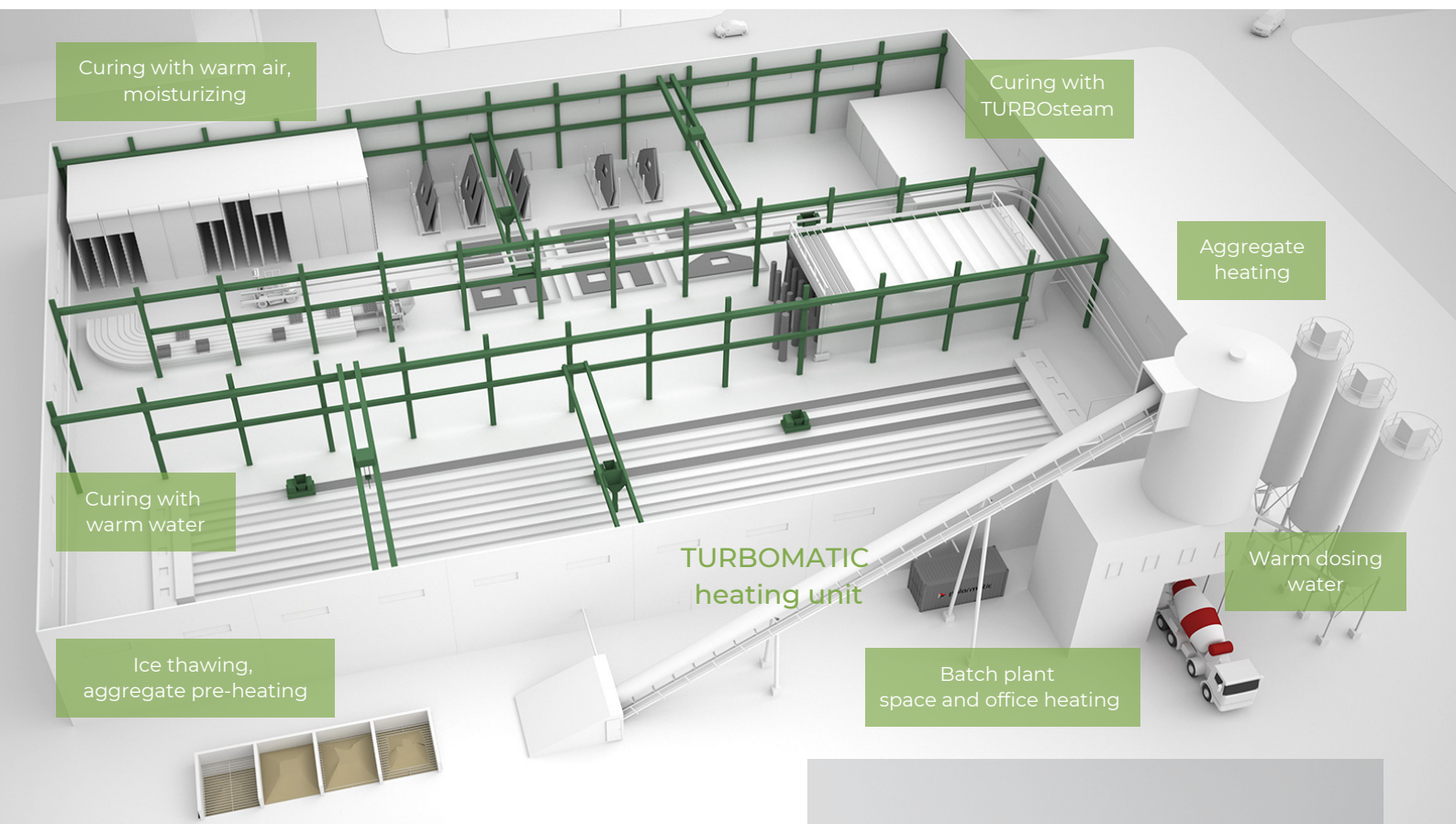


CUREMATIC™



Excellent Precast Concrete Quality and Increased Productivity



Optimal Performance for Precast Concrete Production

CUREMATIC is an energy efficient curing system which will help precast concrete producers to increase their production rate and throughput and, at the same time, improve the quality of the concrete products.

Curematic, together with Polarmatic's superior heating and cooling systems, will enable reaching the target temperatures of the concrete at all times. By doing so, precast producers can rely on achieving their planned curing times and produce premium quality products efficiently throughout the year.

CUREMATIC systems are always tailored to customer specific requirements, and depending on the end-product, the curing media can be either warm water, TURBOsteam, hot air or steam.

