

# THE MIXING SOLUTION



*The brothers David and Bruno Galletti founded their first craft Company back in 1947 with sound basis in the field of fine machining and industrial machinery construction.*

*In 1964 they designed and built the first Planetary Mixer P375 based on absolutely innovative mixing techniques, which would have soon been known in the market under the name of «Galletti Planetary».*

*In 1972 the Company O.M.G. (Officine Meccaniche Galletti S.r.l.) was founded and important investments were made in state of the art machineries and toolings at Ponte Valleceppi (Perugia) factory, allowing new sizes and types of mixers to be produced.*

*In 1992, the growing presence on international markets led to the constitution of SICOMA S.r.l., Company of the fledgling OMG Group, appointed to the production of the new types of mixers and to the sales and service in the foreign markets of all equipment produced by OMG Group.*

*The specific technical solutions characterizing OMG SICOMA mixers, designed and introduced over the years, are protected by international patents and make the machines unique.*

*Nowadays, OMG Group is directly present in Spain (Galletti Iberica 1988), France (OMG France 2006), China (Sicoma Zhuhai 2000), USA (Sicoma North America 2005) and India (Sicoma Mixers India 2011). Localization of manufacturing is a key factor for the success particularly in China and India.*

*In many other countries, SICOMA is present through agents or distributors.*

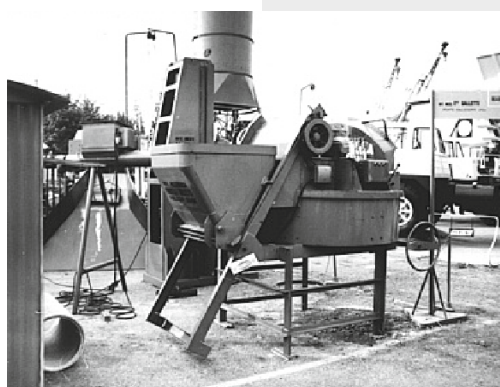
## MANUFACTURING

The main manufacturing facilities are located in Perugia region (Ponte Valleceppi and Torgiano), on a total area of 40.000 square meters of which 13.000 are indoor and where about 100 people, factory workers and office workers, are employed.

All company procedures, particularly the ones related to the manufacturing, are organized in a Quality Management System ISO 9001 certified by CERMET since 1995.

Most of the strategic components are manufactured in house in the dedicated area with 9 CNC machining centers also equipped with a CMM for high precision measurements.

Most of the manufacturing is organized with assembly lines in which all components are accurately prepared and prearranged for a simple, fast and precise assembly.



## THE MIXING SOLUTION

### WIDE RANGE OF MIXERS

With sizes ranging from 10 liters to 9 m<sup>3</sup> of vibrated yield, OMG SICOMA mixers cover all possible requirements, from the small quantities to be prepared in laboratories to the most demanding productions in large batching and industrial plants.

### THE MIXING SOLUTION

On the basis of this large choice in terms of type and size of machines, SICOMA can propose the best techno-economic solution for each specific use and application field.

The machines can be equipped with different accessories and options which optimize the productivity, the mixing performance and the life expectancy. Whenever necessary, new technical solutions may be developed for the specific needs of the customer.

### APPLICATION FIELDS

The excellent performance of OMG SICOMA mixers is recognized in several applications in the construction sector (production of readymix concrete, precast/prestress elements, vibro-compressed cement products, dry mortar mix) as well as in industrial processes (glass industry, refractory materials, chemical products, waste treatment).

### RESEARCH AND DEVELOPMENT

The R&D department has always played a very important role heading to two directions. From one side it deals with design and validation of technical solutions characterizing OMG Sicoma mixers. From the other side, it identifies innovative application fields through a specific cooperation with the customers and tests carried out in the internal laboratory.



