

# PRECAST: A COMPETITIVE ADVANTAGE

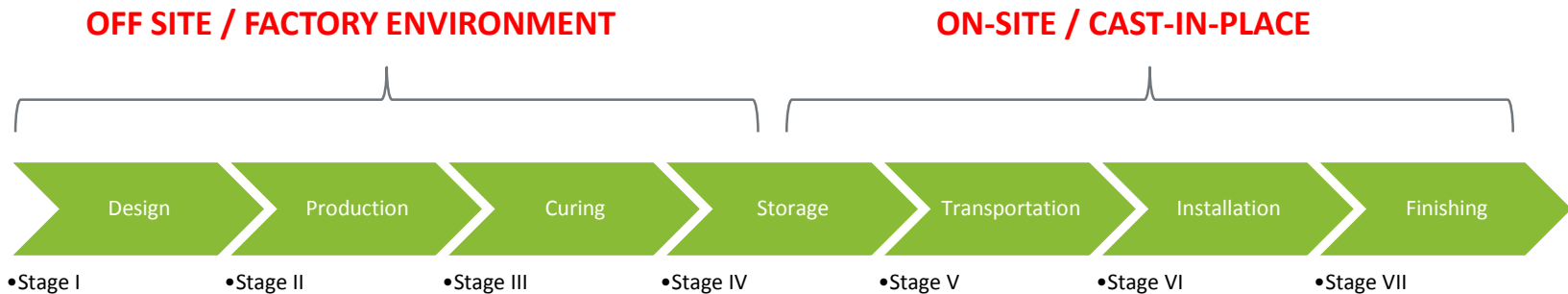
PRESENTATION BY SHRIDHAR RAO - ELEMATIC

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# Precast Construction is Efficient and fast

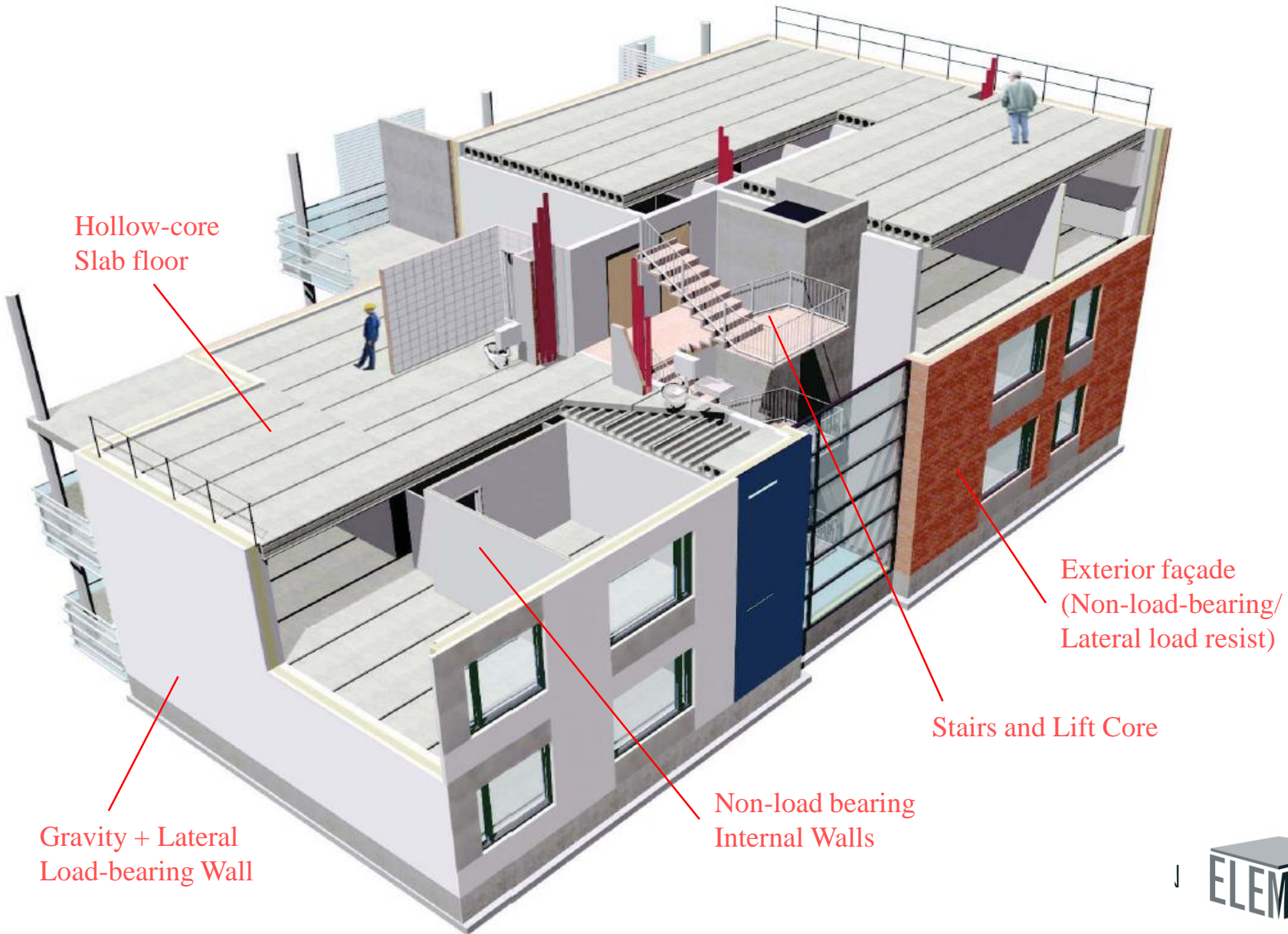
Precast concrete is produced by casting concrete in reusable molds or by using highly advanced machinery, then cured in a controlled environment, transported to the construction site and lifted into place.



