

MONOMIX & TWINMIX

Concrete Mixing Plants

Modular, containerized, high-performance mixing plants

BHS
SONTHOFEN

TRANSFORMING
MATERIALS
INTO VALUE



Headquarters of BHS-Sonthofen



TRANSFORMING MATERIALS INTO VALUE

BHS
SONTHOFEN



The company

BHS-Sonthofen, headquartered in Sonthofen, Germany, is an owner-operated group of companies in the field of machine and plant engineering. We offer technical solutions in the field of mechanical process engineering, with a focus on mixing, crushing, recycling and filtration. With over 300 employees and a number of subsidiaries, BHS-Sonthofen has a global presence.

Over 125 years of experience in mixing technology

BHS-Sonthofen invented the first twin-shaft batch mixer back in 1888 and has been systematically upgrading the design ever since. Today, BHS mixers are the benchmark in mixing technology. Thousands of BHS mixers are in operation throughout the world, providing reliable service day after day.

BHS plant technology with high value stability

BHS specializes in highly mobile concrete mixing plants with high capacities, ranging between 120 - 330 m³/h throughput of compacted concrete. BHS plants have proven their worth in a wide range of large-scale projects for many demanding civil and government regulated projects (highways, bridges, airports and dams). Their mobility enables BHS plants to retain their value over a long term, making them a sound alternative to conventional stationary plants.

