

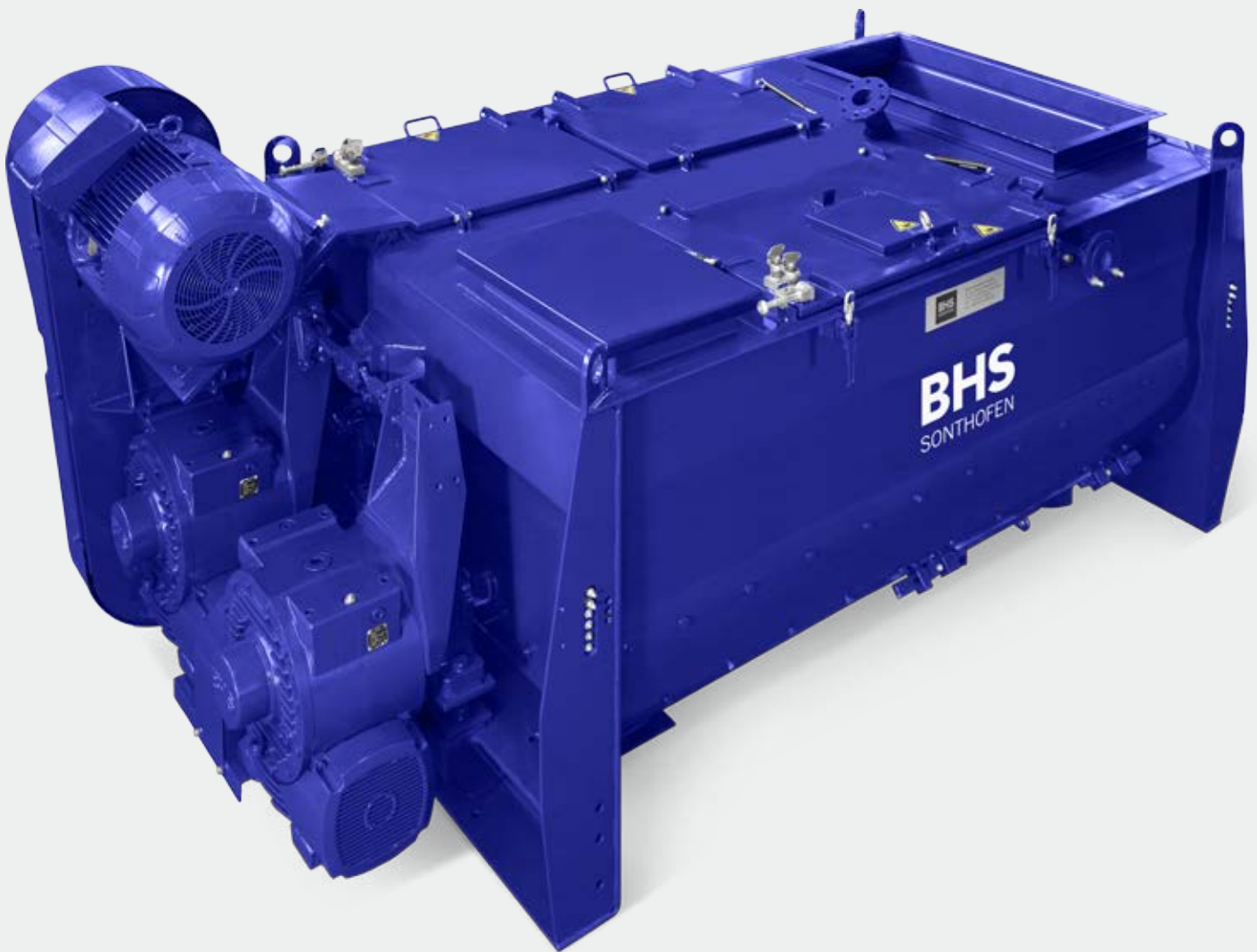
BHS
SONTHOFEN

LFK

Twin-Shaft Continuous Mixer

Intense mixing of dry and moist minerals

TRANSFORMING
MATERIALS
INTO VALUE



Headquarters of BHS-Sonthofen



TRANSFORMING MATERIALS INTO VALUE

BHS
SONTHOFEN



The company

BHS-Sonthofen, headquartered in Sonthofen, 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 has a broad product range of batch and continuous mixing systems for numerous applications.

