
Customised plant concepts for the future.

Thanks to the latest technologies, particularly sustainable and economical concrete production is possible with the Betomix from Liebherr.

LIEBHERR

Betomix 2.5 – 4.5



The foundation for the best concrete

The Betomix series – facts and figures

The latest generation of concrete batching plants from Liebherr is revolutionising the production of concrete by enabling economical production. The modular design of this generation offers a wide range of variants that can be flexibly customised to the needs of customers. This flexibility enables the quick and uncomplicated realisation of both stationary and mobile concrete batching plants.

An important innovation of the new Betomix is the smoothing of power peaks by up to 64 %. This is achieved through the use of LiPerformance process optimisation. This not only significantly reduces connection costs to the power grid, but also the operating costs for energy. As a positive side effect, wear is noticeably reduced thanks to the smooth starting and stopping of the drives.

The precise dosing of cement is another outstanding feature of Liebherr's new concrete batching

plants. This allows more efficient use of resources, because up to 8 kg (17.5 lb) of cement can be saved in a typical formula with 300 kg (661 lb) of cement per cubic metre of concrete.

Increased output of up to 20 % is possible with the Liebherr control system and LiPerformance process optimisation. Optimised process times enable shorter mixing times. When used in conjunction with the ring-pan mixer type RIV, variable speeds of the main mixer and mixing tools are possible independently of each other. As such, mixing times can be reduced by up to 30 % for highly demanding formulas for sustainable concretes.

Cleanliness and convenience reach a whole new level with the new cleaning solutions from Liebherr. With the LiClean cleaning solutions, various options are available for efficient plant cleaning – saving up to 70 % time and 80 % water. They also allow cleaning work to be carried out comfortably in large working areas and to the highest

safety standards.

Assembly of the batching plant is extremely quick and cost-effective thanks to its folding concept and wiring carried out in the factory. Stationary concrete batching plants from Liebherr require only a level base plate or simple foundation strips, which significantly reduces foundation costs and installation work.

Furthermore, the new plant concept offers a wide range of customised and extensive equipment options that can further increase convenience and efficiency. A large working area over the individual operational levels makes daily work much easier.

5x

faster cleaning

With LiClean, cleaning times are significantly reduced and cleaning is five times faster. LiClean solutions include e.g. cleaning the mixer system and the feeding hoppers of the truck mixers.

1 / 3

With the intelligent mixing process control, the speeds of the mixing system can be individually adjusted according to the mixing progress. The mixing time can be reduced by up to 30 %.

LiPerformance process optimisation in conjunction with the Liebherr control system enables increased output rates of 10 to

20 %

compared to conventional* batching plants with the same mixer size (depending on the plant configuration).

15 days

until concrete production is possible under the right conditions! The new Betomix can be positioned quickly and easily thanks to its "folding concept". What's special about it: The entire plant can be delivered on a steel foundation frame and is already pre-wired in the factory – forming the basis for concrete production after only 15 days.

+/- 0,35 %

accuracy of cement

up to 8 kg (17.5 lb) of cement can be saved in a typical formula with 300 kg (661 lb) of cement per cubic metre of concrete.

*conventional batching plants without LiPerformance process optimisation

More precise. Faster. Higher performance.

3 Weighing platform

The weighing platform offers a high degree of flexibility and adaptability. It enables the integration of different scales, which can be comfortably tested for accuracy using checkweighing equipment. Optional ice weigher and microsilica scale can be integrated to satisfy special requirements for the concrete. The optional steel fibre dosing and the optional chain hoist are also located on the weighing platform.

2 Skip or belt

We offer our vertical skip hoist for an optimum material flow. Thanks to the LiPerformance process optimisation and the parallel running surfaces, wear is not only significantly minimised, but also focused on readily replaceable plastic rollers. Alternatively, feeding is also possible with a belt for all mixer sizes.

1 Aggregate storage

Our in-line silo offers a storage capacity of 500 m³ (654 yd³), optionally even as a tower silo with an impressive capacity of 600 m³ (785 yd³). Optional steel foundations significantly reduce the assembly time of the in-line silo.





4 Cement silos

Depending on the configuration, the batching plant can be equipped with up to six cement silos. The silos are available in a variety of sizes and capacities of up to 120 tonnes. They are equipped with filters, sensors and an injection device to ensure an optimum work flow.

