

Counterflowing - A Matter of Strength





The Haarup Counterflow Mixer has the Strength



The Haarup counterflow mixer is a direct result of innovative thinking and constant product development. In house quality assurance schemes enable a full traceability of quality control at all levels. A combination of rotation and counterflow action inside the mixer makes it possible to produce very high quality concrete. The design of the mixer enables many different possibilities and operating advantages.

Everyone choosing a Haarup counterflow mixer is assured of a strong solution with optimum mixing capability including an 8 years warranty of the gearbox and pan.

The Haarup mixer is manufactured at Haarup's own facility in Denmark.





2 x 6000 litre Haarup mixers.

Counterflow Mixers meeting all Requirements

High Operational Reliability

The unique design of the Haarup gearbox ensures problem free operation without the necessity for a complicated greasing system, oil temperature measurement or any other systems that have to be regularly maintained. Because of the **hydro coupling** the mixer is protected against overload.

Low Noise Level

The highly efficient gearbox of all mixers emits a low noise level of under **85 dB(A)** ensuring a good working environment. Furthermore, Haarup give 8 years warranty for the gearbox.



On-time delivery

Ensuring accurate delivery times is very important to all companies. With our precise production planning we keep our delivery times. Haarup deliver the right product at the agreed time.

Easy Maintenance

The gearbox requires no special maintenance because of its unique construction. The mixer lids are divided into sections and there is no centre column inside the mixing pan. This makes it much easier to carry out routine maintenance and the exchange of wear parts.

Low Operating Costs

The counterflow action gives minimum wear and tear and a much longer lifetime. The mixing arms are made of spring-chrome-nickel-steel. The side scraper has exchangeable segments and is adjustable and the mixing shovels can be used on both sides. This means low operating costs.

Premium Quality Concrete

The quality of the concrete is paramount for the production of high quality concrete products. The action of the Haarup mixer with rotating spider and rapid rotating mixing shovels produces a very aggressive mixing solution, shorter mixing time, and a more homogeneous concrete.

What others call luxury equipment

- are standard with us ...

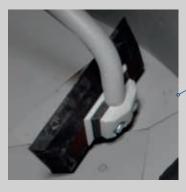
Haarup mixers are supplied with the most comprehensive and exclusive standard equipment in the industry. A standard solution means customized division of cover and inlet points for aggregates, cement, water, admixtures etc.



The inspection door makes it easy to inspect the gearbox and the oil level.



Provision is already made as standard for water and admixture addition.



The mixing shovels can be turned, so that the lifetime is extended. Mixing arms have a diameter of 52 mm, which gives a long service life.







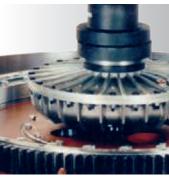
Specially hardened fixing bolts for wear plates, which are completely flush to the pan, ensure that the mixing shovels and wear plates have a long lifetime.

The side scraper is divided into sections, which minimises the cost of replacement and makes the adjustment simple.

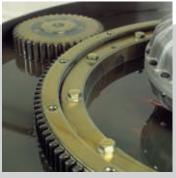




The strong Haarup planetary gear is designed in a balanced system with hydraulic coupling and motor which secures a long lifespan.



Mixers from 1125 litre have a hydraulic coupling so that they can be started under full load.



The Haarup gearbox with its open oil sump absorbs any transmitted heat which means no temperature measurement is necessary.



The gearbox is fitted with a special ring gear, hardened and ground toothed gears installed in spherical or conical roller bearings.



Mixer lids are fitted with relevant safety switch systems. When incorporated in the control system they will prevent the mixer running when the lids are opened.



The plate covering of the mixing pan is designed with labyrinth seals ensuring optimum density and at the same time fast cleaning.



A concrete inspection door with safety grill in a mixer lid.

Customers require individual Solutions – Haarup Speciality

Because every plant is different Haarup are both prepared and able to offer the most flexible solutions to the concrete producer.