Mixing tests in the BHS technical center

BHS offers customers the opportunity to run mixing tests with their own specific materials at the BHS technical center in Sonthofen. Furthermore, laboratory mixers can also be operated directly at the customer's location to develop solutions to challenging problems.

Worldwide service

BHS ensures quick and reliable service worldwide with its technical customer support and a large stock of spare parts for all standard machine types and also for older machines.

www.bhs-sonthofen.com

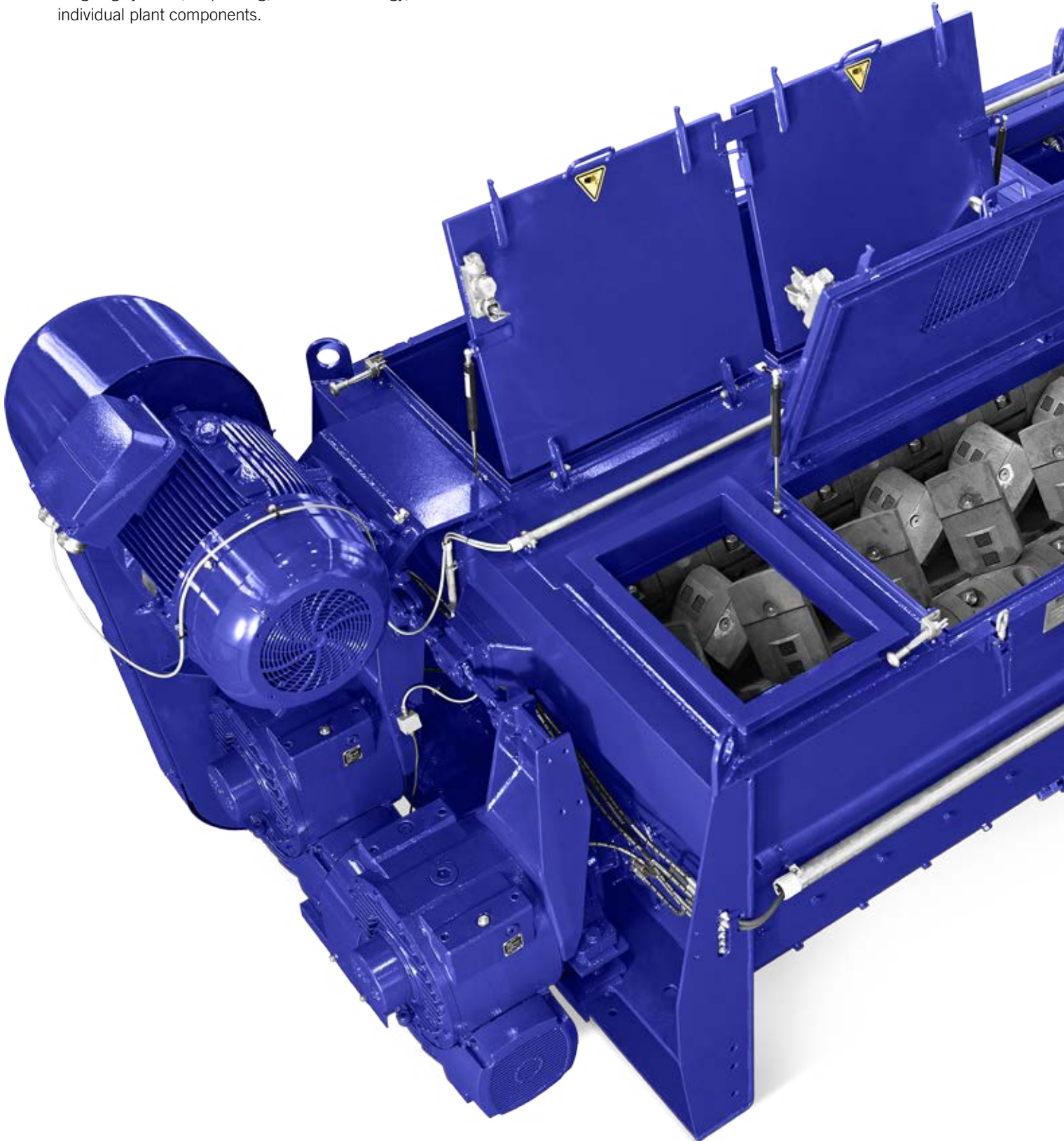
TWIN-SHAFT CONTINUOUS MIXER

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BHS twin-shaft continuous mixer

The BHS twin-shaft continuous mixer is a powerful, reliable solution for continuous mixing processes, particularly those with coarse aggregates. This mixer is especially suitable for producing mineral mixtures, RCC, landfill liners, lean concrete, heavy concrete and dry mixtures, etc.

