

TURNKEY SOLUTIONS FOR CONCRETE INDUSTRIES



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Marcantonini Concrete Technology

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CALL AND A ROOM



Since 1967 we have been managing the complexity of the production cycle, transport and distribution of concrete, developing for the customer **integrated and customized technological systems** in relation to his objectives.

In these first 55 years we have always remained faithful to the vocation for the science of our founder Lamberto Marcantonini who taught us to overcome every challenge with tenacity and rigor.



Today his son Andrea Marcantonini continues to hold the rudder firmly MCT looking proudly at the exceptional company experience and planning an increasingly international and performing future in the providing customized technical solutions. And our mission continues to be clear also for the next years:

providing custom solutions, collaborating with our partners with passion, to attain a common goal: to simplify work as much as possible.

We also want to create an atmosphere of trust and dependability with customers, aiming towards strong personal relations and stable bonds that go beyond the sole execution of the work.

# Turnkey solutions for concrete

Our **turnkey solutions** include all the components of the system we build completely customized starting from the detailed design of the functional areas of the site, to get to the realization of the plant and the automation of the processes whose performances we measure, taking care of the maintenance. We are highly specialized and organized to be the **only point of reference** for our customer who obtains the maximum return from tailor-made systems with flexible and modular technological solutions.

### MCT Turnkey Approach





Our **added value** includes research in safety, risk prevention and knowledge that translates into total compliance with national regulations regarding plants, emissions and environmental impact.

Complexity can only be governed if it is understood in its entirety and tackled with research and technological innovation; with this awareness we live our mission of thinking and creating **the best concrete plant that the customer has ever used**.

Plant Manufacturing in our workshops Pre-installation, wiring/plumbing and testing in our factory before shipment, by modular assembly Complete installation, commissioning and operators training on site by our specialized crews and engineers After-sales assistance and support directly from our head quartier



## Exclusive technology

Research and development are the engine of our technological innovations that we protect with international patents also in order to protect the customer's investment.

Customized solutions

Optimization of existing sites

Pre-testing in our Factory before shipment Environmental friendly and energy efficient



## Fixed and mobile plants

MCT Plants in more than 70 countries include horizontal and tower type batching plants, modular plants, concrete distribution systems.

Faster batches with higher accuracy

Modular assembly Higher production capacity

Fast erection and easy to replace



### Total control

Software automation is developed and realized inhouse, allowing the customer a full control on their plant, the access to the analysis of the working parameters and the production reports, and plan the management of the production and distribution activities, including all the auxiliary platforms of the batch plant.

ConnpuNet	Moisture & Plasticity Control		
Wi-Fi Remote Control	Web Based HMI		



## Certified quality

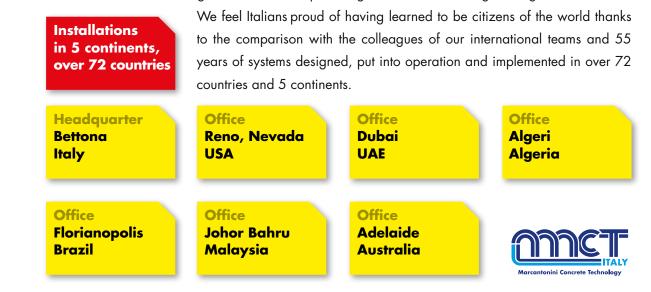
From the first day we have chosen the path of internationalization by adopting internal audit models for quality control and achievement of important certifications valid in all countries where we are present.





### Head Office in Italy and international operating centers

Our Head Office is based in Bettona in the province of Perugia and we are present with operating centers located in all strategic countries for shipbuilding and construction engineering.



### THE ECO-SUSTAINABILITY OF OUR BATCHING SYSTEMS

Batching plants play a significant role in reducing carbon emissions and contribute to a climate-friendly ecological environment. (source World Green Building Council)

We achieve this environmental benefit by using **special dust filters with self-cleaning systems for the control of dusty emissions** of silos, mixers and various internal areas present in all MCT plants. As well as the introduction of **new powder coating systems** that significantly reduces the environmental impact.

This type of painting is in fact, 99% recyclable and does not contain any solvents. Compared to liquid paint it allows zero Vocs (Volatile Organic Compounds) and atmospheric emissions of heavy metals, such as lead or chromium.

MCT tower batching plants are fully coated and buffered **to reduce noise emissions** and operate with **very low energy consumption** as the materials are metered by gravity. The container systems built by MCT respect the environment and the existing territory because they don't require special foundation work they can easily be installed and transported so they are reusable from one construction site to another.