5 Mixer module

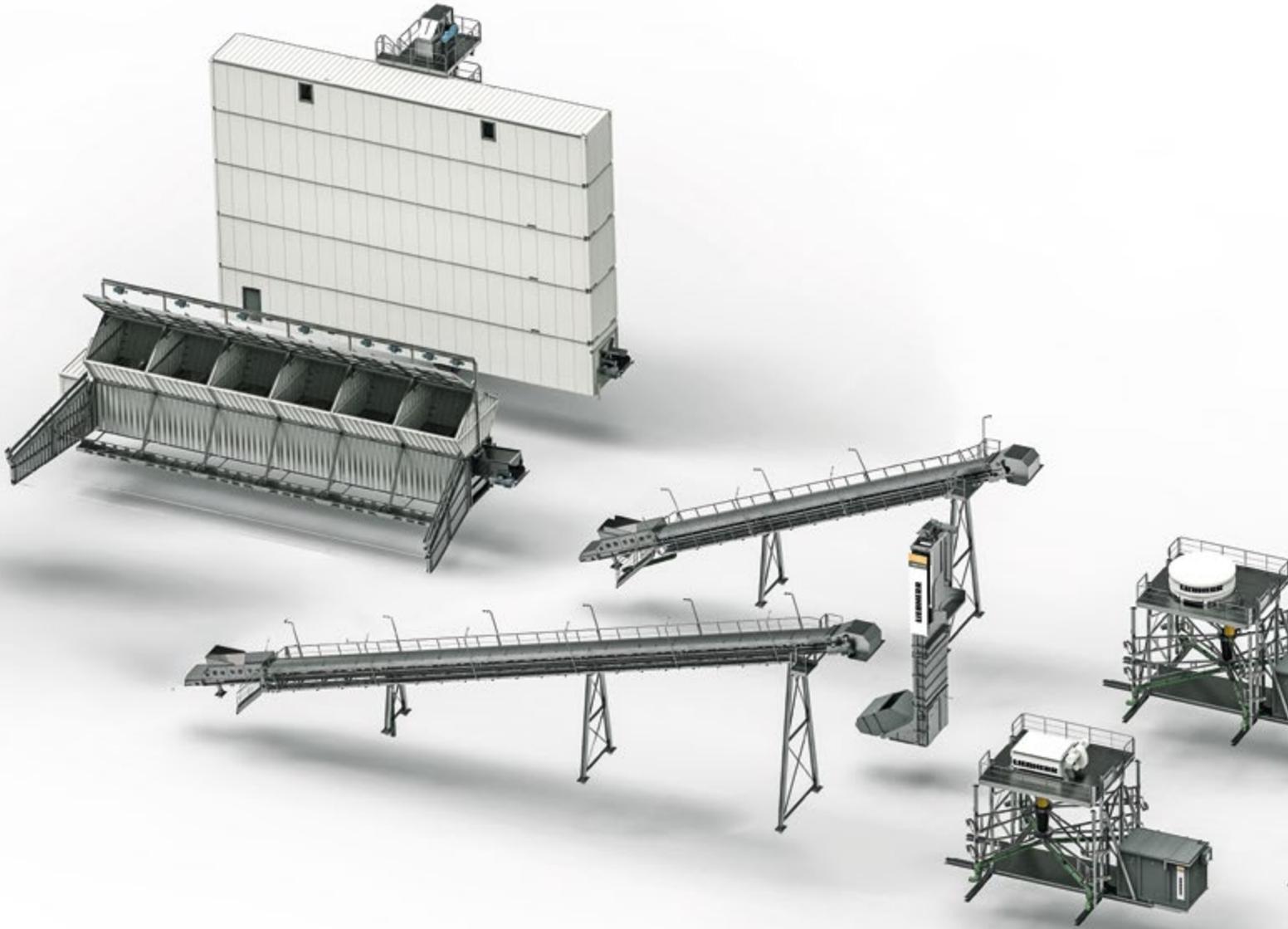
Our mixer systems, the twin-shaft mixers and ring-pan mixers, are the centrepiece of the batching plant. They are optimised for maximum output and efficient operation in conjunction with LiPerformance process optimisation. Furthermore, the LiClean high pressure cleaning system ensures a long system service life and cleanliness. In addition, ergonomic and safe working is guaranteed thanks to the generous workspace.

6 Technology and control container

The control system is the centre of the batching plant. It monitors, controls and coordinates all processes to ensure precise and economical concrete production. The system consists of the highly developed Litronic-MPS 3 control system, which enables comprehensive automation of the plant. When used in conjunction with LiPerformance process optimisation, increased output rates of 10-20 % are possible, depending on the plant configuration.