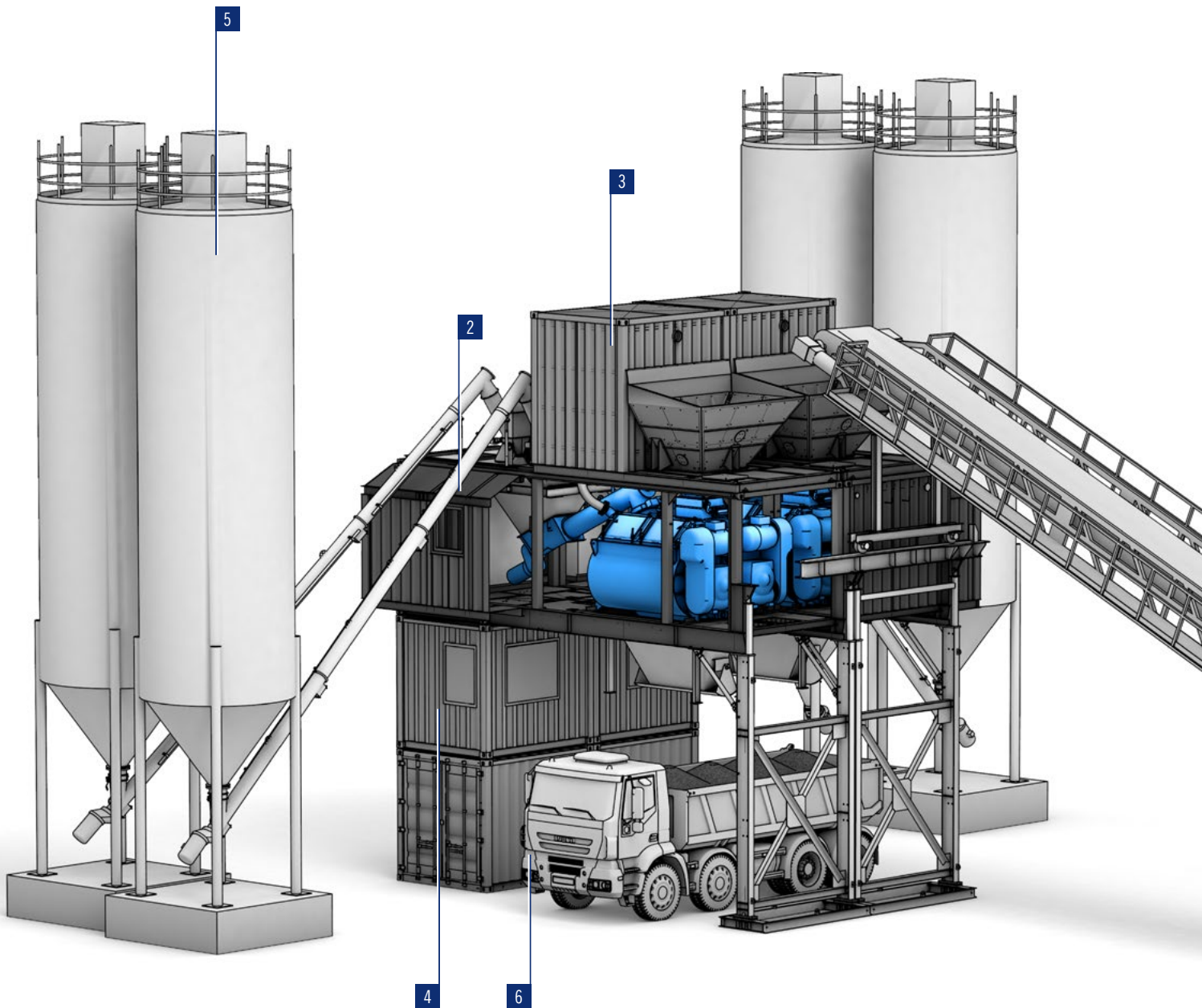
Worldwide service

BHS offers quick and reliable service worldwide with its technical customer support and stocks of spare parts on three continents for all machine types, including older mixers.

www.bhs-sonthofen.com

BHS mixing plants

The highly mobile BHS concrete mixing plants stand up to adverse ambient conditions, frequent changes of location and permanent operation at maximum load in the harshest of construction conditions. Both the MONOMIX variant with one mixer and the TWINMIX as a dual plant are thus an investment that offers value stability and high availability. At the heart of every plant is the BHS twin-shaft batch mixer that has proven its worth thousands of times over.



Inclined belt conveyor 1

- » Catwalk on both sides
- » Slewable in case of a twin-plant (TWINMIX)

Container with mixer platform 2

- » BHS twin-shaft batch mixer
- » Cement scales
- » Air compressor
- » Electric switch cabinet

Container with weighing platform 3

- » Aggregate holding hopper
- » Water scales with pump
- » Scales for chemical additives
- » Dust filter with pneumatic discharge

Control room container 4

- » PC-based hardware
- » Air conditioning and heating
- » Very good overview

Cement silos 5

- » Pneumatic filling
- » Dust filter
- » Screw conveyor for each silo
- » Portable foundation elements

Chemical storage container 6

- » Additive tanks
- » Additive pumps
- » Overflow protection
- » Water pump

Highly mobile – assembly or disassembly in a single day

The BHS concrete mixing plant consists of a number of containerized modules. The robust design ensures stability and mobility, even in the case of frequent changes of location. The plant is fully preinstalled and cabled in the factory. All interfaces are fitted with plug-in connectors. The plant is installed without the need for foundations. Assembly or disassembly is possible in a single day. The transport width of the containers is 3 m.