### MIXING PERFORMANCE IN THE CONSTRUCTION SECTOR

	READYMIX CONCRETE	DRY CAST CONCRETE	SHOTCRETE	SCC	CELLULAR CONCRETE	LIGHTWEIGHT CONCRETE	UHPC / HPC	UHPRC	POWDER BLENDING	RCC	STABILIZED SOIL
MP	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★	★★★★	★	★
MAO	★★★★	★	★★★★	★★★★	★	★★	—	—	★	★★★★	★★★★
MT	★★	★	★	★	★★★★	★	—	—	—	—	—
MAO/C	—	—	—	—	—	—	—	—	—	★★	★★★★

Legenda

SCC = Self-Consolidating Concrete

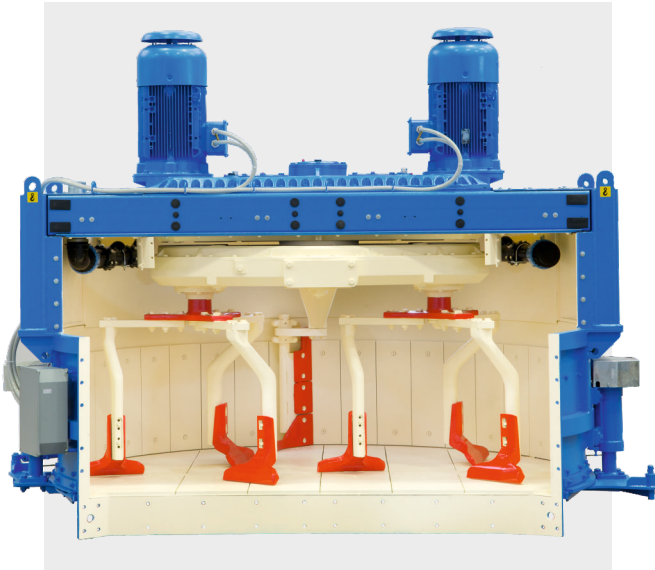
CELLULAR CONCRETE (AAC = Autoclaved Aerated Concrete, Foam Concrete)

UHPC = Ultra High Performance Concrete

UHPRC = Ultra High Performance Fibre Reinforced Concrete

RCC = Roller Compacted Concrete

### PLANETARY MIXERS MP



From 10 liters to 4 m<sup>3</sup> of Vibrated Concrete

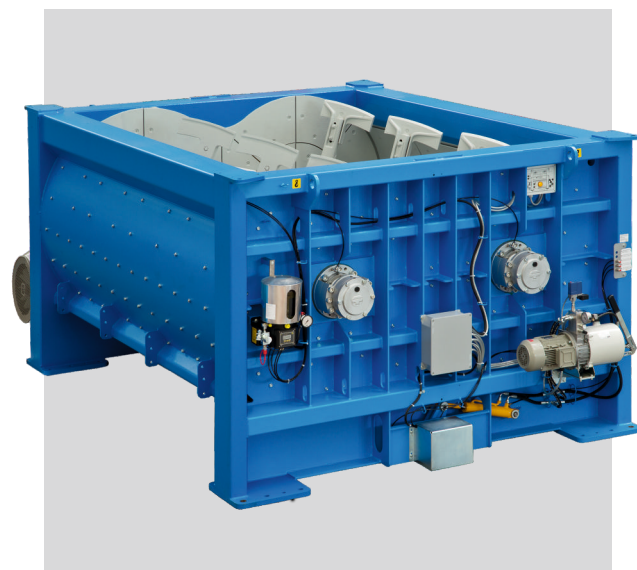
With 70 years of experience in mechanical field, Sicoma has created a gearbox virtually indestructible. The huge double horizontal design is robust and shock resistant. The wide horizontal oil bath is cool running and gives every gear optimum lubrication. It is good for life and carries a 5 year, 10,000 hour warranty.

The unique trajectories followed by the arms cover frequently and uniformly the mixer floor, leaving no dead zones during the mixing action.

The tank is sturdy and robust for the heavy duty operation, lined with Ni-Hard Cast Iron tiles, easy to access for cleaning and maintenance.

Several accessories are available to optimize and adjust the mixer to the specific use: skip hoist for aggregates loading, high pressure washout, side access door, high speed agitator, rotating moisture probe. (more details in SICOMA MP Brochure).

### TWIN SHAFT MIXER MAO



From 500 liters to 9 m<sup>3</sup> of Vibrated Concrete

The stiffened frame of the tank and the CNC machining of the of the whole body guarantees the planarity of the shaft seals under the full load.

The angular gearboxes (made in *Italy*) are fixed to the tank by a system designed by Sicoma that make the possible maintenance to the shaft seals extremely easy and effective.

The shaft supports are modular and the seals are lubricated in their housings by an automatic unit dispensing the exact amount of lubricant avoiding useless grease consumption and concrete contamination.

Several accessories are included as a standard: high top cover, alarm box, inspection platform, manual pump on the hydraulic power pack.