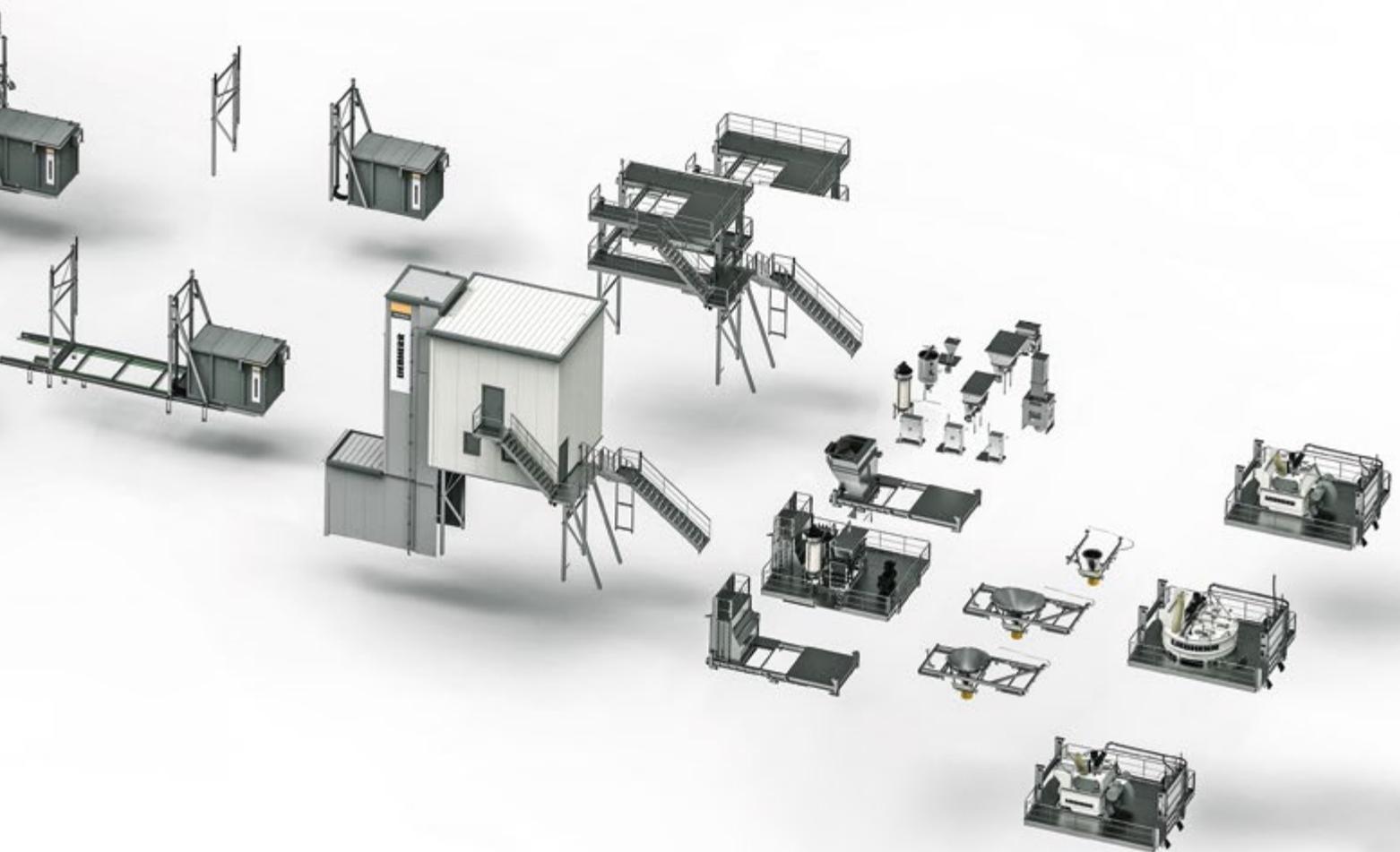
7 Concrete discharge

Our concrete delivery hopper can be modified and equipped as required, to ensure clean and precise concrete delivery. A truck mixer hopper cleaning system with drip guard (optional) prevents soiling, e.g. of the driver's cab or floor. Swivelling hoppers also enable delivery into trucks or trailers.



Diversity redefined

In the development of the new Betomix series from Liebherr, emphasis was placed on unbeatable flexibility, sustainable concrete production and fast assembly. The new Liebherr Betomix demonstrates the true wonder of flexibility – and in the Betomix-S version is able to produce concrete after just 15 days under the right conditions.



