



Core Sand Mixer

STATORMIX Facts

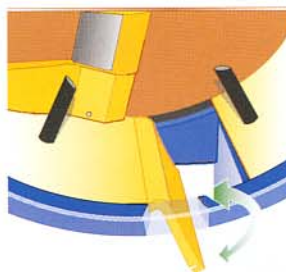
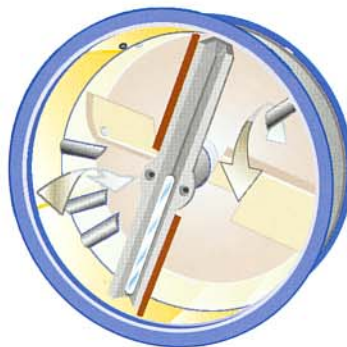
The core sand mixer STATORMIX, with its vertical mixing drum, employs a proven and efficient mixing technique that ensures high quality, thorough mixing of the sand. This high mixing efficiency is achieved by forcing the sand through two mixing chambers separated by a 'stator'.

The special technology used in the manufacture of the mixer interior results in highly abrasion-resistant mixer lining and mixing tools with exceptionally long life expectancy even in three-shift operation. The lining segments as well as the mixing tools can be replaced individually.

The hinged mixer front cover can be opened and moved to the side making the complete mixing drum freely accessible.

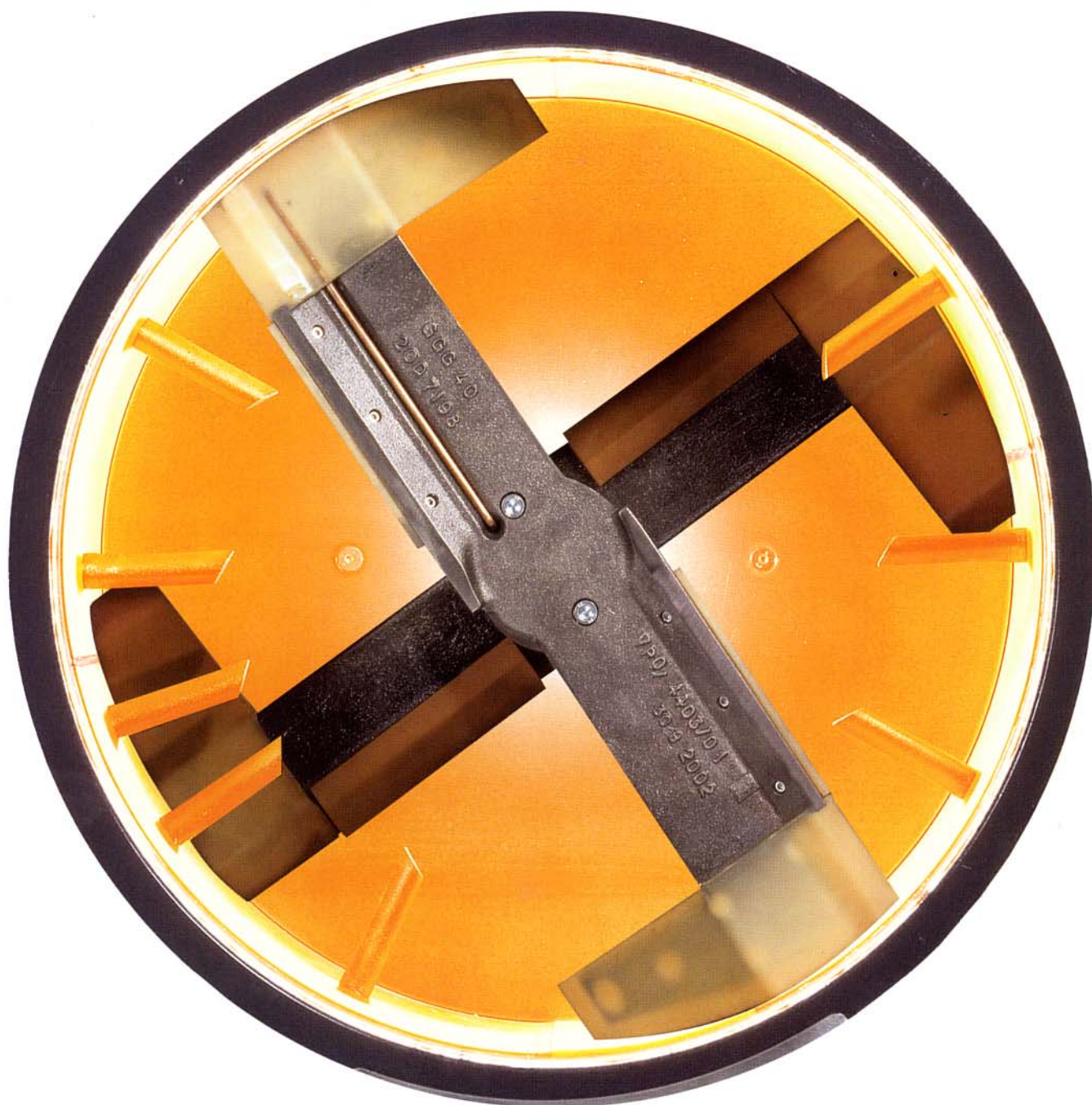
The mixing tools can be removed after releasing a bolt. Once removed, they can easily be cleaned outside of the mixer such as in a blasting chamber.