Special accessories are patented and available only on MAO mixers: Reduced Discharge Door, Double Discharge Door, Swing Out Drives, Slow Motion Drive. (more details in SICOMA MAO Brochure).

### SKIP FOR AGGREGATES LOADING



From 100 liters to 4 m<sup>3</sup> of Vibrated Concrete

More than just an accessory, the skip hoist for the aggregates has to be considered as an actual machine by itself.

All SICOMA mixers up to 4 m<sup>3</sup> output, can be equipped with the skip to have a compact layout and to save costs for the plant footprint.

They are designed for the best reliability and safety using the twin drum hoist. It allows the skip bucket to be operated by a single steel rope capable of self balancing the load by pulling the bucket from both sides. The lock under the bucket, bolted to the rope, prevents the bucket from falling in case of rope failure.

All models are available with high speed up and down (30 meter/min) and all models above 2 m<sup>3</sup> output are operated by Variable Frequency Drive (V.F.D.).

### LAB MIXING EQUIPMENT & SMALL-SCALE PRODUCTION



From 10 to 250 liters of Vibrated Concrete

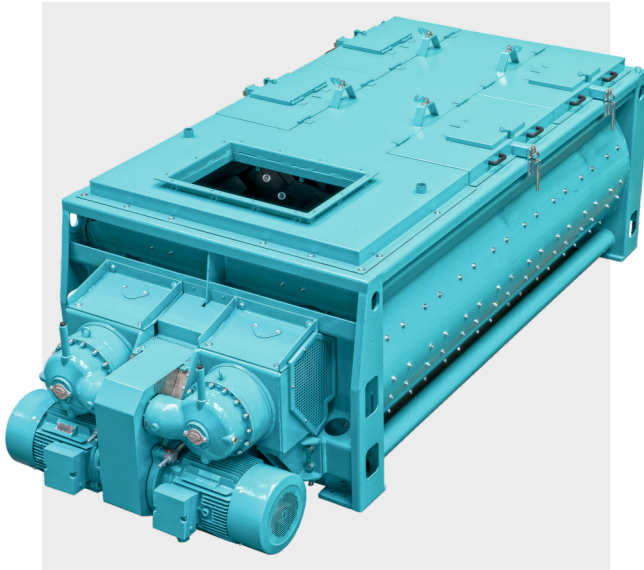
SICOMA Lab Mixers, both Twin Shaft and Planetary, are used in several laboratories and research centers worldwide.

The key factor for a good test and measurement is the availability of samples that are produced with the same technique and quality of the real production plant.

The reproduction in a small scale allows the researchers to study their mix designs, chemicals reaction, production process and to better move from lab to the actual production once their job is completed.

These mixers can also be used in small production plants.

### TWIN SHAFT CONTINUOUS MIXERS MAO C



From 80 to 400 m<sup>3</sup>/hour

SICOMA MAO/C uses the same proven technology of MAO Twin Shaft Mixers, Italian drive system and patented shaft seals.

The two counter-rotating shafts are equipped with a set of short paddles, with a specific configuration and size, which simultaneously mix and push the material from the entry point to the outlet.

MAO/C's are particularly good for the production of stabilized soil and for low quality Roller Compacted Concrete. In some cases, it can be used effectively for Backfill applications.

MAO/C's typically work with low slump, low cement content mixtures for high volumes of production with medium mixing quality.

### TURBINE (PAN) MIXERS MT



From 500 liters to 3,5 m<sup>3</sup> of Vibrated Concrete

Despite the fact that in some countries it is considered as old technology, the Turbine (Pan) Mixer is still a valid solution for the production of Readymix Concrete.

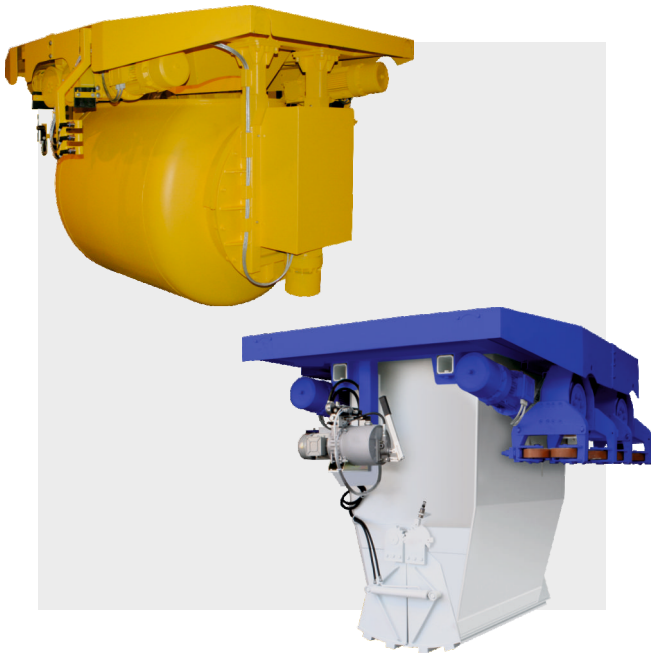
SICOMA Pan mixers are built with Bonfiglioli angular gearboxes and the tank design is conceived on the basis of the characteristics of the MP mixers.