# Precast Buildings



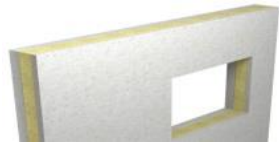
# Precast System for Housing



Wall-Frame System :

# Precast The smart way to build

Precast products can be used to build virtually any type of building.



Sandwich panels



Cladding panels



Solid panels



Solid slabs



Acotec panels



Extruder:  
Hollow-core slabs



Slipformer:  
Hollow-core slabs



Slipformer: Ribbed  
slabs, Half slabs



Slipformer:  
T-beams

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# Advantages of Precast Concrete Construction



**Speed (2x)**



**Low Manpower**



**Economical**



**No Plastering**



**Durable Buildings**



**Better Design**



**No wastage**



**Eco Friendly**

# Precast in Numbers

2

Times Faster than conventional construction.

3

Times Less labour than conventional construction.

5

Years Payback Period for machinery and mould CAPEX

25%

Up to 25% less consumption of raw material

100+

Years is the effective building life as precast concrete gains strength with time.

5,000+

Over 5,000 repetitions with precast casting moulds.

# Hanwha: Bismayah New City, Iraq

The 1st and the largest city development project ever in Iraq



| Project                  | Bismayah New City                                   |
|--------------------------|---|
| Developer                | National Investment Commission of Iraq (NIC)        |
| Design and Construction  | Hanwha Engineering and Construction Co.             |
| Contract Amount          | USD 7.75 Billion                                    |
| Location                 | 10 km from Baghdad                                  |
| Project Detail           | Land development works<br>Housing construction work |
| Work Period              | 7 years: 2 design, 5 execution                      |
| Total No. of Population  | 600 000   |
| Target No. of Households | 100 000   |
| Area Size                | 1, 830 ha   |

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# EXAMPLES IN INDIA

## PRECAST BUILDINGS

# DDA Housing Project – 50,000 houses in Delhi





# Housing Project - Architectural Views



**1.7 M sq.ft  
development  
2 basement  
10 storied Building**

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# Wall Frame – Execution



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# Jindal Student Housing

**Student Housing**  
**6 storey building of**  
**500 student housing**  
**capacity 85,000 sq. ft**  
**structure built in 2**  
**months**



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# Project Examples- Wall Frame structure with Hollow core slabs

Student Housing



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# NESTLE Process R&D Center-Construction phase

**Building Area of 15,000 sq.mt.**  
**Large Solid Slab Spans of 12.0m**  
**Loading = 15.0 kN/ sq.m.**  
**3 Storey Column = 14.20 m Tall**



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# Process R&D Center



# Novotel Ibis Como Hotel- Chennai

- Project size : 300,000 sq. ft. BUA
- 14 Storeyed building with 2 basement and 60 mtr height
- Precast columns and beams, precast hollow core slabs, precast lift core shaft, precast staircase, precast retaining wall
- Project finished in 11 months



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# Novotel Ibis Como Hotel-Project Site snapshot



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# TVS Motors Factory- Hosur, TN