Individual degrees of mobilisation

Two versions are available: The Betomix-S (on a steel foundation frame) with the innovative folding concept and pre-wired electrics. Furthermore, the Betomix-C (on concrete foundations) in a bolted design for assembling the individual modules on the construction site.



Betomix-S version

Folding for rapid assembly, with steel foundation frame

Optimum assembly* 15 days

Version Steel foundation frame for casting

Advantages Quick assembly, pre-wiring in the factory

Foundation Simple foundations or base plate

Installation parts Installation parts or anchor bolts

Betomix-C version

Bolted for assembly on site, mounted on concrete foundations

Optimum assembly* 23 days

Version Bolted for installation on site, no pre-wiring

Advantages No welding work necessary

Foundation Simple foundations or base plate

Installation parts Installation parts or anchor bolts



*complete batching plant with cladding, including completion and start-up, subject to appropriate conditions.

Mixer variety

It is possible to install different mixer systems in the same basic system, depending on the application. Liebherr uses its own twin-shaft or ring-pan mixers to fulfil the highest demands. Output rates of 105 to 275 m³ (137 to 360 yd³) of compacted fresh concrete per hour are possible.



Skip hoist or belt

Regardless of whether maximum output with the belt is required for a 4.5 m³ (5.9 yd³) plant or maximum output in confined spaces with a vertical skip hoist up to size class 4.0 m³ (5.2 yd³). Feeding can be individually selected, according to the size class.



Aggregate storage with in-line silo

The in-line silo can be arranged in line or at an angle of 90° to the Betomix. The in-line silo can also be installed recessed in the floor. This enables ground-level, cost-effective loading with wheel loaders or trucks. Up to 500 m³ (654 yd³) of aggregates can be stored, depending on the design variant.



Aggregate storage with tower silo

The modular tower silo delivers up to 600 m³ (785 yd³) of storage volume, depending on the height. The tower silo can be fed either by a bucket elevator or an inclined conveyor belt.



Technology that makes the difference.

The new Betomix generation impresses with state-of-the-art technology: Thanks to unbeatable flexibility in the technical equipment and LiPerformance process optimisation, concrete production is also securely positioned for future challenges.



Rapid delivery time

The Betomix can be delivered within a few weeks thanks to prefabricated modules, allowing efficient project planning.



Economical transport

All modules of the Betomix are optimised for transport. With the Betomix-C economical transport to all global target countries can be realised.



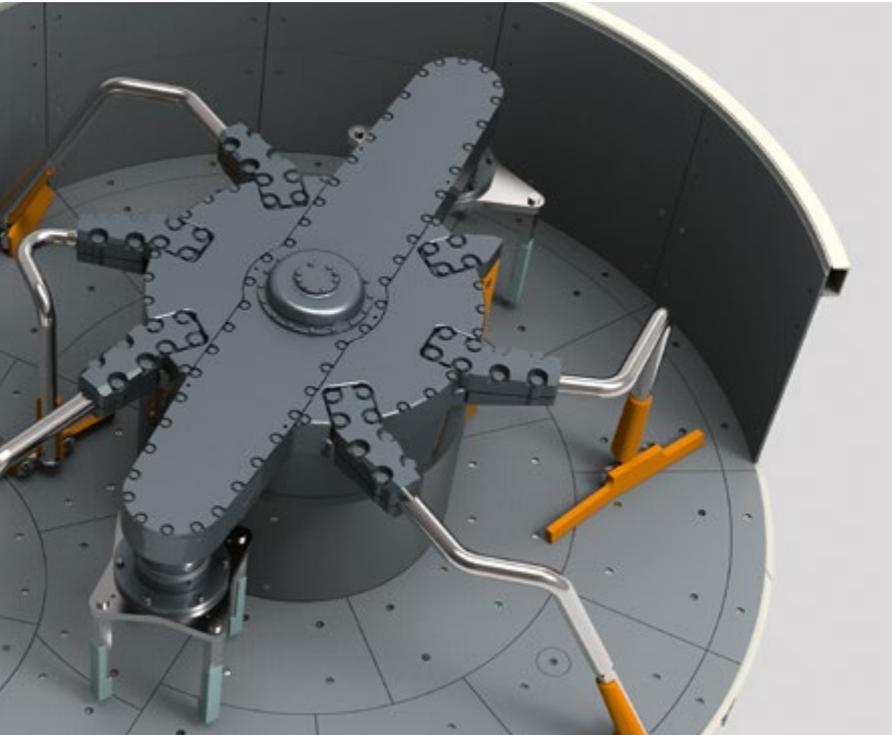
Quick assembly

The Betomix-S, mounted on a steel foundation frame, impresses with its innovative folding concept and pre-wiring to the integrated technology container. Under the right conditions, installation on level concrete foundations is possible in just 15 days.



