KAHL Continuous Mixer

For continuous mixing of bulk products and liquids

Our horizontal continuous mixers are high-speed agitator-blade mixers in robust design, in which mealy, granular, fibrous or flaky carrier substances are mixed with liquids free of lumps according to the whirling principle.

Several bulk product flows, liquids, and steam can be added simultaneously.

The throughput time and the type of whirl formation can be influenced by the adjustment of the agitator blades. Thus the mixing effect can be adapted to the product.

Design

The case consists of a well-dimensioned welded construction and is provided with a large inspection and assembly flap. In order to avoid agglutinations, the mixing chamber lining can consist of synthetic material or stainless steel - depending on requirement. The inner jacket can be replaced through the assembly flap.

Liquid addition is effected via injection devices, the design of the which depends on the type of liquids.

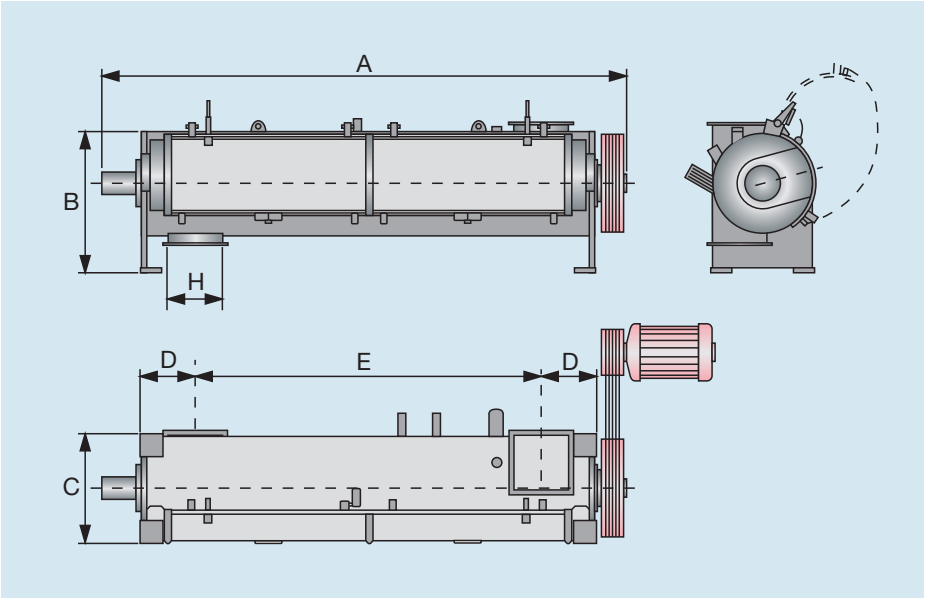
A strong shaft is equipped with the adjustable and easily exchangeable mixing tools made of wear-resistant special cast iron. The shaft runs in anti-friction bearings arranged outside the mixing chamber. The mixer shaft is balanced dynamically with balancing disks arranged in separate chambers. The exceptional silence in operation results from this design. Subsequent balancing can be effected locally at any time. Between the mixing and the balancing chambers the shaft is provided with special seals.

Application

- For continuous mixing of compound feed with liquids and steam.
- For mixing dried beet pulp with molasses – if necessary with synthetic lining.
- Generally for moistening granular/ powdery products.
- In general: for (all) mixing tasks where liquids must be added to solid matters.

KAHL Continuous Mixer

Technical data



Continuous mixer size	I	II	III	V
Motor power kW*	7.5 - 15	15 - 30	30 - 45	55 - 110
Total length A mm	2212	2563	2964	3502
Width C mm	415	500	590	790
Total height B mm	650	740	840	1050
Distance D mm	275	275	300	325
Distance inlet/outlet E mm	1250	1600	1950	2400
Clear width inlet/outlet H mm [(H^2) = H x H]	250^2	250^2	300^2	350^2
Weight kg	425	640	780	1360

*The motor power depends on the material and the viscosity of the liquids.

AMANDUS KAHL GmbH & Co. KG
Dieselstrasse 5-9
D-21465 Reinbek / Hamburg
Phone: +49 (0)40 727 71 - 0
Fax: +49 (0)40 727 71 - 100
info@amandus-kahl-group.de
www.akahl.de