- Project size: 110,000 sq.ft -BUA
- Duration: 90 days
- 10mtr span ,200 mm HCS ,  
Precast columns and prestressed  
beams



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# TVS Motors Factory Project Site



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# Agricultural College Indoor sports hall Bapatla AP

**Total precast sports hall.**



**PROJECT SIZE – 16,000 sq.ft  
Structure completed in 60 days**



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# Construction of Agriculture College - Indoor sports hall -Bapatla AP



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# ITC Cigarette Factory- Bangalore



Alternative way of Construction



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# Video – Precast Building construction

## CONSOLIS PRESENTATION

# ARCHITECTURAL APPLICATIONS- PRECAST IS BEAUTIFUL

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# Precast is Beautiful



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# Precast is Beautiful

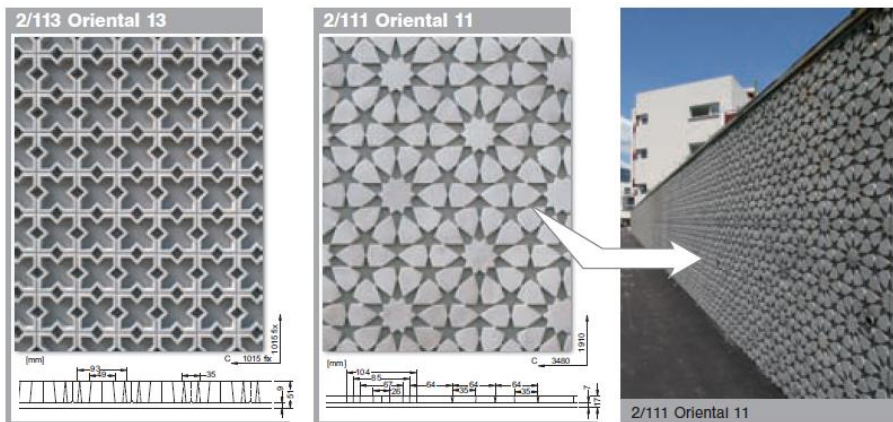
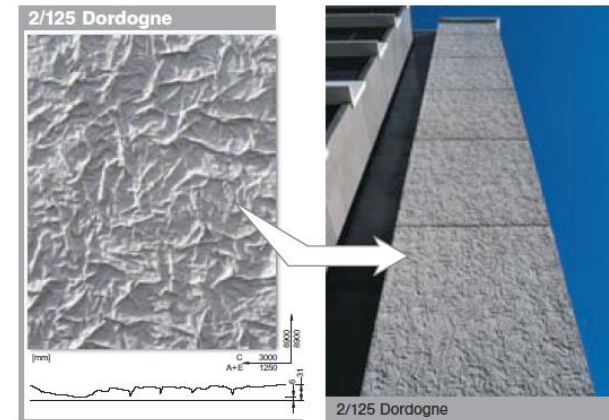
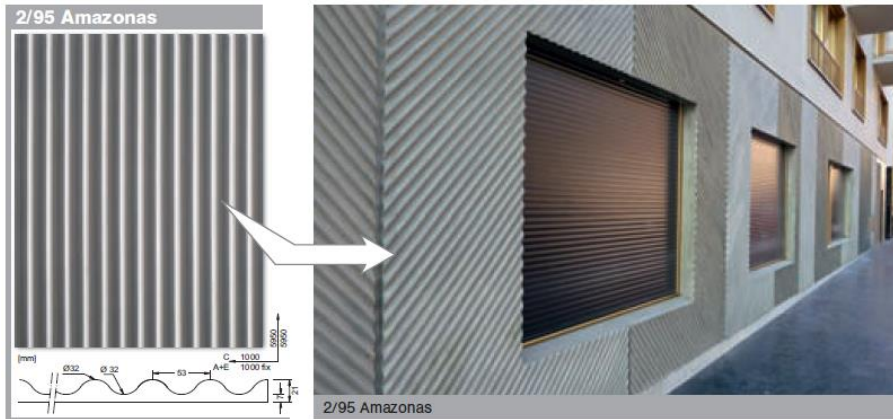


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# Precast is Beautiful



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# OUR COMPANY

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# Elematic - World's Leading Supplier of Precast Technology