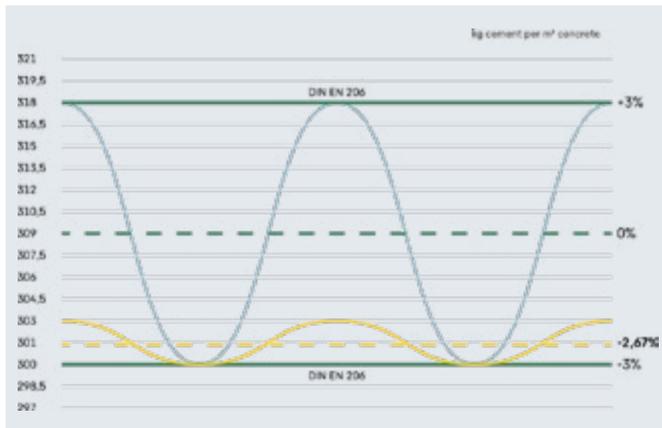
Diversity at its best

The new Betomix generation offers every option for a customised plant solution based on the requirements on site – regardless of whether space is limited, a large mixer size with a high output rate is required or a high storage volume is needed for the aggregates.



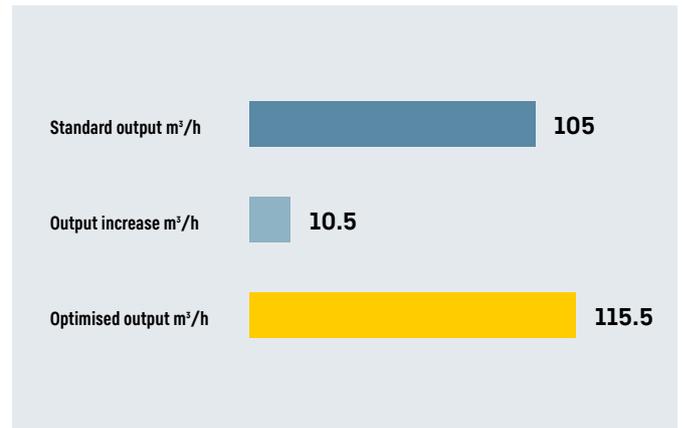
Intelligent mixing process

With the latest generation of Liebherr twin-shaft mixers and ring-pan mixers, the speeds of the drives can be adjusted individually and according to the progress of the mixing process. This means that mixing times can be reduced by up to 30 % for highly demanding formulas for state-of-the-art concretes.



Massive cement savings

Thanks to a dosing accuracy of +/- 1 kg (+/- 2.2 lb) with the new LiPerformance process optimisation, up to 8 kg (17.5 lb) of cement can be saved with a standard formula with a minimum cement content of 300 kg (661 lb). With concrete production of 50,000 m³ (65,400 yd³) per year, at least € 50,000 can be saved thanks to high-precision dosing.



10 to 20 % higher output

With the latest LiPerformance process optimisation from Liebherr, all processes are optimally coordinated, resulting in 10 to 20 % higher output rates compared to standard mixing systems of the same size class.



Genuine energy efficiency

No more power or current peaks, almost no more costs incurred due to reactive current compensation and gentle operation due to the smooth start-up of all drives. Thanks to LiPerformance process optimisation the Betomix is equipped for a sustainable and competitive future.



Generous space conditions

All accessible areas of the entire batching plant are generously sized and offer sufficient space and easy access for maintenance and cleaning. Tools, spare parts and equipment can be stored at any time without compromising the working areas. The plant satisfies all applicable standards to ensure ergonomics and safety.

Liebherr-Mischtechnik GmbH

Established:
1954

Products:
Mobile and stationary batching plants
Truck mixers and conveyor belts for truck mixers
Control and measuring equipment
Residual concrete recycling systems
Concrete pumps

Did you know? To ensure unbeatable quality, the site has its own modern test technology centre with a concrete laboratory. All new products are tested and analysed here. Mixing tests with different materials or formulas are carried out on behalf of customers to satisfy the various requirements.