BHS also offers complete continuous mixing systems, including weighing systems, dispensing, control technology, service and individual plant components.



Consistent high quality mixtures

The counter-rotation of the two mixing shafts as well as the inclined position of the mixing tools result in an intense vertical and horizontal mixing motion. A mixture that is formula-compliant and of a consistently high quality is ensured in conjunction with BHS weighing and dispensing equipment.

Material bed protects against wear

A natural bed of materials that is formed in the mixing trough during operation serves as protection against wear. For special applications, it is possible to design the mixer with a round trough and with tiles made of a special cast chromium steel.

Proven drive technology

The drives installed by BHS ensure high operational reliability, energy efficiency and long service life. The worm gearing is specially designed for the BHS twin-shaft continuous mixer and is highly efficient. The drive power is transmitted reliably by a V-belt drive. A torque support enables the drive to be freely suspended, thereby preventing shock loads within the transmission.

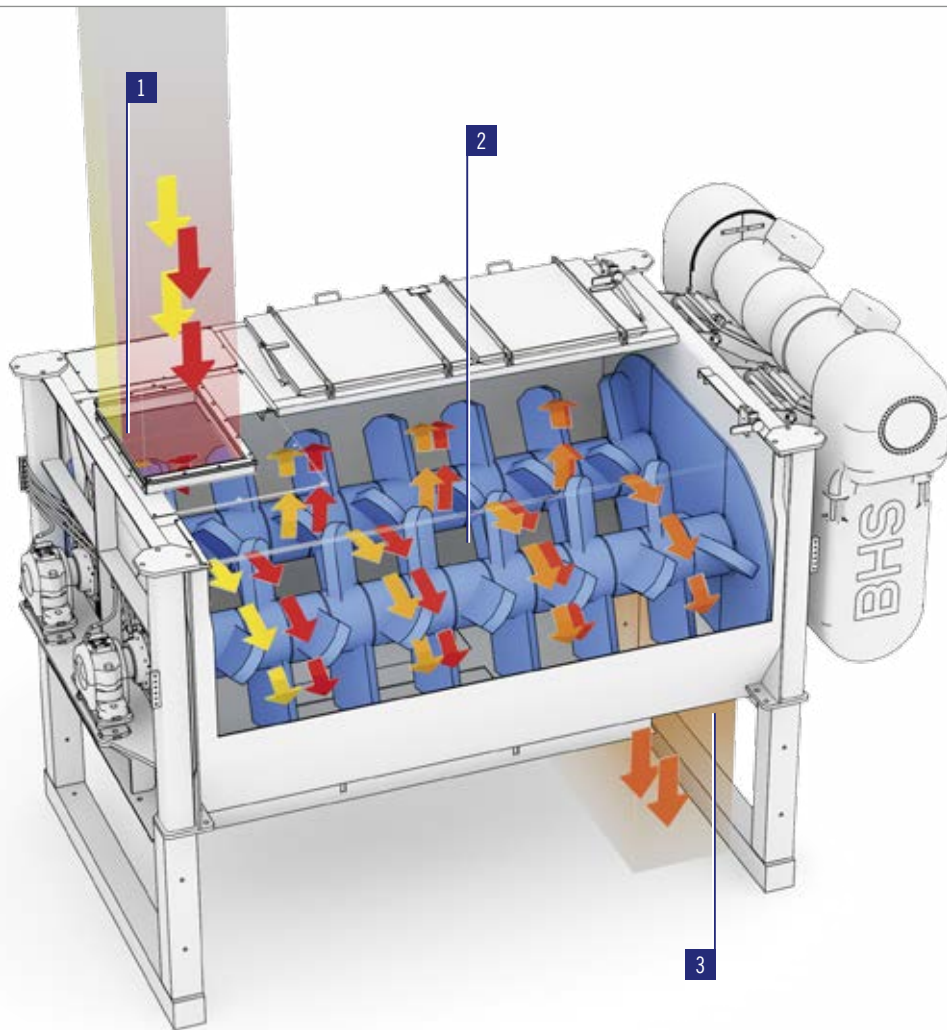
Maintenance-friendly and robust design

BHS mixers are characterized by a sturdy and durable design, providing safe and easy access for maintenance work. BHS twin-shaft continuous mixers have large maintenance doors at the top and at the bottom.

