bearing capacity (> 600 kg/m<sup>2</sup>). The exceedingly smooth steel surface of the tables creates wall products which require minimal finishing work.

## Benefits at a glance

- Sturdy steel tables
- High productivity with circulation
- Efficient shuttering with FaMe
- Concrete saving with accurate and fast dosing
- Space saving curing in stacks
- Little finishing work

## Process

1. Batching and Mixing, mobile type
2. Concrete transportation, with shuttles
3. Shuttering, with FaMe
4. Casting, with Comcaster and compaction
5. Curing, in stacks
6. Demolding, with tilting station
7. Wall surface finishing
8. Table cleaning and oiling
9. Storing, lifting, and transferring



## STANDARD EQUIPMENT



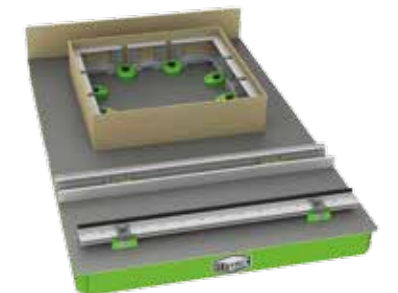
### Comcaster E9-2500

Easy-to-operate, radio controlled casting/compaction. Accurate and fast dosing saves raw material and time.



### Battery molds

High productivity of solid wall products by means of vertical casting. Takes up very little floor space.



### FaMe

Fast preparation of side forms and openings with light, recyclable aluminum profiles and magnets.

### Molds

Battery molds for efficient solid wall production. Tilting tables for special sized products. Area reservation for stairs and other special molds.

## TYPICAL END PRODUCTS

### PRO Wall production line in figures

Theoretical capacity	680–1200 m <sup>2</sup> / day (one casting)
Personnel	12–20
Production area	2800 m <sup>2</sup>
Land area	45000 m <sup>2</sup>
No. of tables	20–30
Typical table size	3.8 x 9.0 m

All figures are estimates



Sandwich panels



Cladding panels



Solids panels



Solids slabs



# THE PRO FLOOR PRODUCTION LINE

The six high-precision beds have long lasting steel surfaces and an integrated heating system to speed up curing. Bed heating promotes better bonding between concrete and prestressing strands. This is useful even in warmer climates. Bed preparation (cleaning, oiling, and pulling strands) is managed by one single operator on the preparer machine – a real time saver. Entirely automated concrete transportation also saves time and keeps up productivity.

The production line offers great flexibility. Choose our slipformer for making a variety of products. Or go for reduced cement consumption with our extruder and shear compaction technology.

