



MIX
ON SITE





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BATCHING PLANT SOLUTIONS



More than 50 years in business have taught us that only by forging a firm link between the client's experience and dynamic design and manufacturing can produce quality products that fully meet market demands.

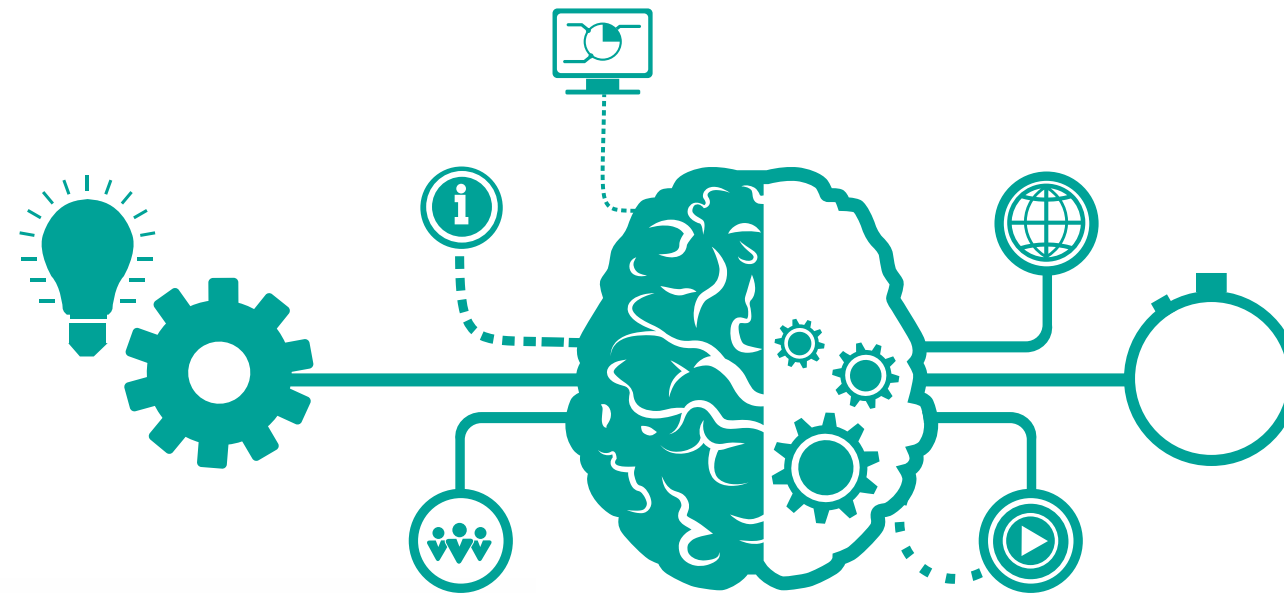
The high level of know-how of our workforce ensures complete control of all processes, from design to the after-sales service. That is why we are a reliable partner in the development of batching plant solutions - before, during and after the sale.

OUR COMMITMENT

MISSION & VALUES

A passion for quality, transparency and ethical conduct that guarantees total respect for the dignity of work, people and the environment, these are the values that guide our actions.

From the design onwards, all our products aim to combine maximum usability with minimal environmental impact. We believe by doing our best work we can contribute to making a better world.



Our solutions:



They are attained by striving to raise standards of efficiency, safety and the utmost respect for the environment.



They are created by "listening" carefully to market needs.



They draw strength from being part of a major Industrial Group.

IMER GROUP MIX ON SITE

Building Sites are part of our history! Over 50 years of experience in designing and building plant and machinery for building sites all over the world. Our simple intuitive handling systems facilitate procedures and provide total control over mix design.



Radius lift arm



Aggregate silo

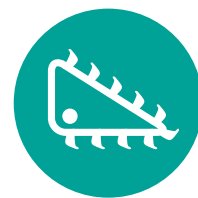


Mixers



RADIUS LIFT ARM "DRUM"

BTK 350-508-1008



**BATCHING PLANTS COMPLETELY
AUTONOMOUS WITH DRUM MIXER**

Experience in the sector, the applied technology to the plants and the ONGOING EVOLUTION philosophy mean that the IMER Group is able to guarantee the production of VERY HIGH QUALITY CONCRETE for any class of consistency, IN COMPLIANCE with standard UNI EN 206-1.