Uncompromising

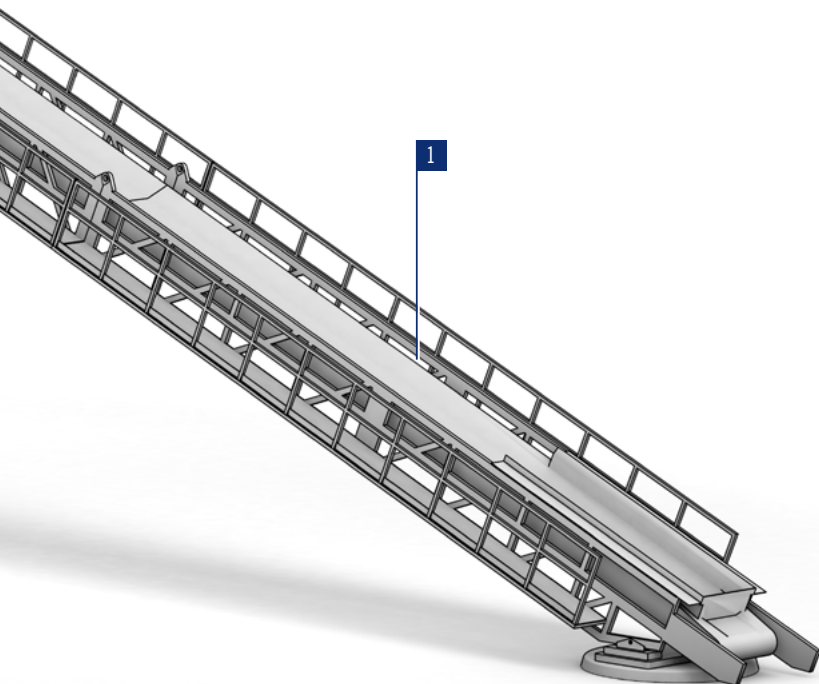
The requirement for mobility in relocatable concrete mixing plants is often met at the expense of ease of maintenance and accessibility in daily operation. However, the very purpose of the plant is the cost-effective and reliable production of concrete. The BHS container plant is thus designed for mobility without making compromises in other areas.

Stationary – cost-effective alternative

The containerized BHS concrete mixing plant can also be operated as a stationary plant. Compared with conventional plant solutions, it offers attractive savings in investment costs, resulting, for example, from the significantly shorter installation times and the fact that concrete foundations and ramps are not required. Furthermore, the mobile concept simplifies approval procedures. If, after a number of years, the selected location proves to be unsuitable, relocation can be carried out quickly.

Flexible

The containerized BHS concrete mixing plant allows the implementation of individual requirements. The storage and dosing of aggregates, cements and additives can be customized for individual customers.



Installation of a BHS concrete mixing plant ready for operation



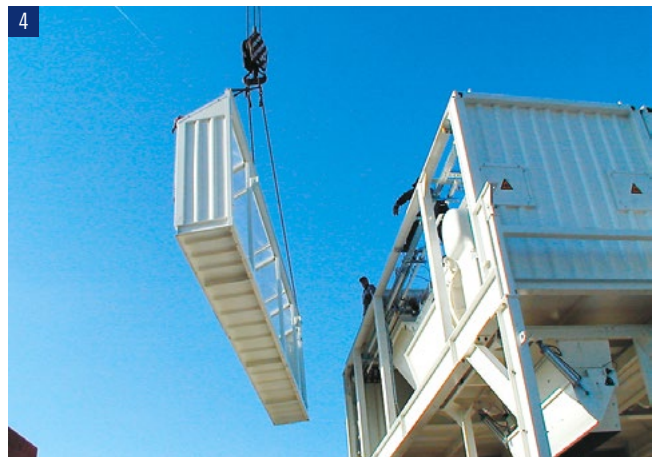
1 Installation of the chemical storage and control room containers on leveled ground



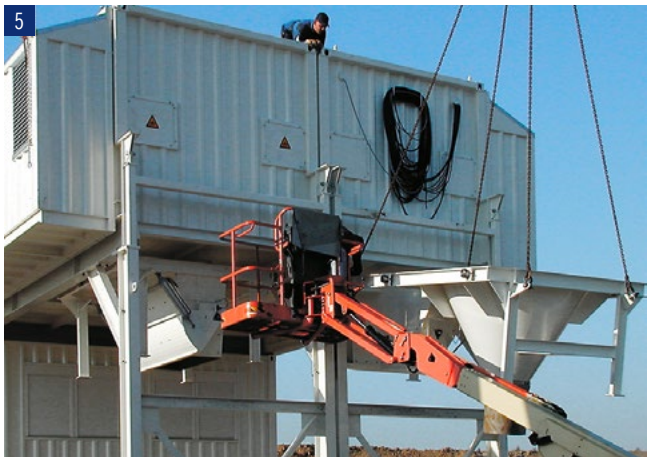
2 Installation of the support beam on the mixer module