Benefits

- One containerized unit for curing, heating and cooling
- Precise control of the entire curing process
- Increased annual production and faster throughput thanks to superior heating power
- Energy-efficient system creates significant savings
- Less cement needed to achieve the concrete strength
- Low operating and maintenance costs
- Environmentally friendly solution
- Fully automated and computer-operated system - fast, flexible and stable operation



Tailored for You

Your curing solution will be specifically tailored for your factory to fulfill the requirements set by your production process and the product specifications.

Achieving the perfect product quality is our priority. Temperature, humidity and throughput are all taken into consideration in designing the optimal curing solution for each customer.

Polarmatic engineering team will:

- Specify the best curing process depending on the final product and other requirements
- Choose the curing media that best meets the needs
- Select the model that best fits the process and size it to meet capacity
- Consider the need of additional moisturizing

CureControl

CUREMATIC curing solutions are equipped with Polarmatic's advanced and easy-to-use curing control system.

Curing process can be started with only a few set-ups, and immediately you can monitor and control the temperature and humidity levels of the production. Curing software gives you also information about the duration and progress of the curing process.

CureControl provides you a full production report, which enables production traceability.

Curing with Warm Water

Warm water is circulated through a piping system which distributes the heat by radiation and convection to the concrete products to be cured.

Applicable precast concrete products:

Products cast on beds, molds or tables
e.g.: hollow core slabs, beams, walls, etc.

Heating Capacity:

0,5 kW per m² of bed/table surface

Polarmatic offers:

- Heating Equipment
- Heat exchanger and pumps
- Control valves
- Piping
- Manifolds and expansion tanks
- Temperature sensors
- Controls and software

Curing with TURBOsteam

CO₂-rich TURBOsteam is led into the curing kilns or tents at a temperature of 250-300°C (480-570°F). The curing temperature increases according to the settings while moisture is kept optimal.

Applicable precast concrete products:

Products cured in kilns or chambers
e.g.: pipes, manholes, blocks, paving stones

Heating Capacity:

Depending on products to be cured and molds used, typically 10-20 K/h.

Polarmatic offers:

- Heating Equipment
- Control valves
- Piping
- Temperature sensors
- Controls and software
- Retractable curing tents

Curing with Hot Air

Warm water is circulated through a piping system which distributes the heat through fan coils. Individual air blowers or a centralized water/air heat exchanger can also be included in the system upon request.

Applicable precast concrete products:

Commonly racked systems with rigid chambers and low product diversity e.g.: concrete blocks, paving stones

Heating Capacity:

Depending on products to be cured and molds used, typically 10-20 K/h.

Polarmatic offers:

- Heating Equipment
- Heat exchangers and pumps
- Blowers and heat exchangers
- Duct work
- Moisturizing system
- Control valves
- Piping
- Temperature & humidity sensors
- Controls and software

Curing with Steam

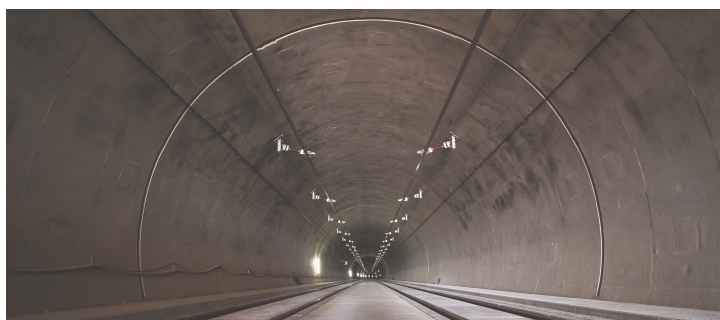
High pressure steam from the steam generator is sent to the radiation/convection tubes, after which the condensate is sent back to the steam generator creating a closed loop design system.

Applicable precast concrete products:

Especially for the rotation lines where big amounts of the same type of products are cured 24/7 h, typically tunnel elements and railway sleepers

Polarmatic offers:

Basic and detail engineering, selection of heating system and components, installation, supervision and commissioning.