Investment security and operational reliability

Even in the most adverse conditions, the robust, durable design ensures maximum operational reliability and thus long-term investment security.





Feed area 1

The input material is fed continuously to the mixing tools, which convey it through the mixer. The water is introduced through special nozzles.

Mixing section 2

The counter-rotation of the two mixing shafts and the inclined position of the mixing tools ensure an intense vertical and horizontal mixing motion as well as continuous transport of the mixture materials.

Discharge area 3

The finished mix leaves the mixer in a constant flow and can be fed to the downstream processing operations.

Areas of use	Applications
Lean concrete / RCC	Road construction, hydro dam concrete, blinding concrete
Mineral mixtures	Road construction, path construction, ground stabilization
Fine-particle and dry mixtures	Dry mortar, cement blendings, fly ash, foundry sand
Environment and waste disposal	Landfill sealing, backfill, pumpable mixtures, mine filling
Heavy concrete	Tube coating
Soils	Gardening soil, soil improvers

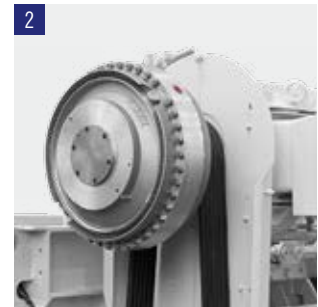
Comb-type blades 1

For the mixing of binding, fine-grained materials, special comb-type blades are available to remove material caked onto the mixing trough.



Turbo coupling 2

The hydrodynamic turbo coupling prevents both mechanical and electrical load peaks. It is recommended particularly in the case of unstable electricity supply conditions.



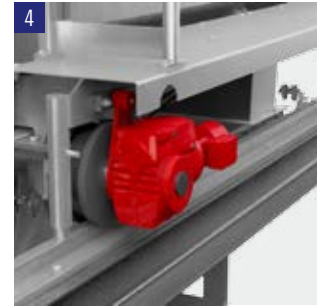
Central lubrication 3

A central lubrication system continuously supplies the inner mixing trough seals with grease during mixer operation. Depending on the desired degree of automation, there are different designs available.



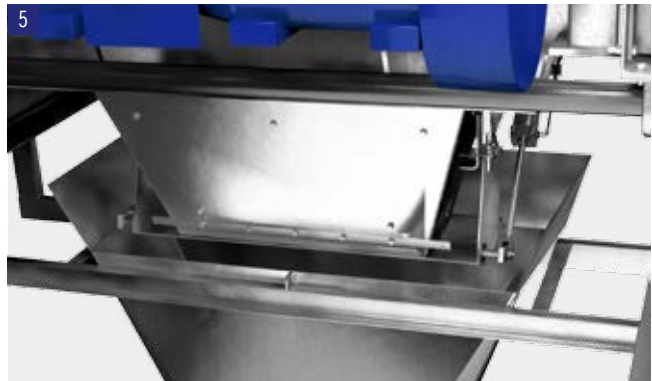
Mixer on a chassis 4

For loading stations in aggregates plants, the mixer can be installed on a chassis to allow a switch between mono and mixed aggregates.



Discharge hopper with segmented gate 5

For loading onto open trucks, a discharge hopper equipped with a segmented gate and integrated drip guard is available. For loading onto truck mixers, a discharge hopper with an additional swivel-mounted hopper is recommended.



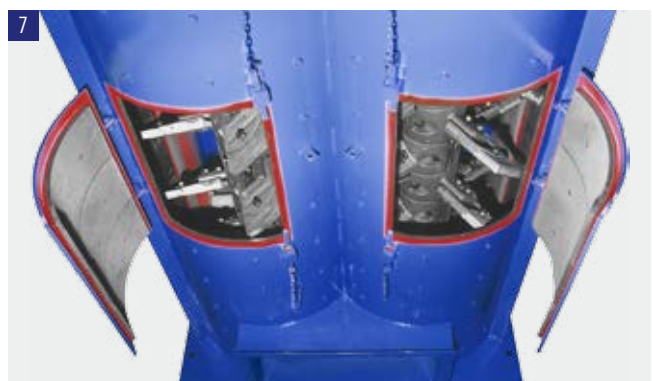
Hopper for loading mono aggregates 6

The hopper mounted on the mixer enables direct loading of aggregates onto open trucks or truck mixers without using the mixer.



