# Prefabricated wall solutions

Automation in the construction industry is indispensable for creating futureoriented living and working spaces.



Ceratec proposes high-quality automated prefab wall units for different types of building materials (clay, silicate, concrete, sand-lime or aerated concrete bricks), for **structural wall** production as well as **facing wall** facilities.

Due to the **modular design** of our lines, we can easily adapt to customer needs.

Thus, Ceratec creates a **synergy between** state-of-the-art **mechanical engineering and construction companies**.

#### Key advantages of prefab

- Weather-independent production in centralized manufacturing facilities.
- Consistently high quality.
- Cost savings through a significant reduction in construction time.
- Accurate cost calculation of manufacturing expenses.
- Possibility of depth of finish through pre-installation of electrical and plumbing components.
- Counter skilled worker shortage.





# Basic automation set-up



# Maximum versatility for mortar and adhesives in walls up to 4 m high.

The different layers are placed manually, but with fully automatic application of mortar or adhesive.

#### Machine data - key facts:

- Type of building materials: clay bricks, sand-lime bricks, concrete blocks, aerated concrete blocks
- Joint: mortar or adhesive
- Production output: 100 120 m<sup>2</sup> per 8h shift
- Wall thicknesses: 11-50 cm
- Max. wall height: 4 m
- Max. wall length: 13 m

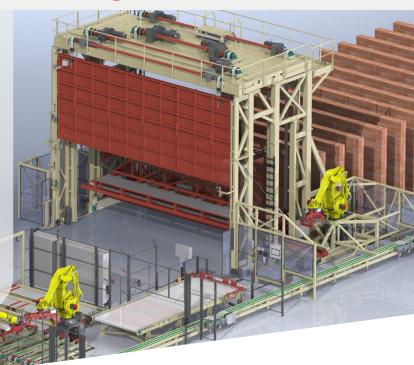
# **Modular robotic set-up**

### The optimal in-between solution with flexible extension options.

The intelligent use of the latest robot and control technology enables the automated, precisely positioned feeding and setting of bricks and accessories (lintels etc.): grid-aligned or by combining products with different lenghts.

When necessary, products can be cut to the desired lengths, using waterjet technology or dry cutting.

This increased degree of automation results in a further reduction of personnel costs as well as a constant output during the manufacturing process.



#### Machine data - key facts:

- Type of building materials: clay bricks, sand-lime bricks, concrete blocks, aerated concrete blocks
- Joint: mortar or adhesive
- Production output: 250 m<sup>2</sup> per 8 h shift
- Wall thicknesses: 9 50 cm
- Max. wall height: 3,5 m
- Max. wall length: 12 m



#### prefab wall solutions

# Fully automated prefabricated wall facility

# Maximal flexibility and output, designed for large production plants.

The wall element is produced to the exact length including gaps or cut-outs. The production of gables, window and door openings is seamlessly integrated into the process.

Ceratec supplies the complete production line, including the software, the on-site installation and testing, and the training of your staff.

When integrating third-party components, we use European high-quality original brands.

We pay particular attention to securing the elements for transport (lifting anchors, strapping system, ...).



A fully automated prefab wall facility typically consists out of following zones:

- · Buffer for pallets and setting machine
- · Preparation zone with distribution robot and cutting
- Setting robots
- Wall supports moving system
- Cutting/sawing system and inspection
- Waste zone
- Packaging area
- Finishing stations



#### Machine data - key facts:

- Type of building materials: (insulated) clay bricks, sand-lime bricks, concrete blocks, aerated concrete blocks
- Joint: mortar or adhesive
- Production output: 400 640 m<sup>2</sup> per 8 h shift Wall thicknesses: 9 - 50 cm
- Max. wall height: 3,75 m
- Max. wall length: 12 m

# Our solutions

Handling Thermal process Prefabricated walls Heat pumps

## Our references



# The Ceratec Group

Ceratec is a Belgian engineering and manufacturing company.

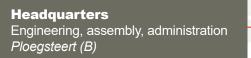
We are passionate about technology, and continuously adapt to changing market needs. We deliver top quality, think solution oriented, and work hard to win our customers' trust.

We offer our customers tailor-made solutions within our 3 core competences:

electrical installations a business unit of Ceratec











operating **worldwide** 



135 mil. € business

turnover

2024-04

Ceratec

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