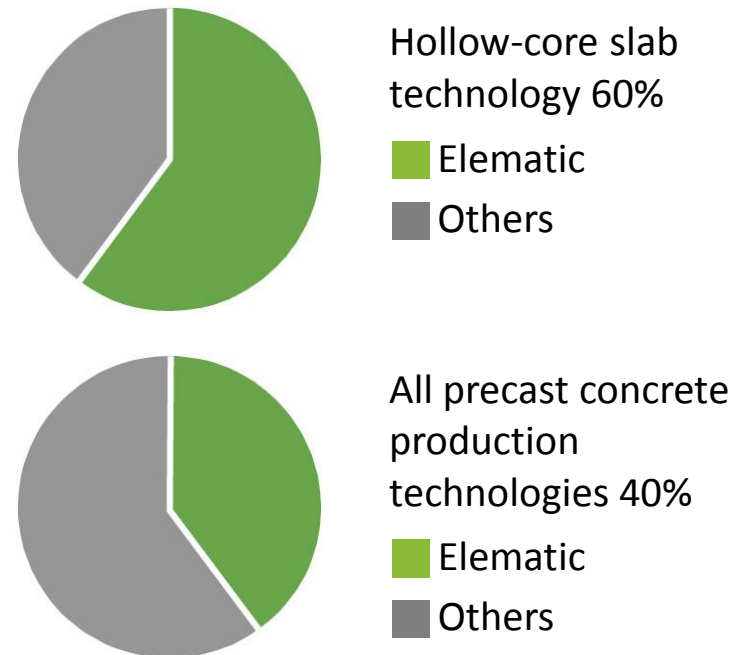
Elematic, a Consolis Group company, is the world's leading supplier of know-how, machinery, equipment, production lines and complete production plants for the precast concrete industry. Elematic's production technology is already in use in more than 100 countries on five continents.



# The only one-stop-supplier in the precast concrete industry

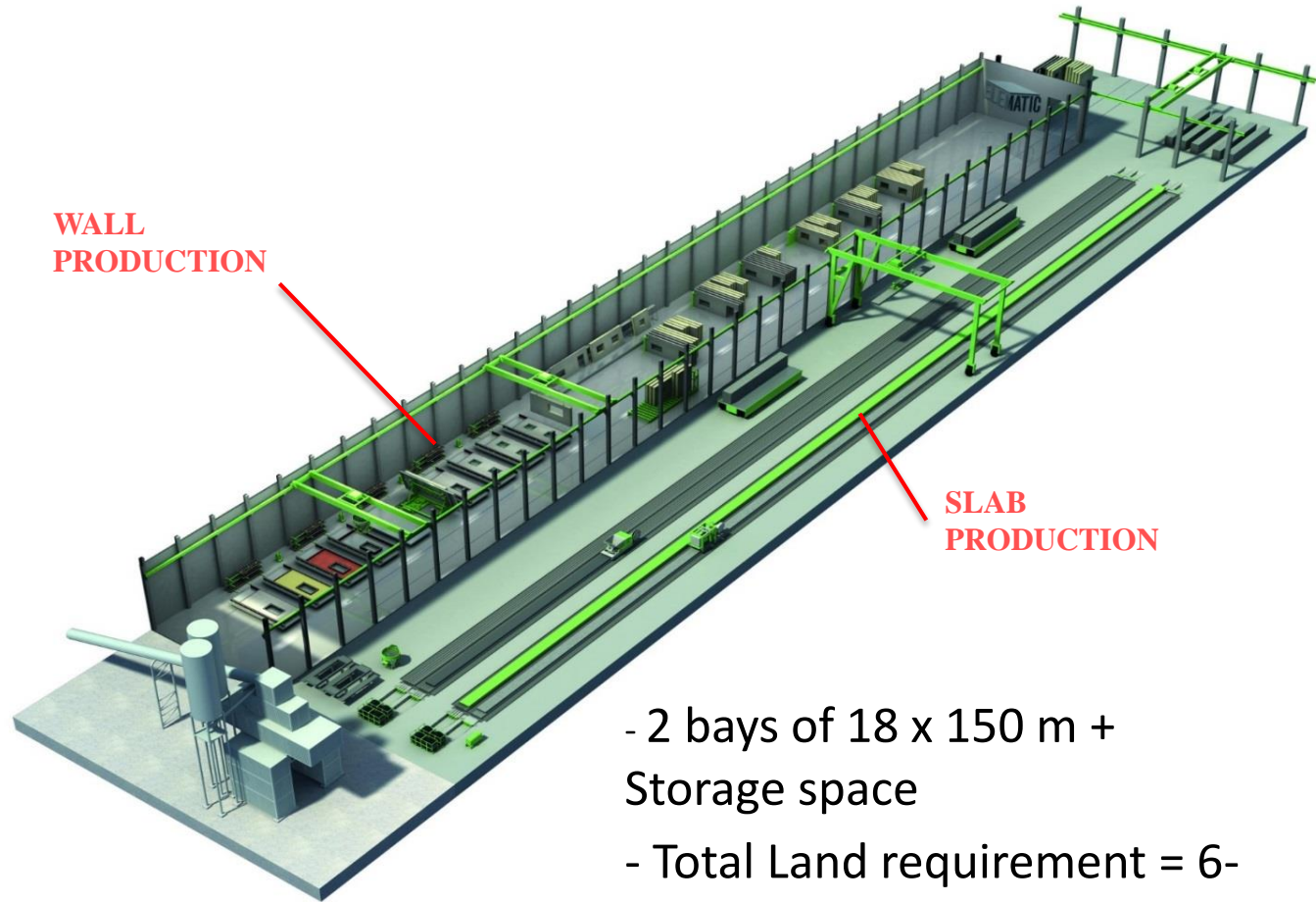
- Delivering anything from a single machine or production line to a complete plant for any precast product
- World-leading technology, knowhow, process excellence and software
- The most extensive customer services in the market
- **Setting up World's largest precast plant at Iraq for 7500 sq.m. BUA per day.**