Mixer design with round mixing trough 7

The BHS twin-shaft continuous mixer with round mixing trough is recommended to meet the requirements for low-residue discharge. The trough is lined with tiles made of a special cast chromium steel.

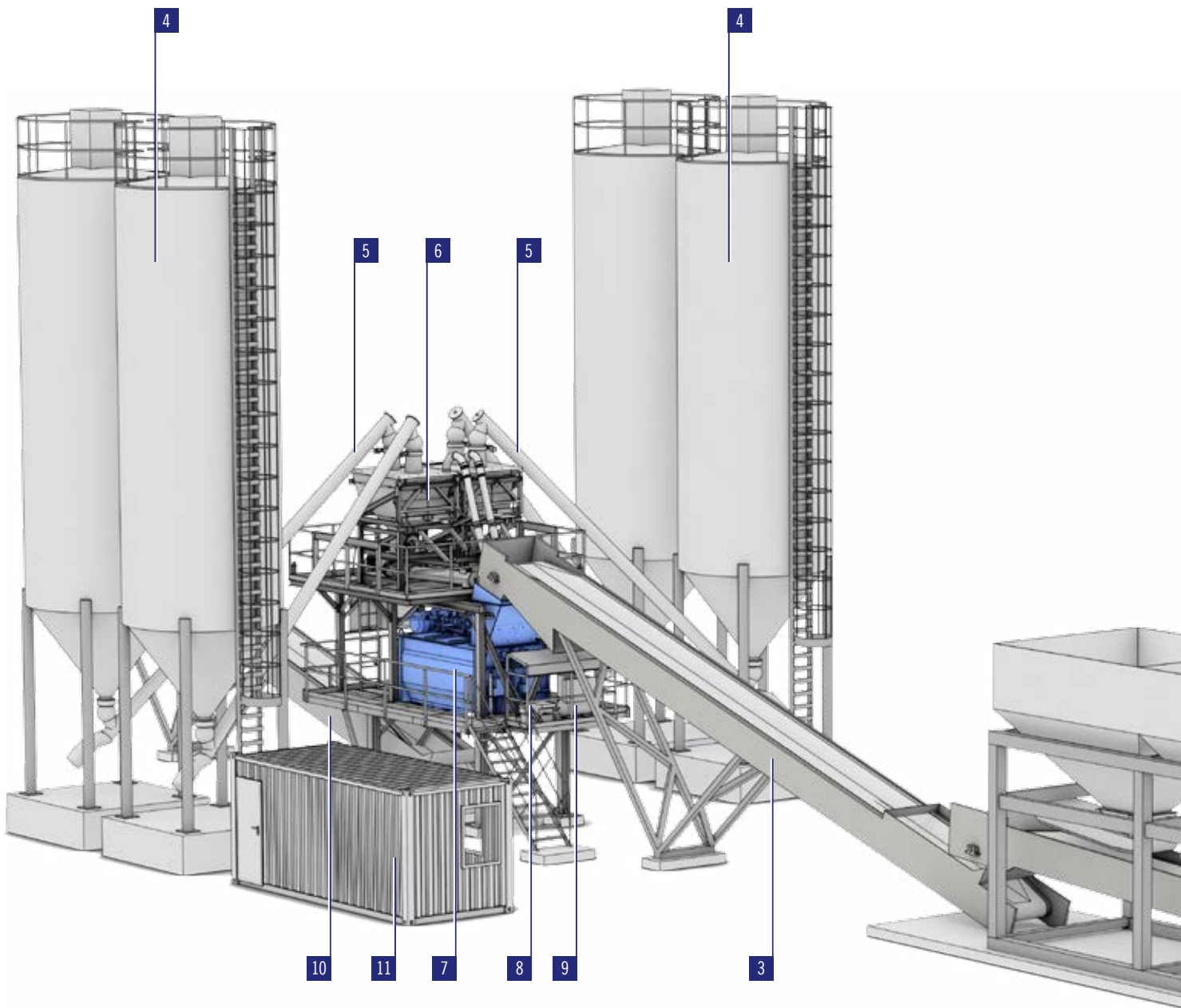


Air sealing

For mixing dry materials that must not be contaminated with lubricants, special air sealing is available.