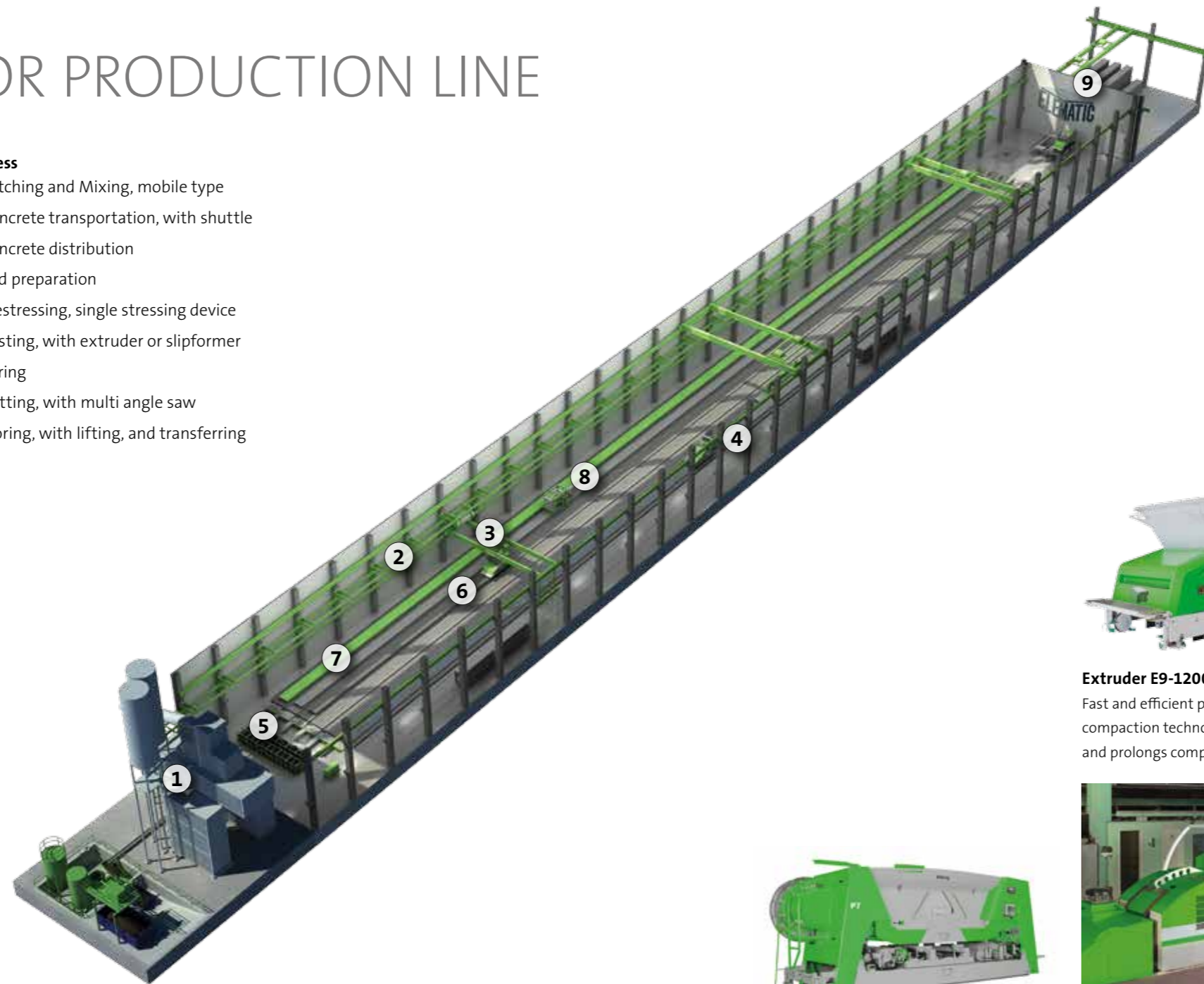
After curing the slabs are cut. The saw is automated – yet another time saver.

## Benefits at a glance

- Fast preparation of beds with preparer
- Low cement consumption with shear compaction
- A broadened end product range with slipformer
- Faster and better curing with integrated bed heating
- Increased productivity with automated cutting cycles

## Process

1. Batching and Mixing, mobile type
2. Concrete transportation, with shuttle
3. Concrete distribution
4. Bed preparation
5. Prestressing, single stressing device
6. Casting, with extruder or slipformer
7. Curing
8. Cutting, with multi angle saw
9. Storing, with lifting, and transferring



## STANDARD EQUIPMENT



**Extruder E9-1200e**

Fast and efficient production with shear compaction technology. Saves concrete and prolongs component lifetime.



**Shuttle E9-2800**

Fast and automatic transportation of concrete to the casting machine.



**Slipformer P7-1200s**

Flexible production of different end products (hollow-core, half slabs, ribbed slabs and T-beams).



**Preparer P7-1200p**

Efficient bed preparation by one operator. Used for cleaning, oiling and pulling strands over the bed.



**Saw P7-500**

Easy and fast cutting by one operator. The saw makes the individual cuts automatically.

## TYPICAL END PRODUCTS

### PRO Floor production line in figures

Theoretical capacity	1080 m <sup>3</sup> /day (one casting)
Personnel	7
Production area	4000 m <sup>2</sup>
Land area	6500 m <sup>2</sup>
No. of beds	6
Max. end product height	500 mm

All figures are estimates



**Extruder: Hollow-core slabs**



**Slipformer: Hollow-core slabs**



**Slipformer: Ribbed slabs, Half slabs**



**Slipformer: T-beams**

Elematic supplies precast concrete machinery and complete production plants for building construction worldwide. Elematic is the leading one-stop-supplier for precast concrete technology. Our customers are in the precast business of floors, walls, frames and foundations – or even all of them. Precast solutions for all needs – from small scale production plants to huge ones with the same high standards for structural and architectural design. Support throughout the life cycle assisting customers to achieve maximum profitability regardless of investment level.

That's our offer.