## Global market share





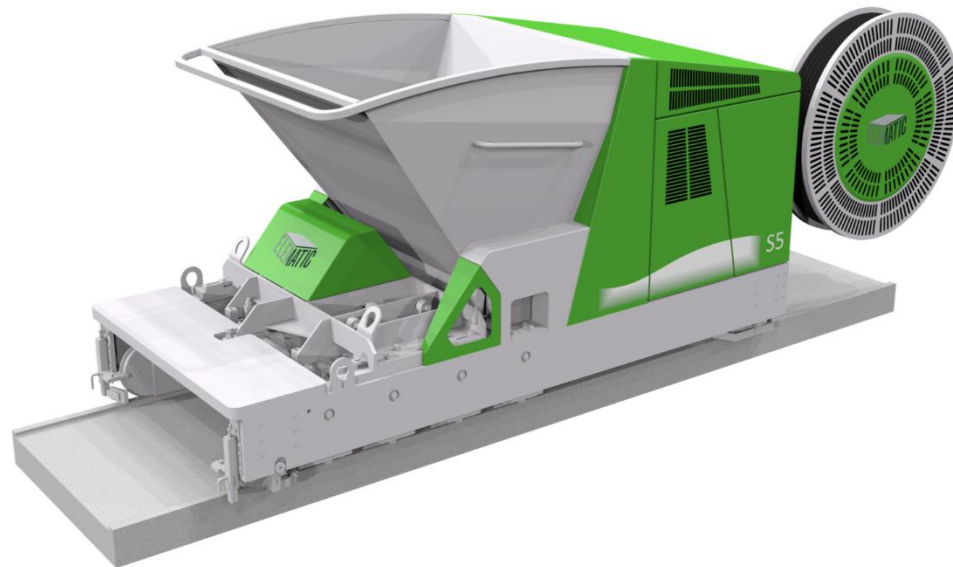
# Elematic – Precast Plant (SEMI)