Continuous mixing plants

Based on the twin-shaft continuous mixer BHS offers complete continuous mixing plants of different sizes. The mixing and weighing platforms are designed so they can be transported in ISO containers to their final destination at low freight cost. The metering system and the control technology enable extremely accurate continuous weighing of the formula ingredients. Continuous mixing plants are suitable for construction sites where large quantities of consistent high quality building materials (such as RCC) are required.



Example: Continuous RCC mixing plant in modular design

Storage of the aggregates **1**

The aggregates are stored in a multichamber dosing system.

Controlled feed belt weighers **2**

The aggregates are weighed in a continuous and formula-compliant manner on speed-controlled feeder belts with integrated belt weighers.

Collecting conveyor and elevating conveyor **3**

The aggregates are deposited onto the collecting conveyor in layers and transported on the elevating conveyor to the twin-shaft continuous mixer.

Storage of the binding agents **4**

Binding agents are stored in silos with continuous level measurement, air loosening and a control unit to monitor the filling process.

Transport of the binding agents **5**

The binding agents are transported to the weighing and dosing station by tubular screw conveyors. The screw conveyors are equipped with overrun butterfly valves.

Weighing platform with dosing station for binding agents **6**

The self-calibrating dual weighing system makes it possible to achieve extremely high dosing accuracy. It consists of a hopper scale with speed-controlled rotary valve as the discharge mechanism and a screw scale feeder providing continuous measurements.

Mixer platform **7**

The different materials are mixed intensively in the BHS twin-shaft continuous mixer, which is housed on a large mixer platform.

Aggregate and water dosing **8**

The dosing of aggregates is carried out via speed-controlled gear pumps. The water is dosed via a regulating valve. The quantities are measured by an inductive flowmeter.

Compressed air generation **9**

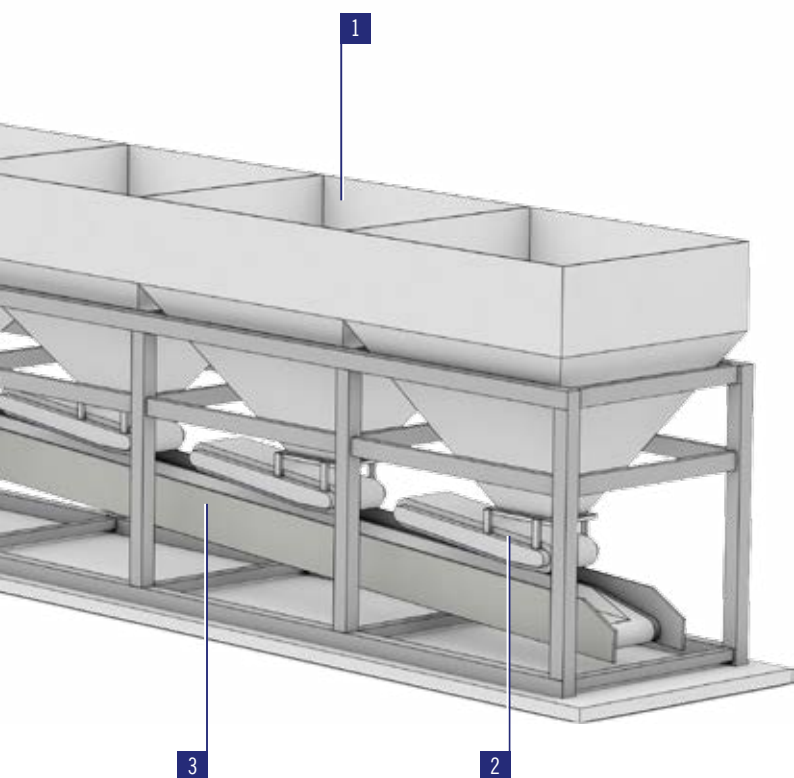
A compressor station supplies the entire mixing plant with compressed air.

Discharge belt **10**

A discharge belt transports the mixture directly to the construction site or for loading onto a truck.

Control container **11**

The control station and power control unit are installed in a climate controlled 20-foot container.