Bad Schussenried

The new Betomix at a glance

Betomix

Type	2.5	3.0 ^{New}	3.5	4.0 ^{New}	4.5 ^{New}
Theoretical output rate in fresh concrete ¹	131 m ³ /h (171 yd ³ /h)	150 m ³ /h (196 yd ³ /h)	169*/174** m ³ /h (221*/227** yd ³ /h)	188*/193** m ³ /h (245*/252** yd ³ /h)	205*/270** m ³ /h (268*/353** yd ³ /h)
Practical output rate in compacted fresh concrete ²	105 m ³ /h (137 yd ³ /h)	120 m ³ /h (157 yd ³ /h)	135*/139** m ³ /h (176*/181** yd ³ /h)	150*/154** m ³ /h (196*/201** yd ³ /h)	165*/215** m ³ /h (216*/281** yd ³ /h)
Practical output rate in compacted fresh concrete ² with LiPerformance process optimisation***	115 m ³ /h (150 yd ³ /h)	132 m ³ /h (172 yd ³ /h)	148*/152** m ³ /h (193*/198** yd ³ /h)	165*/170** m ³ /h (215*/222** yd ³ /h)	165*/215** m ³ /h (216*/281** yd ³ /h)
Mixer size	2.5 m ³ (3.3 yd ³)	3.0 m ³ (4 yd ³)	3.5 m ³ (4.5 yd ³)	4.0 m ³ (5.2 yd ³)	4.5 m ³ (5.8 yd ³)
Ring-pan mixer	✓	-	-	-	-
Twin-shaft mixer	✓	✓	✓	✓	✓
Max. storage volume of aggregates in in-line silo ³	140 - 500 m ³ (183 - 654 yd ³)	140 - 500 m ³ (183 - 654 yd ³)	140 - 500 m ³ (183 - 654 yd ³)	140 - 500 m ³ (183 - 654 yd ³)	140 - 500 m ³ (183 - 654 yd ³)
Max. storage volume of aggregates in tower silo ⁴	400 - 600 m ³ (523 - 785 yd ³)	400 - 600 m ³ (523 - 785 yd ³)	400 - 600 m ³ (523 - 785 yd ³)	400 - 600 m ³ (523 - 785 yd ³)	400 - 600 m ³ (523 - 785 yd ³)
Max. number of cement silos	6	6	6	6	6
Vertical skip hoist	✓	✓	✓	✓	-
Charger belt	✓	✓	✓	✓	✓
Concrete foundations	✓	✓	✓	✓	✓
Steel foundations	✓	✓	✓	✓	✓
Litronic-MPS 3 control system	✓	✓	✓	✓	✓