### ECO-SUSTAINABILITY IN THE COMPANY

For over 15 years we have installed photovoltaic panels on the entire coverage of our headquarters and our plants; this plant allows us to produce about 60,700 kWh in a single year, making us fully autonomous in our production needs, with a CO<sub>2</sub> savings of about 30 tonnes per year.

Inside our factory, the temperature and the switching off of the lights is regulated by an industrial automation of our invention, this software allows us to avoid unnecessary waste of energy.

MCT is strongly committed to the utilization and employment of **new wellness techniques** that combine **sport**, **health and culture**. MCT supports local associations and this allows us to promote outdoor sports activities such as **trail running** among olive trees and woods and **mountain bike competitions** along trails and villages enhanced by **direct and autonomous maintenance**.











# READY MIX BATCHING PLANTS

Turnkey Solutions Tailor Made Concrete Plants Automation Software CompuNet® Worldwide Service and After Sales Network



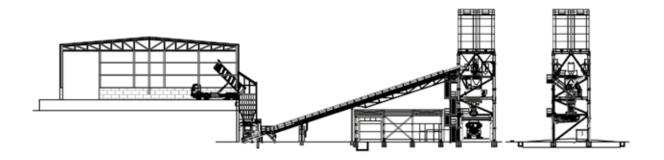


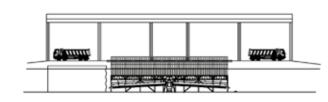
High technology Ready Mix greenfield and turnkey project, developed in full partnership with the customer, with design and manufacturing of the batch plant and automation software.

Horizontal aggregates storage with feeding system by conveyors and drive-through vertical mixing tower with cement silos on the top of the mixing section for the dosing by gravity. Twin shaft mixer MAO 7500/5000 with holding hoppers for the production of up to 140 m<sup>3</sup>/h of high quality concrete, including anti-drip device for the drive-through of trucks. Service building designed and manufactured to accommodate batch room, truckers areas and restrooms, offices and maintenance rooms, including water heating and blending system and recycling system.

Aggregates storage integrated in a pre-storage building for the direct tipping by trucks onto the compartments. Automation batch software integrated with central dispatch system by Command Alcon.

Complete integrated cladding package for batch plant and service buildings.





#### Batching Tower

4 Cement Silos 80 Ton each 1 Twin Shaft Mixer MAO 7500/5000

Admixture Dosing System

Automatic Washing System

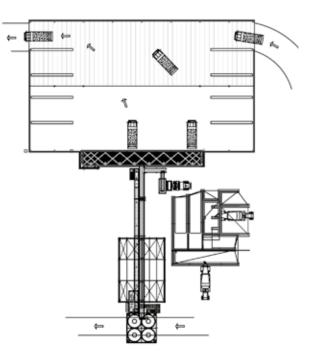
#### Storage Building

8 Pre-Storage Ground Compartments

8 Aggregate Bins - 500 m<sup>3</sup> total capacity

2 Aggregate Scales

1 Feeding Inclined Conveyor Belt





< Use QR Code and connect to our web site to learn more about MCT solutions in Ready Mix field

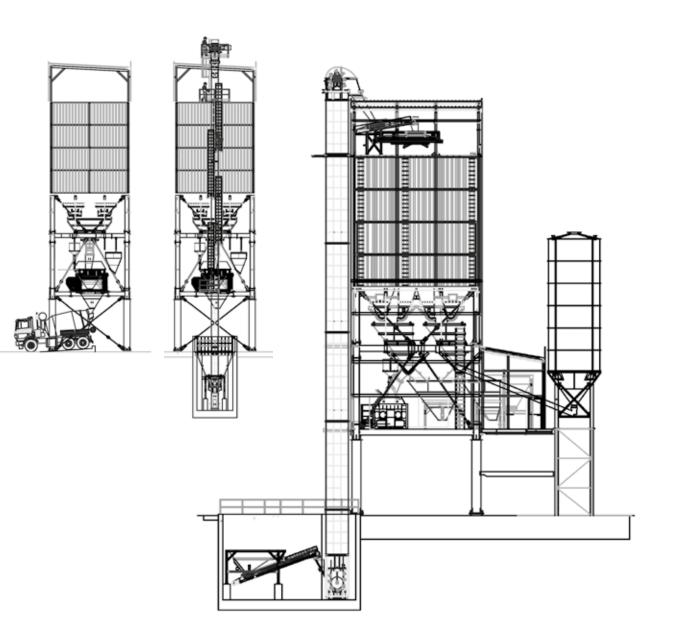


High technology ready mix greenfield and turnkey project, developed in full partnership with the customer for the restricting requirements of a narrow site in a residential area, with complete design and manufacturing of the batch plant and automation software.