3 Positioning the mixer module on the container base. Fastening with twist-lock elements



4 Attaching the catwalks



5 Sliding the discharge hopper into the guide rails



6 Installation of the weighing module



Installation of the cement silos and screw conveyors



Positioning the inclined belt conveyor



Assembly of the aggregate batcher (consisting of three transport units)



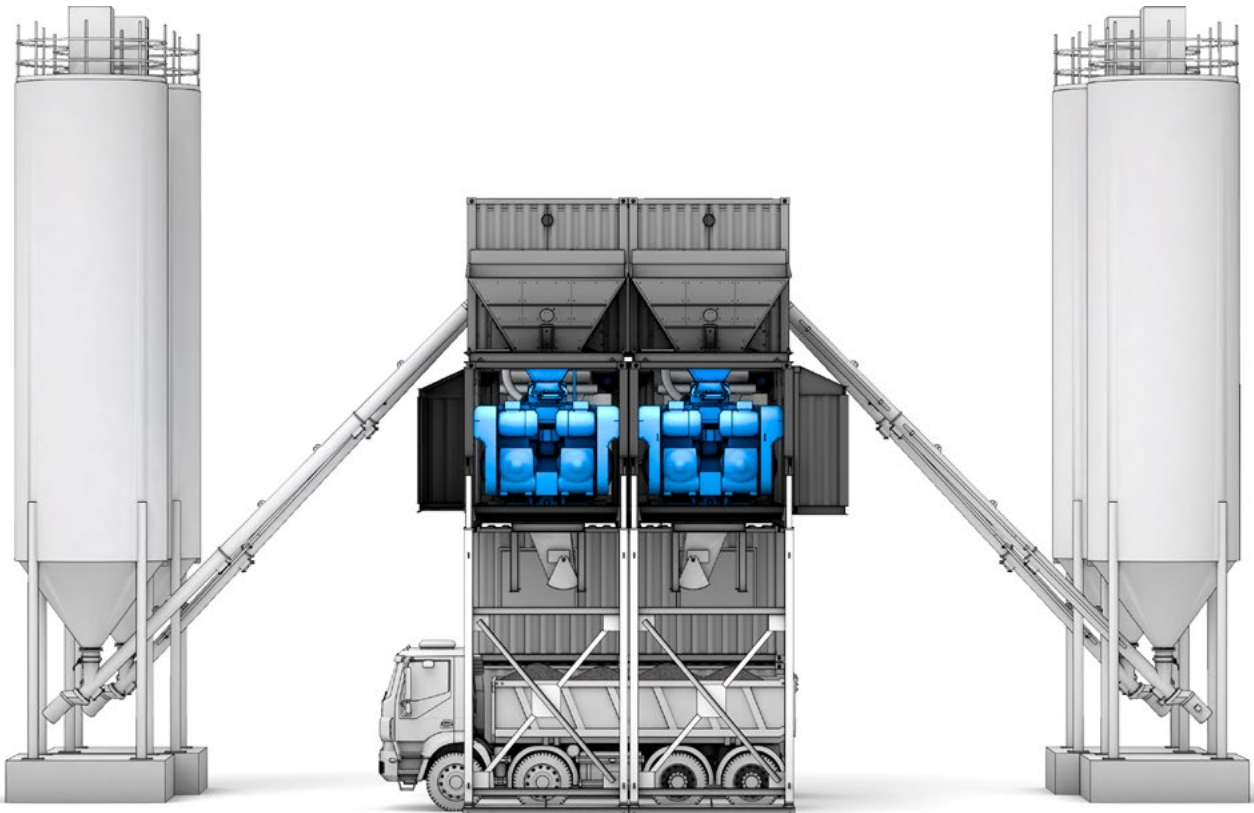
Completion of the internal connections and the electrical plug-in connections

BHS MIXING PLANTS IN TWO VARIANTS

BHS MONOMIX



BHS TWINMIX



Batcher

Depending on the application and the location, batchers with four, six or eight chambers are available, as are various special designs. The batchers can be installed parallel to the inclined belt or at an angle of ninety degrees.