After the mixing cycle is finished, the sand is completely discharged from the mixer. Almost no sand remains in the mixing drum. Different batches of sand can thus be treated in sequence without mixing up the different kinds.



The mixer is equipped with an integral self cleaning mechanism:

- Thanks to the shape of the mixing tool each spot in the mixing drum is reached and thus kept clean.
- Two integral air nozzle systems remove sand residues from the interior surfaces of the mixing drum and the rotating mixing tools.
- After each mixing cycle, eventual adherences can be removed from the mixing drum and the mixing tools by cycling dry sand.



The STATORMIX

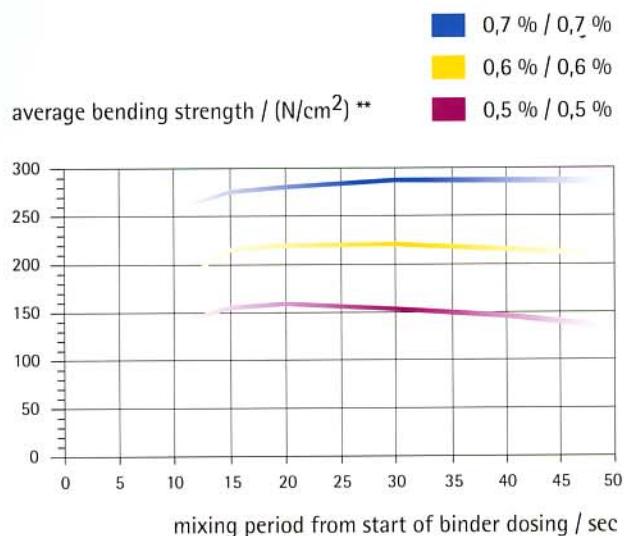
- high mixing intensity
- mixing rate matched to the core demand
- partial batches can be processed without loss in quality
- minimum adherence of residues to the mixer interior
- triple stage cleaning concept
- freely accessible mixer interior
- lowest wear
- only negligible sand residues in the mixer after discharge
- low energy consumption
- no heating up of the sand
- no loss of solvents

STATORMIX Type	22	53	123
Batch size	15 l	34 l	80 l
Batch weight	appr. 22 kg	appr. 50 kg	appr. 120 kg
Mixing rate max. *	appr. 2,2 t/h	appr. 5 t/h	appr. 9 t/h
Drive	4 kw	5,5 kw	5/10 kw

* related to silica sand F32 cold box binder

The STATORMIX method of operation guarantees optimal mixing results in short mixing cycles. Reduced binder consumption provides another advantage. As a consequence, degasification is optimised, core shooting and de-coring are facilitated.