In addition, the BTK radius lift arm batching plants are compact and VERSATILE, making them suitable for small sites, where they are able to operate constantly and completely INDEPENDENTLY.

- *Compact and versatile*
- *Suitable for small sites*
- *Very high quality concrete*

PRODUCT RANGE

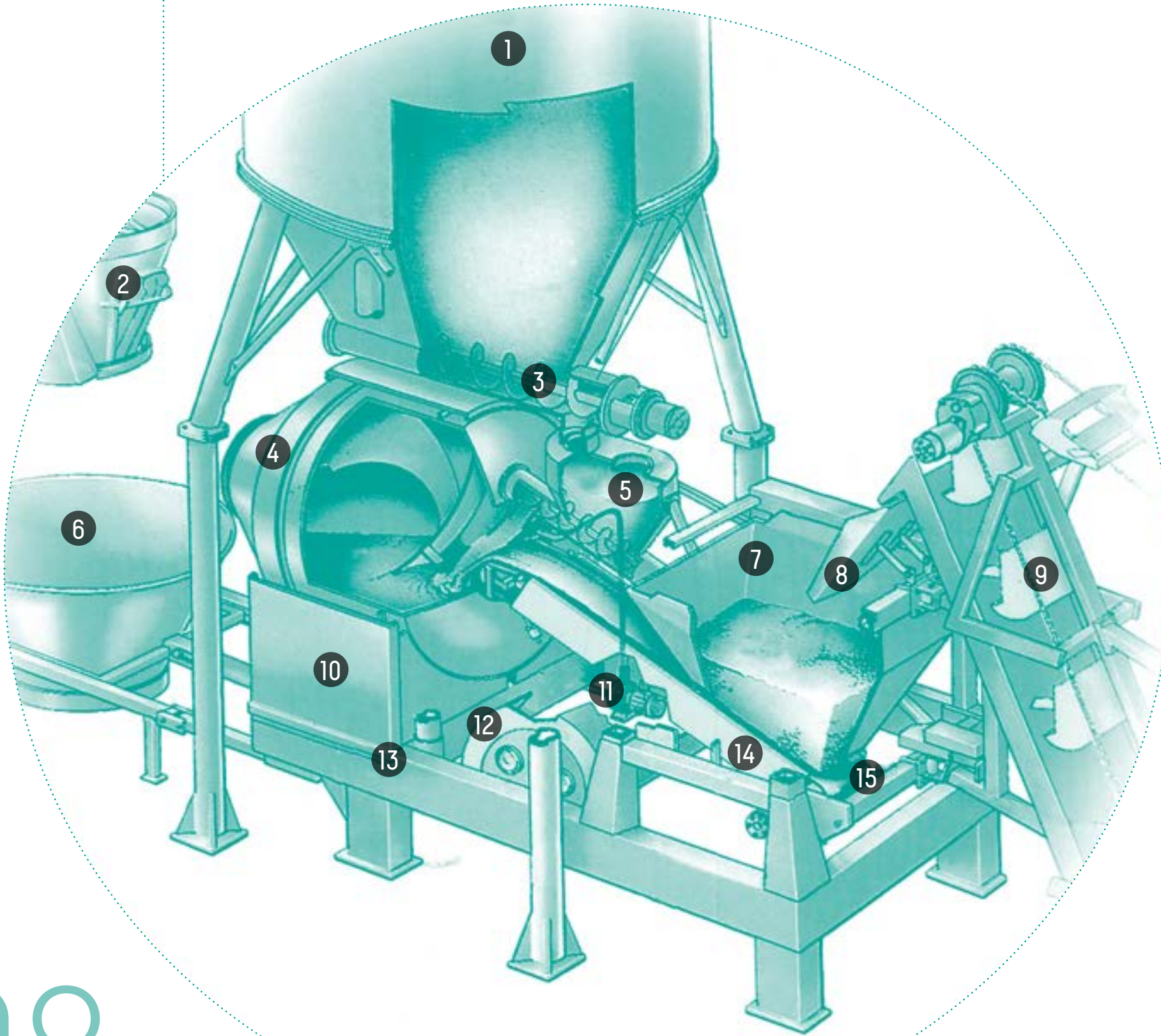
[BTK 350](#)

[BTK 508](#)

