

Concrete Batching Plants

BETON COMPACT 2 MM 2000 (Patented)

- MOBILE
- ULTRA COMPACT
- EXPANDABLE
- HIGH HOURLY OUTPUT OF READY-MIXED CONCRETE AND CEMENT MIXTURE



EXTREMELY INNOVATIVE CONCEPTION OF BATCHING PLANT:

Thanks to the **modular design** it is possible to combine the various components in order to fit special production requirements and create a **single system characterized by different production stations** (cemented mixed - concrete - lightened concrete -)

BETON COMPACT mobile plant is the best solution for concrete producers who need to supply both **ready-mix concrete** for sale and / or construction of large-scale works, as well as **cement mixtures** for road foundations, RCC concrete and lean concrete.

In fact with this extremely versatile system with **discontinuous cycle**, it is possible to produce **high quality concrete** with a **2 m³** mixer per **BATCH**, but also large quantity of **cement mixture**, with an hourly output of **120 m³ / h**.

The concrete produced by our plants is able to satisfy the highest quality standards even for special applications and for very high performance structures.

BETON COMPACT is designed with the aim to make easy the transport and to reduce the time and space for the installation.

MAIN FEATURES

Management:	Semi-automatic / Automatic
Surface treatment:	frame and hoppers hot galvanized , mixers and accessories painted
Aggregate hopper loading:	by mechanical shovel or belt with ground hopper
Aggregate storage:	n. 2 compartments capacity 15 + 15 m ³ , EXPANDABLE MODULAR STRUCTURE adding further modules with 2 compartments each
Aggregates extraction:	directly in the mixer by means of pneumatic mouths
Mixer:	single shaft vibrated output 2 m³ per batch, with automatic washing system
Mixing time:	40 sec. (Maximum)
Hourly production:	90 m³ of concrete (2 aggregates) 120 m³ cement mixture
Discharge height:	conveyor belt supplied with hydraulically adjustable height
Cement batcher:	0,8 m ³ capacity, equipped with load cells
Water dosage:	by weight / volume
Slump:	S.3 - S.4
Working voltage:	380 V, 50 Hz
Low voltage:	24 VAC
Electrical control panel:	on board the machine
Electrical installation:	on board the machine
Pneumatic installation:	on board the machine complete with compressor
Dust reduction system:	on board the machine

DESCRIPTION OF THE PLANT

The solution we propose is composed by the basic module with 2 hoppers capacity 15 m³ each, complete with nr. 2 + 2 pneumatic mouths.

The mixer is equipped with load cells and it moves on a rails placed under the extraction mouths, the aggregates are unloaded and dosed directly into the mixer.

The cement and water batchers are positioned in the center between the two aggregate hoppers.

The base module is equipped with **dust reduction system**.

The mixer discharges on a conveyor belt with **hydraulically adjustable inclination** (discharge height) that loads the truck-mixer or truck.

The aggregate hoppers are loaded by means of a mechanical shovel or, optionally, with a ground hopper supplied with a conveyor belt.

The modular structure makes it possible to add other aggregates units, cement batchers and loading points, thus obtaining **extremely flexible systems that can be adapted to different needs**.

WORKING DESCRIPTION

Each aggregate hopper is equipped with 2 discharge cones. When the mixer is located in the center of the base module, the discharge cone of each compartment that is closest to the center is located exactly above the mixer tank. With the mixer stopped in this position it is therefore possible to extract and dose 2 aggregates, water and cement.

Until a sufficient quantity of aggregates is released quickly from these central cones, the mixer does not move.

During the dosage of one of the two aggregates, if the material begins to slowly descend (reserve condition), the mixer automatically moves towards the 2nd discharge mouth of the same hopper and upon reaching the desired weight, it automatically goes back to the central position and completes the cycle.

Water and cement are batched separately, since their weight is known and their introduction is faster than aggregate loading, they can be **introduced simultaneously in masked time** during the dosage of the first aggregate, which can be dosed **by deduction**.

This makes it possible to reach high productions with the following time per cycle (considering free discharge):

- **80 seconds for concrete (with 2 aggregates)**
- **60 seconds for the mixed cement (with 1 aggregate)**

The extraction and dosage of aggregates directly into the mixer make the use of the plant **versatile and customizable**: for each cycle the user has the possibility to choose the optimal inlet sequence of each aggregate, cement, additive and water during mixing.

RELEVANT PERFORMANCES - DISTINCTIVE CHARACTERISTIC

The solutions adopted in this new project, one of a kind and patented, make the machine **extremely compact and highly productive**. Thanks to the limited use of moving parts **maintenance costs are low and the use is simple**.

- (1) **Compact structure:**
dimensions during transport 2500 x 6200 mm H = 2600 mm + loading belt
dimensions of base module when is installed 3200 x 6500 mm H = 5000
total occupied area included loading belt and cement silo 15 x 8 m
- (2) **Pre-assembled and pre-wired monoblock.**
- (3) The mixing plant is a single monoblock consisting of a strong steel frame complete with mixer rails, nr. 2 aggregate compartments with tip-up sides for transport, mixer, water and cement batchers, control and power panel.
- (4) Control panel integrated into the structure.
- (5) **VERSATILE, ADAPTABLE AND EXPANDABLE** thanks to the possibility of combining additional modules.
- (6) The **fully automated management** enables the concrete certification.
- (7) **DISCONTINUOUS CYCLE with high hourly production.**
- (8) Easy construction works for positioning on site: nr. 4 plinths, availability of water and power supply.
- (9) **Quick and easy assembly: JUST 2 DAYS** for machine installation and start up on site.
- (10) Minimum use of lifting equipment.
- (11) Transport of the basic module on a standard-sized truck, **easy to transport** by land, sea or train.
- (12) **Low maintenance costs:** the efficient **high-pressure mixer cleaning system** and the limited use of moving parts reduce the required maintenance.
- (13) **EXTREMELY COMPETITIVE PURCHASE PRICE.**

Preparation for 2 cements.

Preparation for additives.

OPTIONAL: small hopper with belt and deflector on the top, for aggregate hoppers loading from the ground.