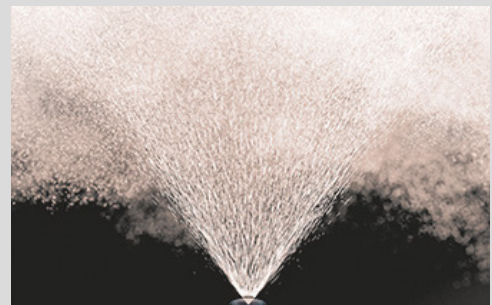
Accessories



Curing Enclosures

Polarmatic offers a wide range of curing enclosures like:

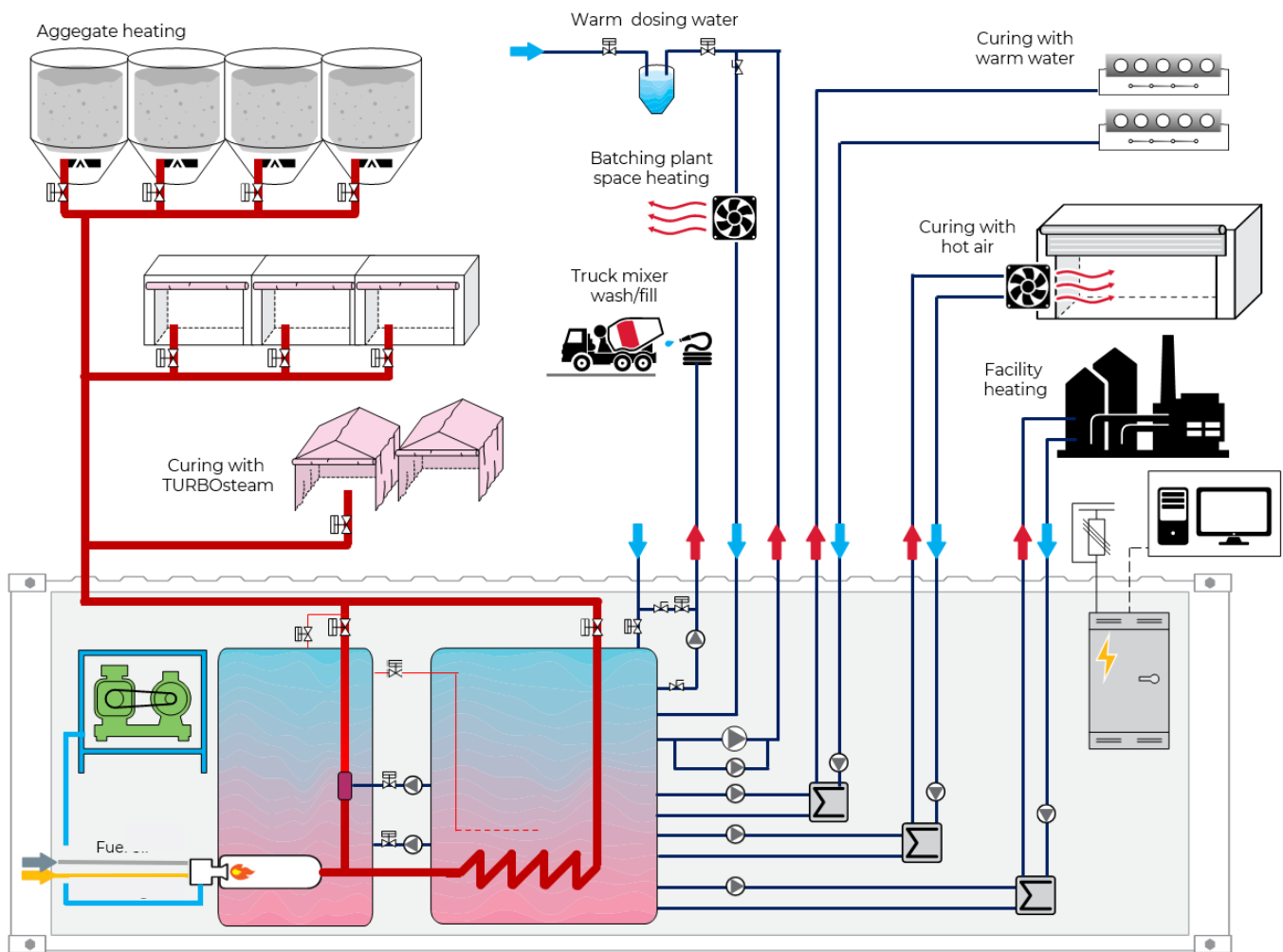
- Curing tents; stationary or retractable
- Curing kilns with insulation, tarp or shutter doors



Humidity Control

When additional moisture is needed, the CUREMATIC system can be equipped with a fully integrated CUREmoist moisturizing system.

The rack-mounted CUREmoist system is available in wide capacity range and it is designed for optimal and precise humidity control, which is seamlessly working with the adjacent parts of the curing system.



Polarmatic Oy

- Established: 1968
- Domicile: Tampere, Finland, local presence also in Germany, Sweden and United States
- Delivered units (9-2022): ~1.300 worldwide
- Brands:
 - TURBOMATIC heating systems
 - COOLMATIC cooling systems
 - CUREMATIC curing systems
 - ProCon X control system
 - POLARMOIST moisture sensors



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