- 2 bays of 18 x 150 m + Storage space
- Total Land requirement = 6-8 Acres

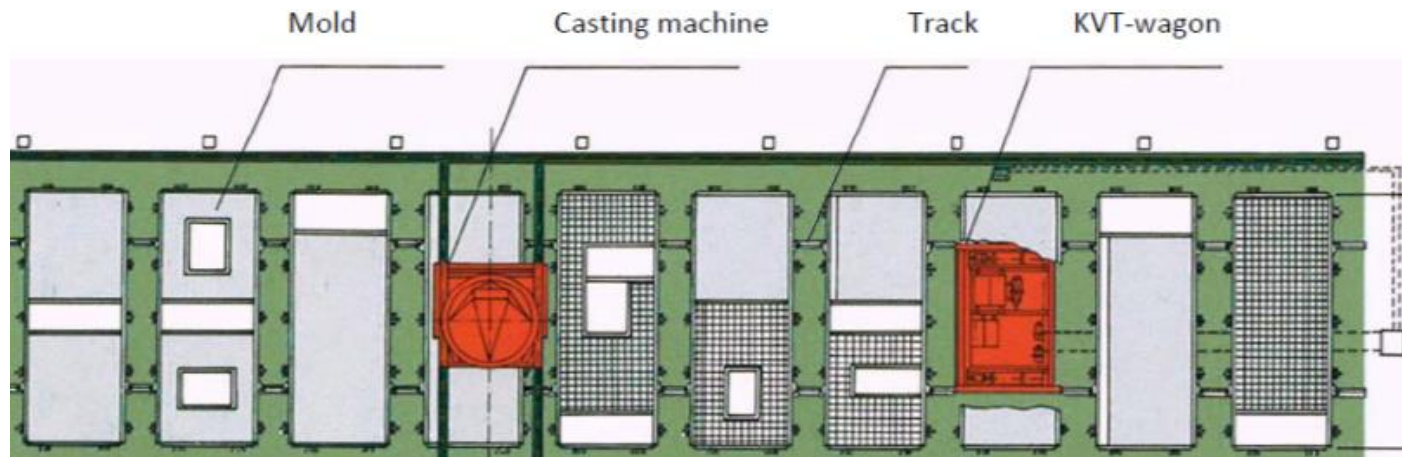
# Elematic – Precast Plant

## Production of Pre-Stressed Floors : Extruder



# Elematic – Precast Plant

## Production of Wall Panels : KVT Line





# Elematic – Precast Plant

## Production of Precast Wall Panels

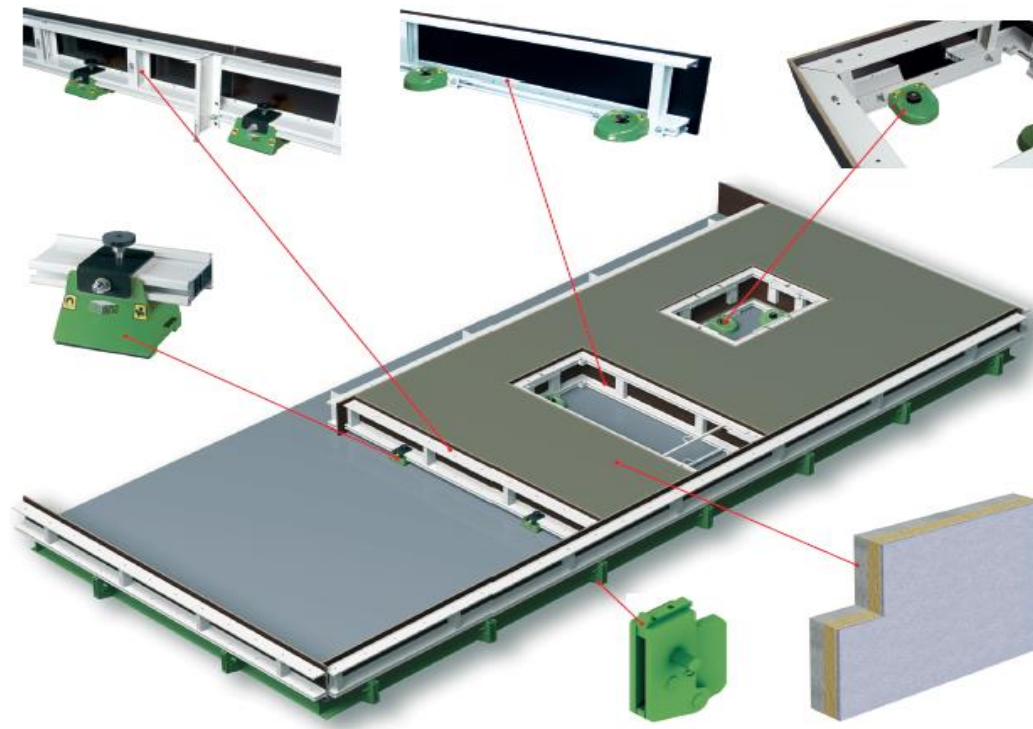


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# Elematic – Precast Plant

## Fastening Method

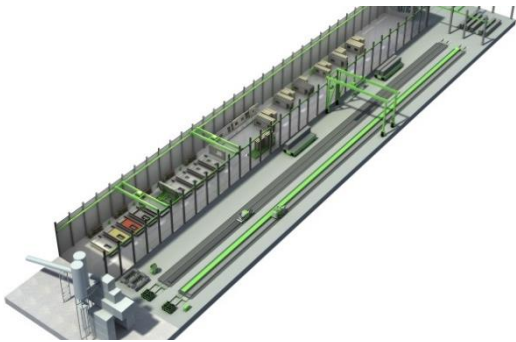


- Magnets
- Aluminum side forms