Tests give certainty

BHS offers customers the opportunity to run mixing tests with their own specific materials at its technical center in Sonthofen. Furthermore, laboratory mixers can be operated directly at the customer's plant. All test results are recorded, documented and analyzed according to mutually agreed criteria. We would be pleased to advise and assist you.

BHS technical center in Sonthofen for customer-specific testing



Performance data

Type	Mixing circle diameter	Mixing section	Material throughput rate ¹⁾			Feed size (max.)	Drive power
			Lean concrete / RCC	Mineral mixtures	Fine-particle mixtures (dry) ²⁾		
LFK 0626	630 mm	2,600 mm	100 - 220 t/h	100 - 230 t/h	50 - 130 t/h	45	22 kW
LFK 0726	750 mm	2,600 mm	150 - 325 t/h	150 - 350 t/h	70 - 220 t/h	64	37 kW
LFK 0926	900 mm	2,600 mm	200 - 550 t/h	200 - 700 t/h	110 - 330 t/h	64	55 kW
LFK 1130	1,100 mm	3,000 mm	350 - 850 t/h	350 - 1200 t/h	190 - 550 t/h	80	2 x 37 kW

Dimensions and weights

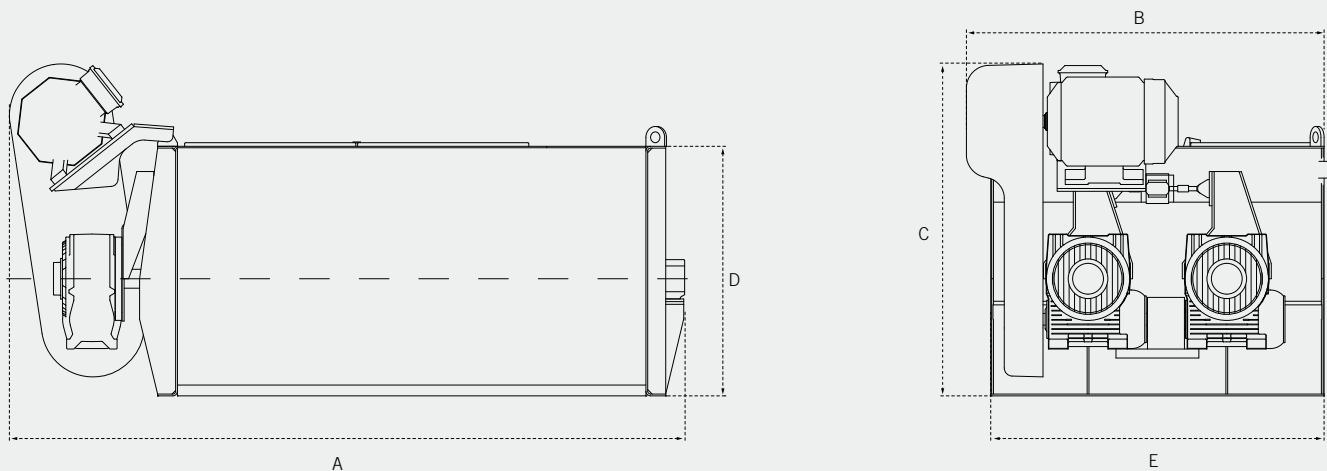
Type	A	B	C	D	E	Weight ³⁾
LFK 0626	3,530 mm	1,250 mm	1,330 mm	1,200 mm	1,330 mm	3,100 kg
LFK 0726	3,650 mm	1,440 mm	1,480 mm	1,200 mm	1,500 mm	5,100 kg
LFK 0926	3,950 mm	2,000 mm	1,860 mm	1,385 mm	1,850 mm	6,100 kg
LFK 1130	4,250 mm	2,370 mm	2,050 mm	1,600 mm	2,260 mm	9,900 kg

¹⁾ Throughput rates for other mixture materials available on request

²⁾ Material density 1 t/m³

³⁾ Weight for standard design without accessories

All specifications apply to the standard design.
 Technical data for customized designs may differ from the specified data.
 All technical data subject to development. Subject to modification without notice.



BHS FIELDS OF COMPETENCE



MIXING
TECHNOLOGY



CRUSHING
TECHNOLOGY



RECYCLING
TECHNOLOGY



FILTRATION
TECHNOLOGY