Vertical tower batching plant with no.3 loading lanes, no.2 dry batch and no.1 wet batch with twin shaft mixer for the production up to 200  $m^3$  of high quality concrete in 24 hours/day shifts.

Aggregates loading system by primary hopper, bucket elevator and dispensing conveyor on the top of the tower, fully automatic. Automation batch software integrated with central dispatch system.

Complete integrated cladding package and emissions control for the installation on a residential area with high environmental restrictions.



#### **Tower Batching Plant**

- 1 MAO Twin Shaft Mixer 5000/3350
- 8 Aggregates Bins 460 m<sup>3</sup> total storage
- 6 Cement Silos 65 m<sup>3</sup> each
- 2 Concrete Dry Feeding Lanes for truck mixers

Concrete Recycling System



< Use QR Code and connect to our web site to learn more about MCT solutions in Ready Mix field



### Futuristic project studied about 20 years ago for a high quality plant for the production of concrete.

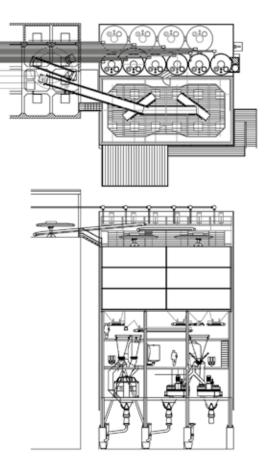
The plant located in Switzerland near a city center has required extreme attention to the environment. This required complete integrated cladding package and emissions control.

The design made side by side with the customer is very particular infact the platform of cement silos is completely cantilevered compared to the central mixing tower.

The vertical aggregate storage with 12 bins have a 920 m<sup>3</sup> total capacity. Aggregates belt loading system by primary hopper, inclined belt and dispensing conveyor on the top of the tower, fully automatic.

Mixing platform with no.3 loading lanes, wet batch with no.3 twin shaft mixers MAO 4500/3000 for the production up to 150 m<sup>3</sup> per hour of high quality concrete in 24 hours/day shifts.

Automation batch software integrated with central dispatch system by Dorner Electronic.

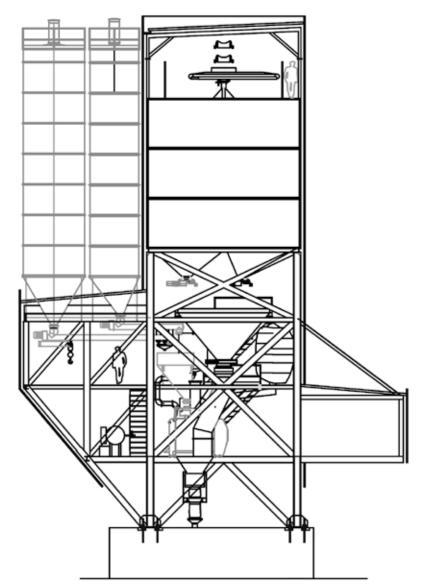


#### Batch Plant Tower Type

- 3 Twin Shaft Mixer MAO 4500/3000
- 12 Aggregates Bins 930 m<sup>3</sup> storage
- 6 Cement Silos 60 Ton each

29 Chemical Admixtures

3 Concrete Feeding Lanes for truck mixers





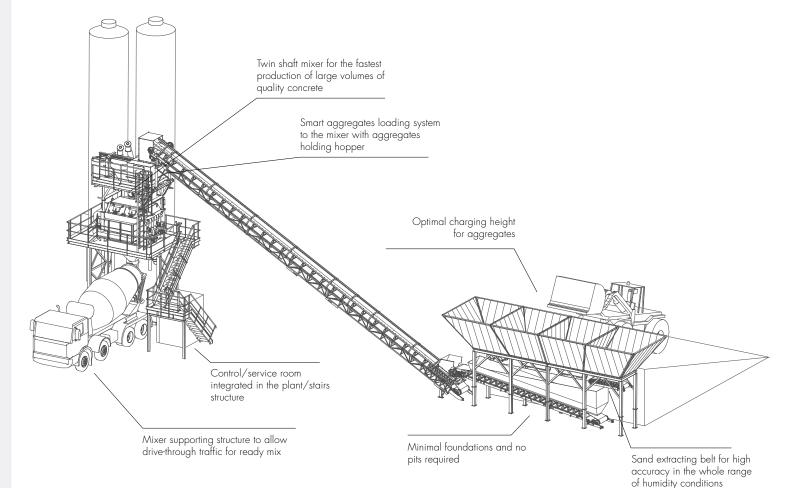
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# MCF-B **RIGEL**

The MCF-B Rigel mixing plants range has been developed to meet the needs of large and fast concrete productions, up to 135 m<sup>3</sup>/h.