Extra

- ✓ Up to 4 discharge gates.
- ✓ Hydraulic discharge gates with manual hand pump. (standard 4500 litre & 6000 litre / 6750 litre)
- ✓ Outlet chutes with hinged, hot galvanized safety grills.
- ✓ Vibrator and vibration dampers on outlet chutes.
- ✓ Pneumatically opened inspection door for TV-inspection.
- ✓ Mixer motor starter with 2-hand operation.
- ✓ Supports under the mixing pan.
- ✓ Equipment for taking out concrete samples.
- ✓ Lamp to be used for inspection of the mixing cycle.
- ✓ Temperature probes for concrete.
- ✓ Steam injection valves for heating of concrete.

- ✓ Water distributing pipes with nozzles for distribution of coarse and fine water.
- ✓ Equipment for automated wash-out system for faster mixing and easier cleaning.
- ✓ Pipes, nozzles, and microwave probe for electronic water batching and moisture measurement.
- ✔ Polyurethane protection sleeves for mixing arms.
- ✔ Bottom and side wear plates of extra hard-wearing, cast chrome-nickel-steel.
- ✓ Dust extraction and air bags.
- ✓ Separate automatic washing equipment.



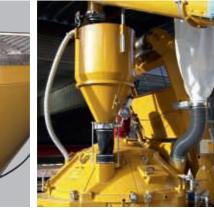
Lamp for inspecting the mixing cycle.



Equipment for concrete samples.



Discharge chute with vibrator suspended in vibration dampers.



Airbag for minimising dust.



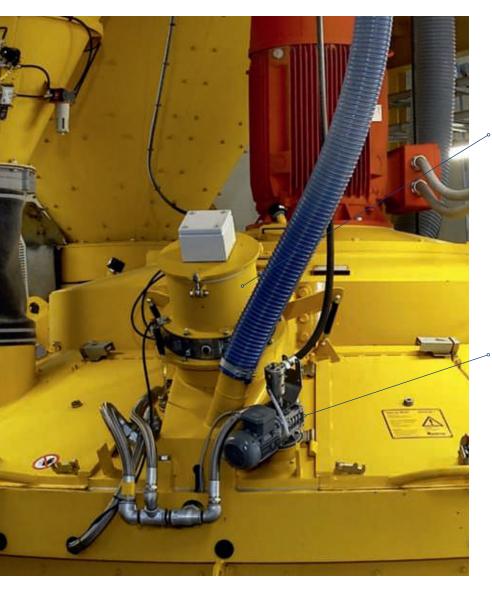
Diaphragm hopper, pressure pump and cabinet for valves. Secures the water supply and increases the water pressure.

Valve Cabinet

At Haarup details are a matter of course. For water batching Haarup supplies a hot-galvanised valve cabinet. The valve cabinet protects water valves and the flowmeter against influences from the environment, for instance spraying from concrete.

The water valves and the flowmeter are part of Haarup's unique water flushing and water distribution. The flowmeter is a precise batching unit and has in addition the advantage that it is always ready to batch. In addition, the Haarup water valve system is designed for optimum batching of fine and coarse water.





TV Inspection

Haarup offers TV inspection for installation in the cover of the mixer. This makes it possible to supervise the mix from a monitor. To obtain the best possible picture in the mixer, a special camera and a lamp are installed.

High pressure cleaning

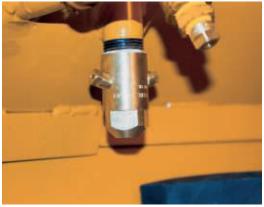
The Haarup mixers can be made with equipment for high pressure cleaning of the mixers. This is with advantage installed together with Haarup's wash-out system that cleans when mixing takes place.













Horizontal flushing nozzle for cleaning the upper part of the gearbox and the mixing arms.

Vertical flushing nozzle for cleaning the side scraper and the lower part of the mixing arms.