Bending strength versus the period of mixing *

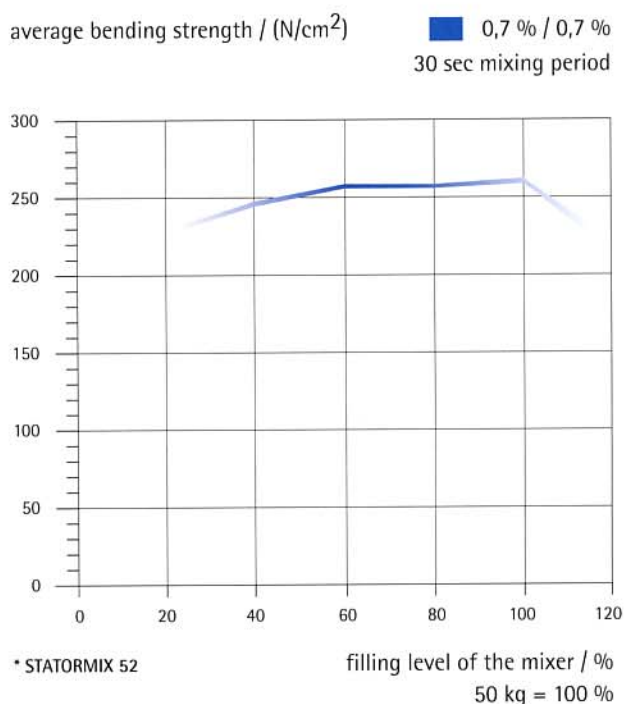


* STATORMIX 22

** measured instantaneous strength with a cold box binder (example)

The homogeneity of the mixture is generally independent of the mixer filling level. The batch size can easily be adjusted to the immediate demand of the core production to ensure that an appropriate amount of prepared core sand is continuously available.

Bending strength versus batch size *



* STATORMIX 52



STATORMIX 122 with dosing equipment and distribution vehicle



STATORMIX 22 with distribution vehicle



2 STATORMIX 53 with sand and additive balance



STATORMIX 123 with sand and additive balance



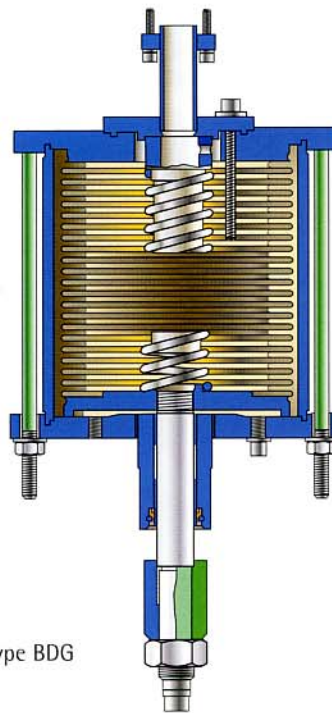
Dosing equipment for cold box binder



STATORMIX 22 compact plant

Outstanding features and advantages of KLEIN binder dosing equipment type BDG

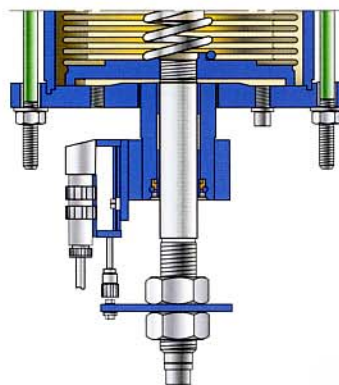
KLEIN bellow dosing equipment was particularly developed for use with chemical binders for foundry sands. The design is simple and robust.



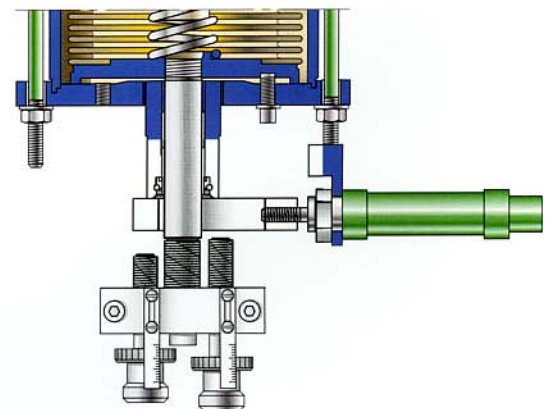
Binder dosing equipment type BDG

Principle components:

- stainless steel bellows
- welded flange connections on both ends
- interior discharge and suction openings
- operated by normal compressed air
- suction spring-actuated



infinite adjustment of dosed quantity



selection of two binder quantities

Features:

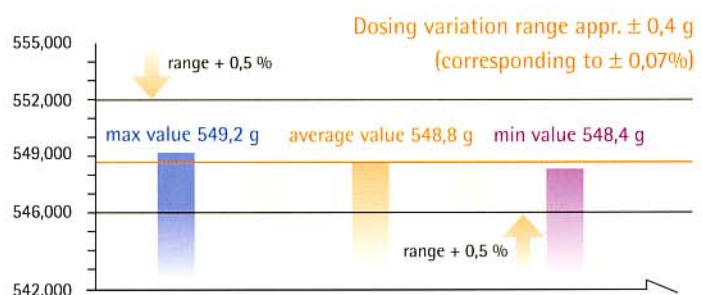
- volumetric dosing independent of binder viscosity
- The seals do not come into contact with any binder.
- guaranteed repetitive accuracy $\pm 0,5 \%$
- The bellow dosing equipment is absolutely maintenance-free.
- The desired dosing volume is easily adjustable by:
 - a) manually infinitely adjustable set screw
 - b) selection of two binder quantities using selector switches
 - c) infinite adjustment of dosed quantity

