



**MECMETAL**  
CONCRETE EVOLUTION

# CONCRETE INTELLIGENCE AND EFFICIENCY

**Product machines**  
**Production Lines**  
**Accessories**  
**Services**



# CONCRETE EVOLUTION

FROM FINLAND

## State of the art production lines created with Finnish integrity

With smart technology combined with northern innovation, stamina, and efficient production, we are proud to be pioneers of the industry being the sole provider of fully electromechanical production lines for the manufacture of concrete products and alternative material-based products since 1996



SERVO TECHNOLOGY GENERATION

# MEC FC EVOLUTION-20

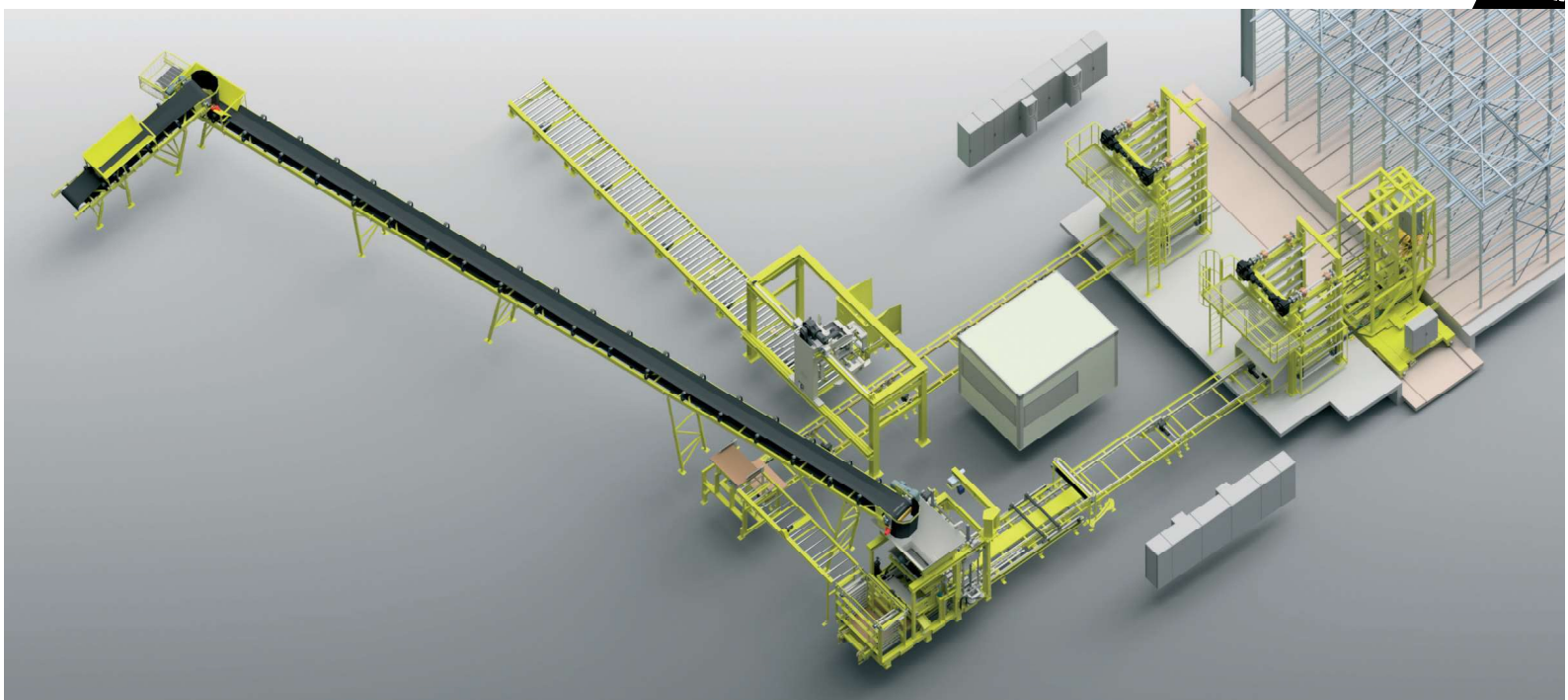
FULLY AUTOMATIC FINGER CAR HANDLING SYSTEM