The design of every detail is focused to ensure high reliability and functionality during the production of large volumes of high quality concrete.





	MCF RIGEL 60	MCF RIGEL 80	MCF RIGEL 100	MCF RIGEL 130
Type of Mixer	Twin Shaft 2250/1500 60 m³/h	Twin Shaft 3000/2000 80 m³/h	Twin Shaft 3750/2500 100 m³/h	Twin Shaft 5000/3350 130 m³/h
Hourly Concrete Production				
Number of Aggregates	4 x 20 m <sup>3</sup>			
Aggregate Storage	80 m <sup>3</sup>			
Automation System	CompuNet®			
Concrete Discharge Height	4,1 m			
Composition	3 x 40' O/T Sea Container			
Compressor	3 kW	4 kW	4 kW	4 kW
Total Installed Power	110 kW	180 kW	220 kW	280 kW



# RECYCLING SYSTEM

MCT reclaiming systems are fully integrated with the batching plant and distribution system and their automatic washing systems.

Our customized solutions in the reclaiming of materials are meant to reduce the wastes and minimize the production costs.





## MOBILE BATCHING PLANTS

Mobile Plants, easy to install and ready to use

Modular Batching Plant Type MCM >





^ Semi-Mobile Batching Plant Type MCM



^ Mobile Plant On-The-Road Type MCR

## MATERIALS TERMINALS

Cement Silos Trucks Feeding Station



# Connpunet

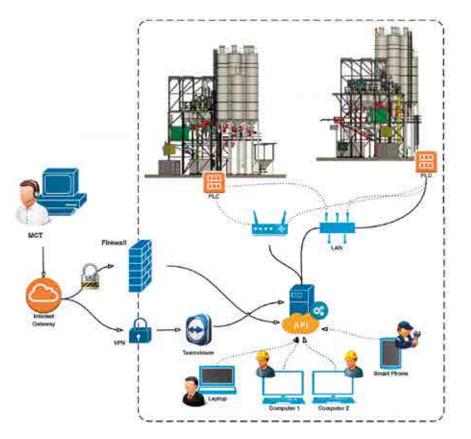
## CompuNet<sup>®</sup> is our software for management and control of both batching plants and concrete transport and delivery systems.

Years of experience and top-notch connection technologies are what CompuNet<sup>®</sup> is made of. The automatic system control is assigned to a modular, Windows running software. With CompuNet<sup>®</sup> it is possible to **monitor and manage** all the aspects and stages of the whole process of the concrete production and distribution systems.

With our remote technical support we provide a **24/7 assistance** to help in case of required support, to check or restore the operations of the batching plant or of the transport and delivery system. It is possible to **check and modify processes on-line**, while it is running, just by an internet connection.



The fastest and most direct channel of assistance is through our **Marcantonini Customer Assistance App**, available on Apple Store, Google Play Store and in Desktop version.



#### Software

- HMI Web Based
- Ease of use
- High reliability: downtime reduced to zero
- Flexibility
- Expandability
- Management features

#### Management

- Weight dosing
- Volumetric batching
- Additives control
- Temperature control
- Steam and ice dosing
- Aggregates moisture and hygrometry control
- Measurement of consistency and fluidity

### Additional software packages

- Recipes formulation and archive
- Daily production management
- Jets power management
- Stock management
- Production process optimization
- Automatic system diagnosis
- Data archive
- In-house or third party database software support

Discover all CompuNet® advantages on MCT website





PRECAST Best Quality through Design and Process Optimization





Mobile Plants type MCM and MCR, easy to install and ready to use





**Marcantonini Concrete Technology** 



### **MARCANTONINI IS A WORLDWIDE LEADER**

in the field of Batching Plants for Concrete Production and Distribution Systems since 1967



Exclusive Management and Control System



for Reclaiming Materials





READYMIX Innovative Solutions for Concrete Production



#### **MATERIALS TERMINALS**

Cement Silos, Trucks Loading Stations





Marcantonini Concrete Technology



**#BLUEHEART** Our commitment to our heritage

f in y D 0 Concrete Batch Plant Solutions for Precast, Blocks & Paver and Ready Mix Producers Concrete Distribution Systems

Plant Automation Software and Control Systems

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