AK-43-E 10/12

KAHL Batch Mixers

Single-Shaft Mixer BWM, Twin-Shaft Mixer MAH

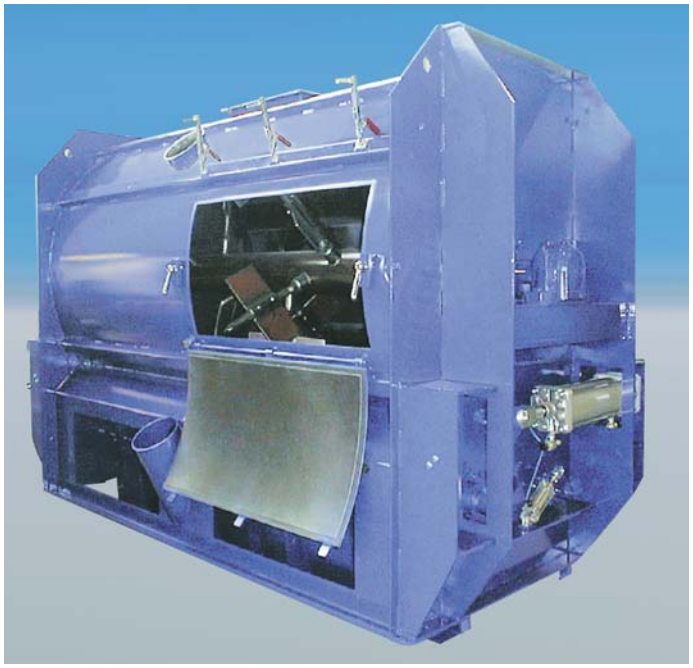
Field of application

- Mixers of the construction series MAH and BWM are discontinuous mixers.
- They are used as individual machines or as batch mixers within a plant.
- Liquid addition is possible to a certain limit.

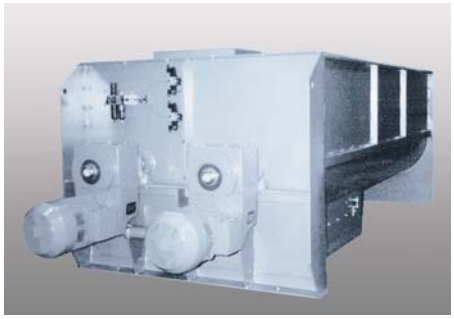
Possible applications

- Homogenizing of different raw materials
- Storage of non-free-flowing products (prebin)

The batch mixers of the construction series MAH and BWM can mix several solid matters (individual components) to a homogeneous mixture.



Single-shaft mixer BWM



Twin-shaft mixer MAH

Design criteria

The contents of the batch mixer is indicated in litres of useful contents,
e.g. 1,000 l contents in kg
= useful contents x bulk density
e.g. 1,000 l x 0.5 t/m³
= 500 kg

Filling degree

- Minimum 20 %
- Maximum 110 %
- The useful contents of a mixer is abt. 70 - 80 % of the gross contents.

Bulk density of the individual components:

Compound feed:	0.35 - 0.7 t/m³
Minerals:	0.6 - 0.9 t/m³
Individual components:	0.1 - 0.9 t/m³
Particle size of the components:	100 µm - 4 mm ground

KAHL Batch Mixers

	Single-shaft mixer BWM		Twin-shaft mixer MAH
Construction sizes:	BWM 100, 200, 500, 1000, 2000, 3000, 4000, 6000, 8000	Construction sizes:	MAH 500, 1000, 2000, 3000, 4000, 5000, 6000, 8000
Mixing tools:	adjustable mixing paddles arranged on a shaft	Mixing tools:	2 mixing spirals made of flat steel thread
Case:	mixing drum	Case:	U-shaped trough adapted to the mixing spirals which lie side by side
Material:	St 37-2, product-contacting parts in 1.4301 design possible	Material:	product-contacting parts made of St 37-2, stainless steel 1.4301 possible
Bearings:	exterior pillow blocks	Cover:	screwed cover with braces
Outlet:	electropneumatically operated bottom flap over the complete mixer length	Bearings:	2 exterior pillow blocks per mixing shaft
Drive:	slip-on geared motor	Drive:	1 slip-on geared motor per mixing shaft
	Connections		Connections
Inlet:	150 - 600 mm round	Inlet:	selectable according to requirement
		Outlet:	2 openings closed by electropneumatically actuated flat slides
Ventilation:	ventilation socket depending on mixer size 100 - 400 mm	Ventilation:	ventilation socket depending on mixer size 200 - 400 mm Ø
Inspection openings:	in the mixing drum and in the outlet case, protected by limit switches	Inspection opening:	in the cover, abt. 400 x 500 mm, protected by limit switch
Compressed air:	installed ready for connection, incl. maintenance unit	Compressed air:	installed ready for connection, incl. maintenance unit
Options:	crusher, liquid nozzles	Options:	liquid nozzles

AMANDUS KAHL GmbH & Co. KG
Dieselstrasse 5-9
D-21465 Reinbek / Hamburg
Phone: +49 (0)40 727 71 - 0
Fax: +49 (0)40 727 71 - 100
info@akahl.de
www.akahl.de

AK-30-E 05/14