All sizes can be shipped in standard Open Top containers or Trucks due to their split tank, which can be easily assembled at the jobsite.

The arms are connected to the rotor by a spring system to absorb the shock load caused by mixing blades hitting possible obstructions, protecting the gearbox.

Larger models can be fitted with rotating agitator(s) to increase the mixing efficiency and to reduce the mixing cycle time.

### CONCRETE DISTRIBUTION SYSTEM



From 750 liters to 4 m<sup>3</sup> Capacity

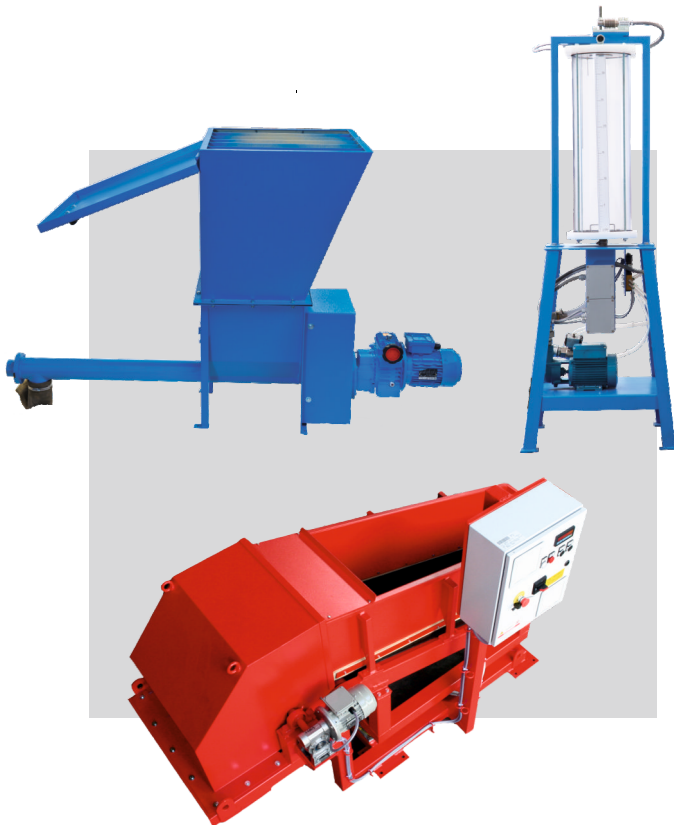
Concrete distribution in the Precast and Block industry is a critical factor, making the difference in having an efficient production plant.

Rollover buckets are more suitable for Wet cast.

Double Clamshell bucket is usually more effective in the dry cast applications due to the pyramidal shape of the walls. For double layer blocks and pavers, a twin bucket option is also available. Twin horizontal rail or Twin vertical rail track.

They can reach the speed of 240 m/min. Maximum inclination of the rail track is 25° (8° without chain system).

Hybrid models are available whenever both types of concrete (wet and dry) have to be transported and distributed inside the plant.



### MIXERS ACCESSORIES

A wide selection of accessories is available for the OMG SICOMA mixers. Most of them are pre-assembled in the factory for an easy and fast final assembly at the jobsite, reducing installation costs.

- HOLDING HOPPERS
- CEMENT SCALES
- WATER SCALES
- WATER FLOWMETERS
- LIQUID CHEMICAL DISPENSERS

Capacity: 20 - 50 liter / Flowrate 10 - 40 liter/min

- POWDER (CHEMICALS/COLORS) DISPENSER
- Capacity: 50 liter / Flowrate: 5 - 30 liter/min

- STEEL FIBRE DISPENSERS
- Three models from 8 to 120 kg/min



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