[BTK 1008](#)



MAIN COMPONENTS



1_CEMENT SILO

2_SKIP

3_SCREW FEEDER

4_DRUM MIXER

5_CEMENT HOPPER WITH INCORPORATED SCREW FEEDER

6_TRANSLATING SKIP GUIDE

7_AGGREGATE WEIGHING HOPPER

8_AGGREGATES CONVEYOR

9_RADIUS LIFT ARM

10_DRUM MIXER GUARD

11_WATER PUMP

12_HYDRAULIC UNIT

13_SUPPORTING FRAME

14_CONVEYOR BELT GUARD

15_AGGREGATE CONVEYOR BELT

MAIN FEATURES



CERTIFIED WEIGHING SYSTEM

Weighing of concrete and of aggregates is carried out using CERTIFIED weighing equipment: batching takes place in separate hoppers connected to a lever system with certified load cells.

FLUID POWER CONTROL UNIT

Activated by a single electric motor, the fluid power control unit sets in motion all the mechanical and moving parts of the plant (radius lift arm, aggregate transfer belt, skip guide) and reduces of maintenance operations.



TRANSLATING SKIP GUIDE

The system automatically positions the skip from the lifting point to the unloading point thanks to the travelling skip guide. The crane operator can collect the concrete produced, quickly and easily, and in complete safety.



SELF-REGULATING WATER SUPPLY

At the start of the production cycle the operator sets the desired level of concrete fluidity. The self-regulating water supply mechanism, activated by an adjustable fluid power control system, performs the function of maintaining the pre-established level of fluidity throughout all the stages of production. This is achieved completely independently and is self-regulating. The water system is automatic with self-regulating motor pump and tank.



MANAGEMENT UNIT

The IMER Group electric control boards are able to offer many possible solutions for the management and control of radius lift arm plants depending on the specific needs of the client.

The solutions offered range from single-formula boards to multi-formula boards: all the systems undergo strict testing, programming and installation by specialised personnel, thus guaranteeing high quality performance, operation and production.

Mono-formula management unit

The Mono-formula management unit allows for the radius lift arm plants to be activated manually and autonomously.

It is made up of:

- Electric board with IP 54 protection
- Transparent protection screen in the control section
- Control panel
- Display and pre-selector for cement and aggregate weight
- Contactors
- Motor protection devices in the event of overload and loss of phase
- Electronic microprocessor board



- Software (by Le Officine Riunite Udine S.p.A.)
- Printer: upon request the receipts, the real composition of each cycle, the date and time that the cycle is carried out and the total consumption of the various components can be printed.

Multi-formula management unit

Programmable micro-controller electronic unit (Controlled process).

The MULTI-FORMULA management unit, like all the IMER Group management systems, guarantees precise batching of the components in the quantities required by the formula.

The system is made up of:

- Electric board with IP 54 protection
- Transparent protection screen in the control section
- Digital weight display
- Contactors
- Motor protection devices in the event of overload and loss of phase
- Programmable micro-controller electronic equipment
- Software (by Le Officine Riunite Udine S.p.A.)
- Keyboard with display for presetting the receipts, the process parameters and for displaying consumption
- Printer: upon request the receipts, the real composition of each cycle, the date and time that the cycle is carried out and the total consumption of the various components can be printed.



AUTONOMOUS OPERATION

With the change-over switch set to AUTONOMOUS, and after having set the appropriate preselectors with the quantities of cement, water and aggregates, the machine (started up using the START button) begins the production cycle by collecting the preset quantities of material and transferring them to the concrete mixer. Once the mixing phase has finished (approx. 30") and the skip is inserted into the skip guide, the machine will begin to empty. Once unloading has finished, the material for the next cycle, which has already been collected during the mixing and unloading phases of the previous cycle, is autonomously transferred to the concrete mixer.

MANUAL OPERATION

Once the change-over switch has been set to MANUAL, the phases of the cycle (WEIGHING - controlling the increase in weight on the display - TRANSFER TO MIXER and EMPTYING) are carried out when the relevant controls are activated.



ACCESSORIES

SAFETY VALVE

This allows for the control, inside the silo, of pressure during the loading phase and vacuum during unloading (according to safety regulations).