¹ Mixing time 30 sec, compression ratio = 1.25

³ 4-6 chambers

* Truck mixer filling

*** 10-20 % higher output depending on plant configuration only possible with Liebherr Litronic-MPS 3 control system

² Mixing time 30 sec

⁴ 4-8 chambers

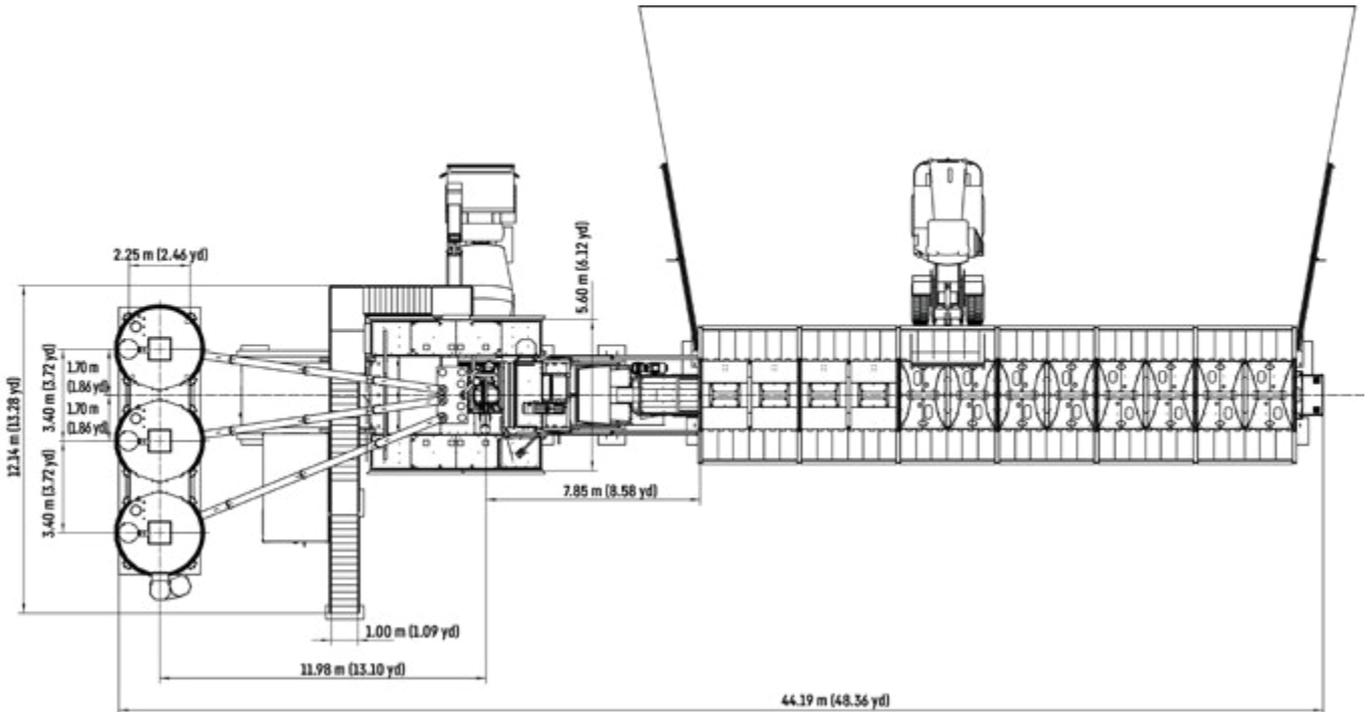
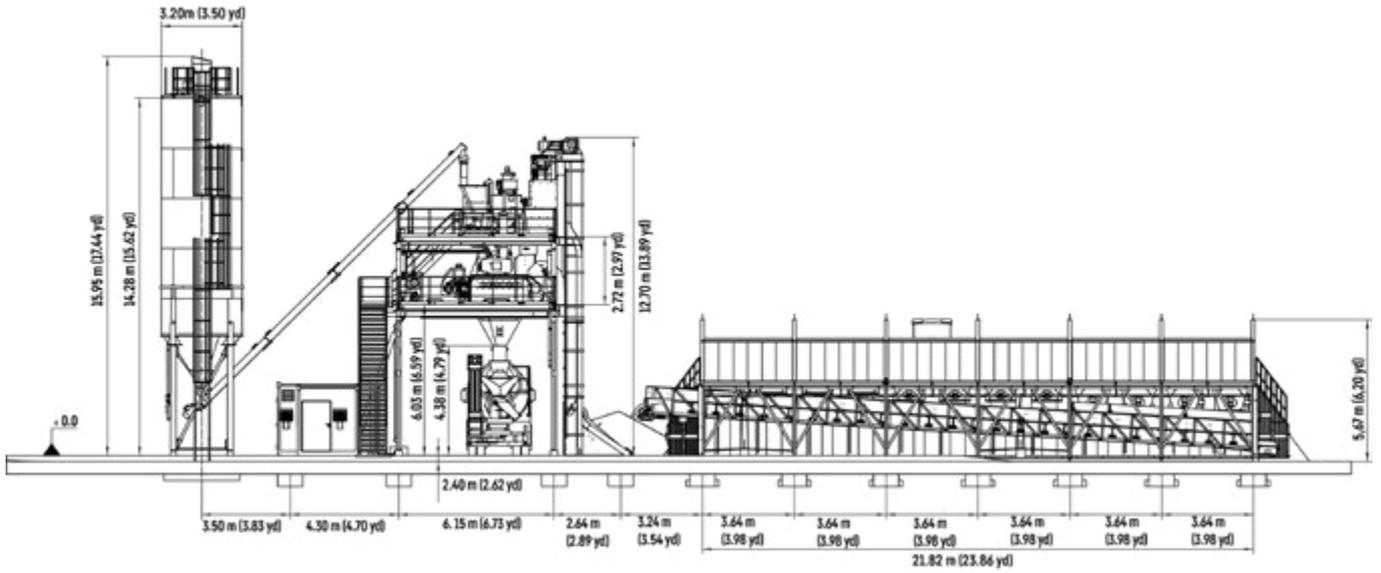
** Truck filling

Equipment

	Standard	Optional
LiPerformance process optimisation with Liebherr control system	✓	
Liebherr Litronic-MPS 3 control	✓	
Liebherr frequency converters for main drives	✓	
Microsilica scale, ice weigher		✓
LiClean mixer high-pressure cleaning system		✓
LiClean "creep speed" cleaning operation		✓
LiClean truck mixer feeding hopper cleaning		✓
Chain hoist with material hatches		✓
Steel fibre dosing		✓
Slewing hopper, drip protection for concrete discharge*		✓
Winter cladding		✓
Heating, cooling		✓

¹ More on request

* For truck loading or for collecting the cleaning water



Even more options and benefits

The equipment options

The new Betomix allows a wide range of equipment options. All versions focus on maximum safety and unbeatable ease of use.