The MEC FC Evolution-20 finger car handling system is fully automatic and optimal for large production volumes. Production line is equipped with MEC Evolution-20 product machine, has a curing chamber storage system and packing line. The best solution for tall production facilities. Finger car handling system is good for all general concrete products, but especially recommended for tall products.

## Turn-key service with various accessories

**The control system is concretely smart** and extremely versatile, but still really **user-friendly** and easy to use. Improved servo gear motor technology guarantees **precise and fast movements in** all conditions and **improves energy efficiency** totally to a new level.

The new web-based services are designed to support **maximizing production efficiency** and responding quickly to any need. New solutions also enable an extensive selection of predictive maintenance and real-time diagnostic services.



## TECHNICAL PROPERTIES

- Fully automatic
- Smart features
- Sturdy industrial design
- Electro-mechanical operation, based on servo technology
- Wide variety of stepless adjustments for all movements

## DIMENSIONS

Layout dimensions are determined by customer-specific needs

## ADVANTAGES



HIGH UTILIZATION RATE



EXTREMELY FAULT-TOLERANT



HOMOGENOUS & HIGH-QUALITY



SHORT DOWNTIMES



INTELLIGENT MAINTENANCE & DIAGNOSTICS



LONG LIFE CYCLE



COST-EFFECTIVE



ENERGY EFFICIENT



CO<sub>2</sub> FOOTPRINT MINIMIZED



VARIOUS NEEDS

# VARIOUS ACCESSORIES

## INSULATION FEEDER FOR INSULATED BLOCK PRODUCTION



Automatic insulation feeder for concrete/insulation block production

## FACE-MIX UNITS



Units for the production of two mass products

## PACKING LINES



MEC Robot and manipulator packing lines with various accessories

## QUALITY CONTROL UNIT

Machine vision units with advanced cloud based monitoring and reporting

## PRODUCT WASHING UNITS

Robot washing device for patio tiles and stone surfaced products

## NOISE AND DUST REDUCING CONTROL CABINS

Noise reduced cabinets and control booths for electrical cabins, machine operators and around the product machine

## GRINDING LINES

Grinding device for the exact height of the products

## PRODUCTION PALLETS

High quality production pallets for all product machines

## CUSTOM EQUIPMENTS

Design and manufacture of devices for special purposes

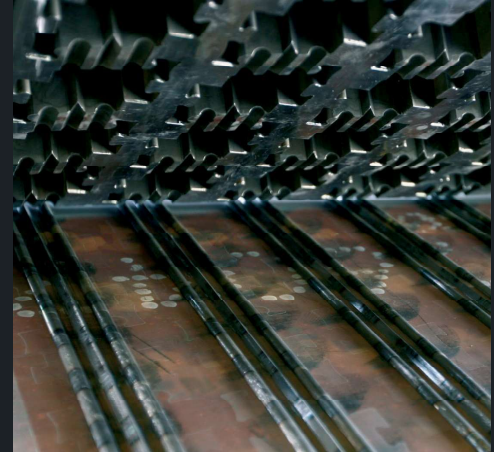
FOR CUSTOMERS SUCCESS

# LIFE CYCLE SERVICES



## DURABILITY AND ACCURACY

MEC Molds are designed and made in our factory in Finland. Each mold goes through a systematic process to guarantee the right molds for the efficient and dimensionally accurate manufacture of each product. We keep our production capacity limited throughout the year, to serve customers faster and precisely. Our average order-to-ship time is 20 weeks. We design and deliver molds globally for every concrete product machines regardless of the brand. Additionally, we provide mold maintenance and spare-parts to extra life cycle.