Binder dosing equipment: dosing accuracy (example)

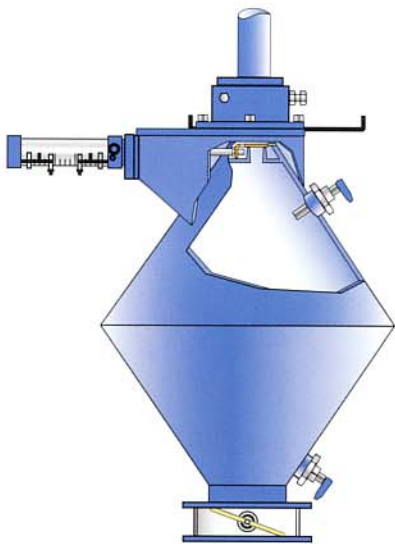
Distribution of the dosed amount of binder (max range)

Guaranteed dosing deviation

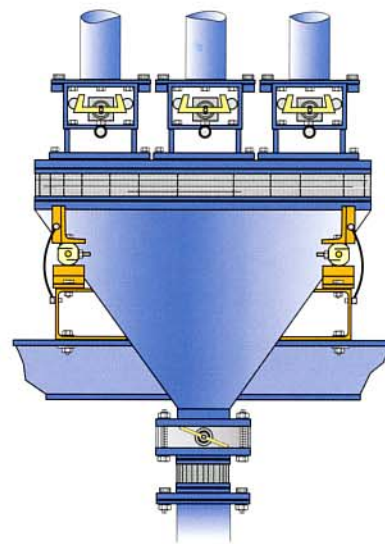
Metered amount / g



maximum variations of 19 measured values



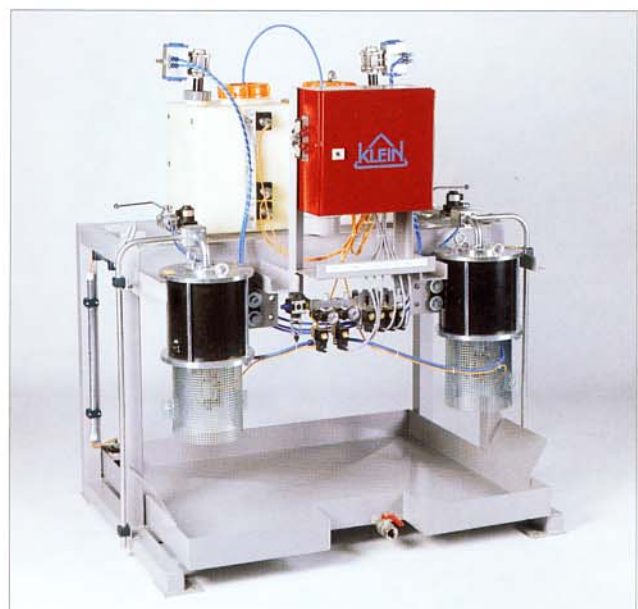
Sand dosing type SDG, volumetric



Sand dosing balance



STATORMIX 53



Binder dosing equipment with day tanks



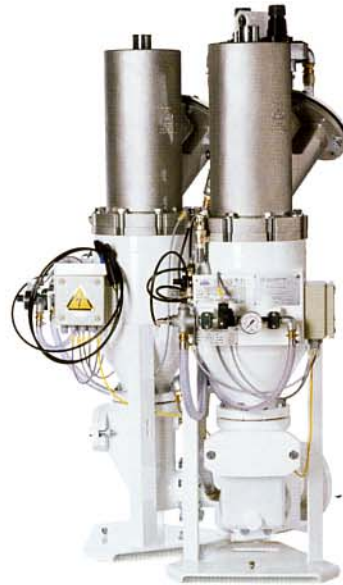
STATORMIX mixing plant with:
STATORMIX 22, sand dosing equipment
and binder dosing equipment

Our range of products:

Pneumatic conveying technology:

Pneumatic conveying systems with pressure vessel conveyor for dry, free-flowing, abrasive and abrasion-sensitive materials.

- Thrust conveying for granular materials such as silica sand
- S-type conveying for dust-texture materials such as bentonite, coal dust and additives
- PLI-process for low-wear transportation of abrasive materials with a wide granular spectrum



Reclamation technology:

- Reclamation plants for used sand
- Regeneration unit ROTAREG to improve the quality of used sand

Engineering, Installation and After-Sales-Service