DUST REMOVING SYSTEM

The dust removing system, located on top of the silo, has the function of preventing the dispersion of dust into the surroundings with the aim of protecting the environment. Its installation proves to be more advantageous than a ground filter, both from an operational and an economical point of view.

ADT AUTOMATIC TIMED ADDITIVE PLANT

Upon request, a timed device can be provided for batching additives; its operation is strictly linked to the automatic production cycle of the concrete mixing plant.

It is made up of:

- Motor pump with 7.5 l/min flow rate - 0.25 kW
- Electric controls
- Delivery pipe
- Intake pipe

Batching is carried out via a timer which activates and deactivates the pump, depending on the quantity of additive required.

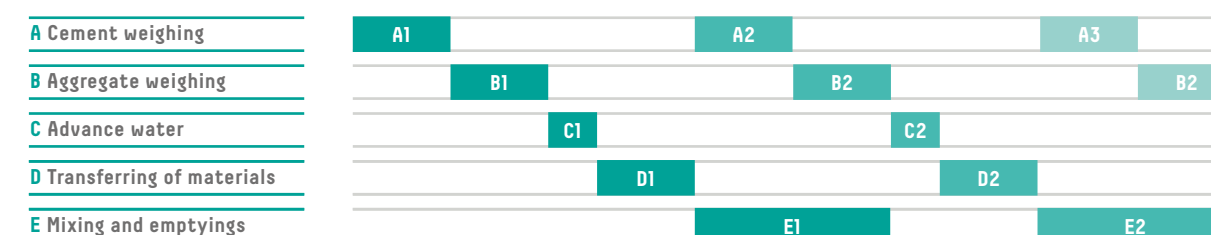
Technical characteristics

		BTK 350	BTK 508	BTK 508 2P	BTK 1008
Drum mixer capacity	l	525	750	750	1500
Output of fresh concrete	l	438	625	625	1250
Output of compacted concrete	l	350	500	500	1000
Maximum aggregate stockpile	m ³	100	300	300	300
Maximum absorbed power	kW	TN 8	TN 11	TN 12	TN 17.5 - TR 18,5
Monobloc weight	kg	3800	2500	2500	1800



Batching plant with one weighing hopper

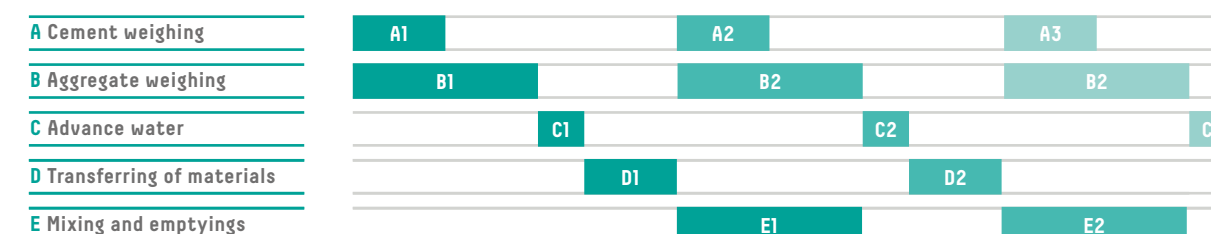
	BTK 350	BTK 508
A Cement weighing	30"	20"
B Aggregate weighing	40"	59"
C Advance water	5"	3"
D Transferring of materials	40"	36"
E Mixing and emptyings	70"	79"
Phases that define the cycle	A+B+C+D	A+B+C+D
Average time per cycle	115"	118"
Hourly output	9-11 m ³ /h	14-16 m ³ /h



Notes: A1= first cycle; A2, A3, ...= following cycles

Batching plant with two weighing hoppers

	BTK 508	BTK 1008-TN	BTK 1008-TR
A Cement weighing	30"	50"	50"
B Aggregate weighing	59"	90"	80"
C Advance water	3"	4"	4"
D Transferring of materials	36"	36"	36"
E Mixing and emptyings	59"	90"	80"
Phases that define the cycle	B+C+D	B+C+D	B+C+D
Average time per cycle	98"	130"	120"
Hourly output	16-18 m ³ /h	26-28 m ³ /h	28-30 m ³ /h



Notes: A1= first cycle; A2, A3, ...= following cycles

Concept & design: Emporio ADV
Photo: Gabriele De Nardo; Le Officine Riunite - Udine S.p.A. Archive

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