- Moulds
- Beds

# Three technology levels Your choice

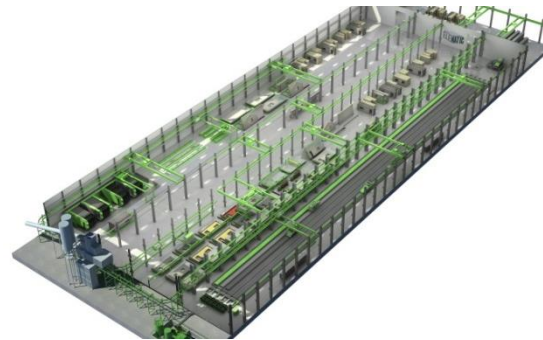
Complete precast plants for walls and floors

SEMI



Simple and easy start up level production with low initial investment

PRO



Large capacity production for a broad product range

EDGE



Advanced and highly automated plant for high volume production

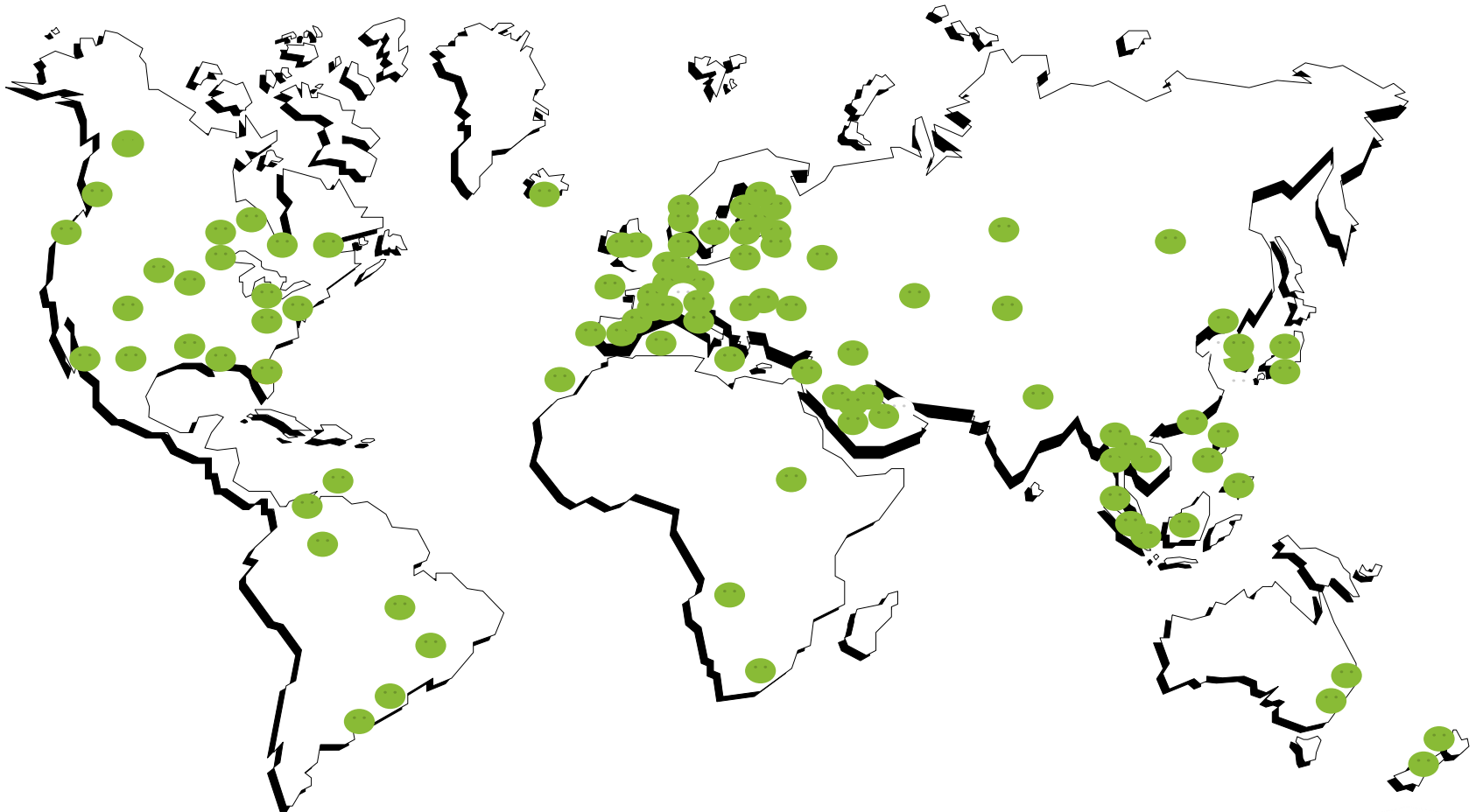
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# Market Areas

Elematic's production technology is already in use in more than 100 countries on five continents.