Bunker cover

The individual chambers of the batcher can be designed with bunker covers that are actuated either hydraulically or by means of electric motors. These covers are of a warp-resistant design and can also be insulated.

Grating

Gratings are available to prevent extraneous materials from entering the batcher. They are pivot-mounted on the edge of the batcher.

BHS twin-shaft batch mixer

Various application-specific configuration options are available for the twin-shaft batch mixer. These are described in the "Twin-shaft batch mixer" brochure.

High-pressure cleaning

For efficient cleaning of the mixer, and optionally also the discharge batcher, the plant can be equipped with a high-pressure cleaning system.

Insulation

Particularly for winter operation, the individual modules can be supplied in an insulated version.

Heating

Furthermore, the mixing plant can additionally be equipped with hot air heating and a hot water system if required.

Addition of special formula ingredients

The plant allows the flexible addition of equipment for dosing special formula ingredients, such as flake ice, fibers, microsilica or superheated steam.

Twinmix 3.0

in operation in an airport construction project



Twinmix 3.0

in operation in a road construction project



Monomix 3.0

for producing ready-mixed concrete and precast concrete



Performance data and weights

Type	MONOMIX 3.00	TWINMIX 3.00	MONOMIX 4.00	TWINMIX 4.00	MONOMIX 4.50	TWINMIX 4.50
Mixer batch size	3 m ³	3 m ³	4 m ³	4 m ³	4.5 m ³	4.5 m ³
Mixers	1	2	1	2	1	2
Assembly time	1 day	1.5 days	1 day	2 days	1 day	2 days
Transport units	12	17	12	19	12	19
Max. transport width	3 m	3 m	3 m	3 m	3 m	3 m
Max. transport weight/unit ³⁾	22 t	22 t	26 t	26 t	27 t	27 t
Length ⁴⁾	46 m	46 m	54 m	54 m	54 m	54 m
Width	13 m	23.5 m	14.5 m	22.5 m	14.5 m	22.5 m
Production output ¹⁾ with truck mixer discharge (30 s) ²⁾						
Batches per hour per mixer	40 1/h	40 1/h	38 1/h	36 1/h	36 1/h	36 1/h
Compacted concrete output	120 m ³ /h	240 m ³ /h	152 m ³ /h	288 m ³ /h	162 m ³ /h	324 m ³ /h
Production output ¹⁾ with open truck discharge (30 s) ²⁾						
Batches per hour per mixer	51 1/h	40 1/h	48 1/h	38 1/h	47 1/h	36 1/h
Compacted concrete output	153 m ³ /h	240 m ³ /h	192 m ³ /h	304 m ³ /h	212 m ³ /h	324 m ³ /h
Production output ¹⁾ with open truck discharge (45 s) ²⁾						
Batches per hour per mixer	42 1/h	40 1/h	40 1/h	38 1/h	40 1/h	36 1/h
Compacted concrete output	126 m ³ /h	240 m ³ /h	160 m ³ /h	304 m ³ /h	180 m ³ /h	324 m ³ /h

¹⁾ Dependent on the cycle time, concrete quality and aggregate type

²⁾ Value in brackets = mixing time

³⁾ Value corresponds to the max. transport weight/unit without batcher

⁴⁾ The length of the plant depends on the batcher variant. The values specified here refer to the 6-chamber, 2-aggregate batcher

Performance data for other materials available on request.

All specifications apply to the standard design.

Technical data for customized designs may differ from the specified data.


All technical data may change due to development.

Subject to modification without notice.

BHS FIELDS OF COMPETENCE



MIXING
TECHNOLOGY



CRUSHING
TECHNOLOGY



RECYCLING
TECHNOLOGY



FILTRATION
TECHNOLOGY