Litronic-MPS 3 control

The Liebherr control system offers a user-friendly interface for data input and process control. When used in conjunction with the new LiPerformance process optimisation, it enables a 10-20 % higher output.



Steel fibre dosing

The arrangement of the optional steel fibre dosing on the weighing platform ensures reliable and convenient production of steel fibre concretes.



Winter cladding

The cladding can be fitted in a matter of hours. Large sandwich elements are bolted on and then cut to size for doors and windows. The ISO cladding is designed with a wall thickness of 60 mm.



Chain hoist and hatches

Optional chain hoist and hatches for lifting heavy loads of up to 2,000 kg (4,409 lb) on Euro pallets (e.g. steel fibres, spare parts, tools).



Checkweighing equipment

Comfortable and safe testing of the scale function thanks to pneumatically operated checkweighing equipment.



Additional connections

Extra pneumatic and water connections in all working areas (truck mixer area, mixer and weighing platform) for convenient working.



Heating

Heating the batching plant and in-line silo enables reliable concrete production in cold regions and during the winter months.



Ice weigher

In hot regions, the ice weigher enables the production of cooled concrete.



Drip protection

Our pneumatically operated drip guard prevents concrete from escaping in an uncontrolled manner and dripping onto the truck driver's cab or the floor.



Frequency converters

LiPerformance process optimisation enables gentle operation, efficient energy use and up to 20 % higher output.

LiClean cleaning solutions

Modern cleaning systems guarantee quick and convenient concrete production. Our LiClean cleaning solutions are an efficient and environmentally friendly way to keep the plant in top condition.



LiClean high pressure cleaning

Our LiClean mixer high-pressure cleaning system cleans with the 3D high pressure cleaning heads and 100 bar pressure in the fastest possible time with minimal water consumption. The hand lance can be used during automatic cleaning operation.



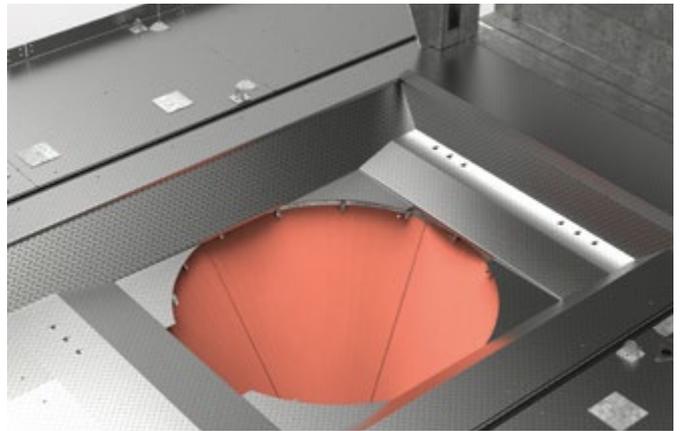
Creep speed

The “creep speed” cleaning mode makes it easy to clean the inside of the mixer. The mixer can be rotated by one rotation per minute using the two-hand local control when the mixer cover is open.



Feeding hopper cleaning

The LiClean cleaning system for the truck mixer feeding hopper saves the driver climbing up to the platform. The quantity of cleaning water is taken into account by the control unit in the formula.



Collecting hopper cleaning

A ring line equipped with cleaning nozzles ensures quick and easy cleaning of the collecting hopper.

We are here for you!

Personal. Capable. Reliable.



Concrete pumps



Mixing plants



Truck mixer



Conveyor belts



Measuring technology



Mixing systems



Concrete recycling system

Your powerful partner.

- Delivery and instruction by experienced service technicians
- Worldwide service network with over 90 service centres
- Technical support worldwide
- Fast availability of spare parts
- Professional maintenance and services

Get your
contact



Liebherr-Mischtechnik GmbH • Postfach 145 • D-88427 Bad Schussenried
+49 7583 949-0 • www.liebherr.com • E-mail: info.lmt@liebherr.com

Subject to changes.
Printed in Germany by Lacher LMT-8203 042 05_02.25_en