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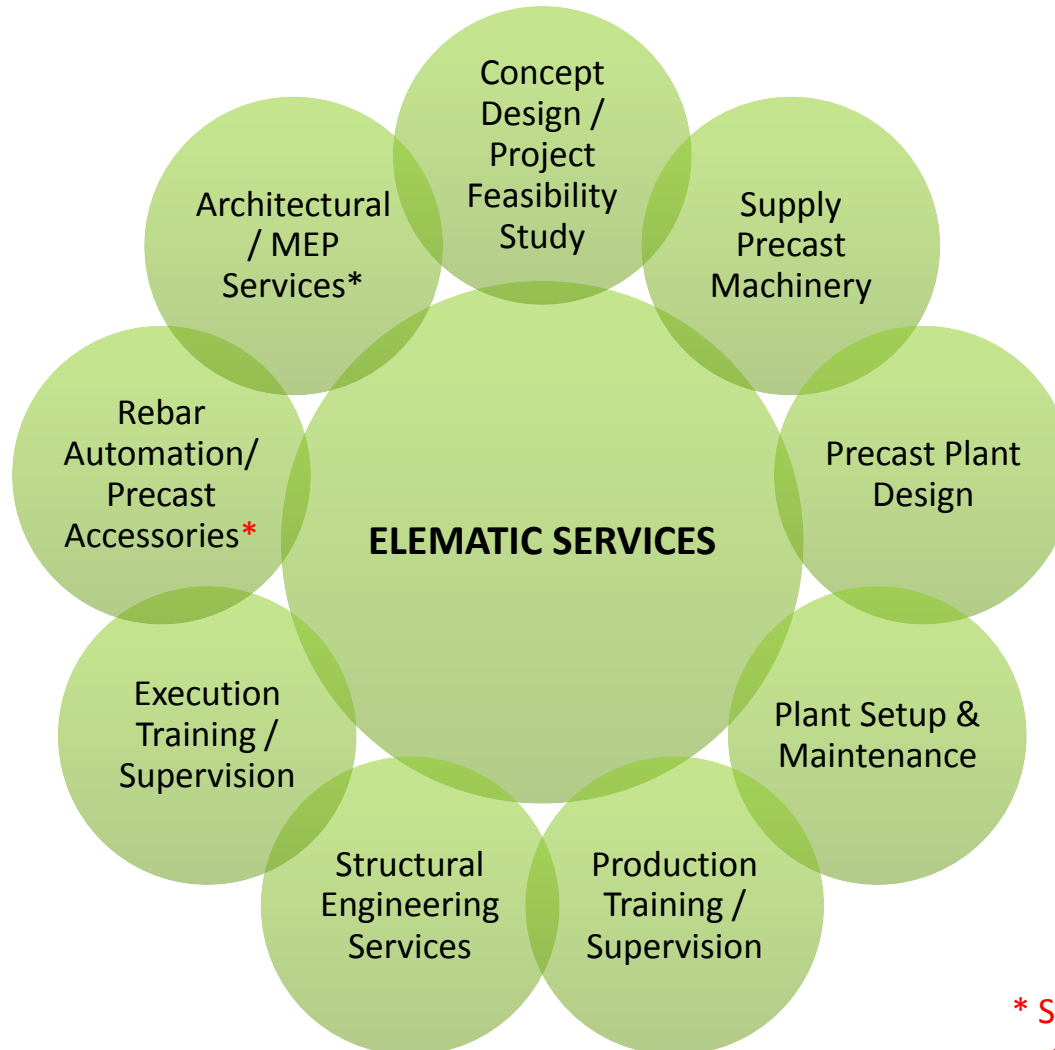


# Some of our key customers

Reference of some of the key customers having our machinery setup



# Elematic India Services



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\* Services provided through  
our partners  
SMART EVOLUTION **ELEMATIC**



# Thank You!

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