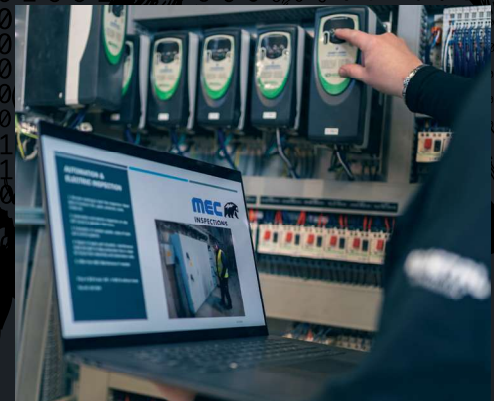
## OPTIMAL PRODUCTION

MEC maintenance is an inherent part of the partnership with the customer. We have manufactured and delivered concrete product production lines globally since 1996. Throughout these years, we have provided spare-parts, maintenances and guidance to our production line owners and helping them to keep production at optimal level all year. For every new MEC production line customer, we offer different service levels and continuous warranty.



## TO KEEP YOU UPDATED

MEC Inspections is developed according to customer needs, to figure out the situation for every electric part, automation, or mechanical machine in a production line. Knowledge of spare part availability and maintenance needs come in handy when planning for the next season and for keeping capacity at an optimal level all year round. We provide visually presented comparisons to our industry-leading production line to see how your equipment fares against the competition.



ENVIRONMENT

# TURN-KEY SOLUTIONS

## ALTERNATIVE MATERIALS

The use of alternative materials and other environmental decisions benefits our world. We act as a forerunner in many ways that help our customers achieve demanding goals in environmental matters.

For sustainable development Mecmetal production lines provides possibility to use alternative materials in production and different ways of CO2 treatments to assure carbon-free or even carbon-negative end products.

Recycled concrete waste adding into production, alternative binders, CO2-treatment use and production that consumes less energy than technology that manufacturers use these days plays important part to help industry achieve net zero goals to greener world and at the same time manufacture products more efficiently and safely.

## CARBON DIOXIDE TREATMENT

Carbon-neutral concrete products will soon be the industry standard as manufactures searches solutions to achieve environmental regulations and standards. At the moment concrete industry generates up to 8 percent of the worlds yearly carbon dioxide emission. One of the mecmetal's core values is environmental sustainability as we want to keep our heavy snow winter's and biting coldness here in north. We have been in continuous cooperation with product manufacturers and partners like Carbonaide, to provide the most compatible and efficient production lines with CO2-treatment, to achieve even the most ambitious goals without risking the quality of the end product.



# CARBONAIDE



TRANSFORMS CO<sub>2</sub> INTO A ROCK-SOLID CONCRETE

## AWARD WINNING CARBON-CURING TECHNOLOGY

Carbonaide offers an award winning carbon-curing technology for precast concrete manufacturers to reduce their carbon-footprint and generate cost savings with the help of CO<sub>2</sub>. Our technology is fully compatible with OPC and enables the use of novel binders.

## 20% CEMENT SAVINGS WITH MINIMAL CHANGES

We offer an all-inclusive service for carbon-curing with minimal changes to the production process and operations. This results in 20% less binder use and 50% less CO<sub>2</sub>-footprint already with OPC based mixtures. With our technology reaching carbon-negative concrete is made easy.

## COMPATIBLE WITH MEC PRODUCTION LINES

Carbonaide's carbon-curing module is compatible with Mecmetal's concrete product production lines. Integrated reporting systems for reliable reporting of carbon dioxide concentration. Equipment maintenance and real-time support as well as adjustment in seamless cooperation.

## CONTACT

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**EQUAL STRENGTHS WITH 20% LESS CEMENT**





# COMPREHENSIVE SERVICES DEVELOPED ACCORDING TO CUSTOMER NEEDS



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