Rotating flushing nozzle(s) cleans the underside of the mixer lids.

Efficient Haarup Wash-out System that cleans when Mixing takes place

For quick and efficient cleaning, the water droplets should have enough power also at longer distance. This is only possible at a relatively low pressure where the weight of the droplets is relatively high. Consequently the Haarup wash-out system operates with a water pressure of 6-8 bar.

Cleaning takes place throughout the whole day because the mixing water is also used for cleaning every time a batch is produced.

The heart of the cleaning system includes specially designed chromed flushing nozzles with variable capacity some of which can also rotate to spray the underside of the mixer lids.

This results in quick cleaning, low dust levels, and a more efficient use of the mixing water giving a better and quicker mixing cycle.

Advantages

- ✓ Utilisation of batch water for cleaning.
- Efficient mixing of water.
- ✔ Reduction of dust levels.
- ✓ Quicker cleaning.
- Larger production.
- ✔ Better concrete.



Efficient and Sturdy Skip Hoist

with adjustable angle - 60-75°

The Haarup skip hoist has a mechanical opening and closing of the bottom gate ensuring complete discharge under all conditions. The hoist bucket is made of strong steel plates with angled sides ensuring efficient emptying.



Special hoist with bent at the bottom.

Weighing unit for check weighing or weight batching in connection with a weigh belt.

Standard Equipment

- ✓ Adjustable angle of the hoist and rail.
- ✓ Quality geared motor.
- ✓ Angled sides ensuring efficient emptying.
- ✓ Safety guarding under the top part of the hoist.
- Adjustable ball joint bearings for gate and activation arms
- ✓ Safety bolts for stopping the bucket.

- ✓ Self-closing gate on material inlet to mixer.
- ✓ Coupling to wire drum (from 750 litre).
- ✓ Grooved wire drum.
- ✓ Limit switches for filling, waiting and discharge positions, safety devices including special Haarup slack wire switch.

Extra Equipment

- ✓ Hoist rail Straight or curved.
- ✔ Hoist with 2 speeds.
- ✓ Common hoist for distribution to 2 mixers.
- ✓ Connection box for valves and limit switches.
- ✓ Increased hoist bucket for light-weight aggregates.
- ✓ Fall safety device on hoist bucket in case of wire failure.
- Galvanized safety plate guarding fitted under the hoist rail.
- ✓ Safety guarding at the sides of the hoist.
- ✓ Weighing unit for the hoist bucket.
- ✓ Vibrator on the hoist bucket.
- ✓ Wear plates in the hoist bucket.

It is Easy and Economical

- to modernize an Existing Plant

The low installation height of the mixer makes it both easy and economical to build it into an existing plant. The mixer lids can be divided individually and it is possible to place inlets and outlets where required.



1125 litre Haarup mixer.

2250 litre Haarup mixer.



VM500 litre Haarup face-mix mixer.

Plants for all production sizes



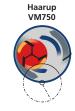
Mixers to Meet All Requirements

Haarup counterflow mixers are available in 15 different versions. In addition to normal concrete Haarup mixers can be used for the production of face-mix and light-weight concrete. Other industries have also used Haarup mixers successfully. For instance in:

Dry-process plants







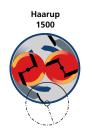






The ceramics industry
Glass factories
Power plants

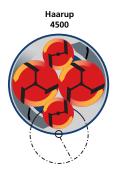
Mixer type and max. added	litres*	300/VM300	375	500/VM500	750/VM750	1125	
materials and water	Kg*	480	600	800	1200	1800	
	Lbs*	1060	1320	1765	2645	3970	
Finished quantity of concrete	litres*	200	250	333	500	750	
	yd³*	0.26	0.33	0.46	0.65	1.00	
Motor power output	kW/HP	7.5/10	11/15	15/20	22/30	30/40	
Number of spiders	number	1	1	1	1	1	
Number og mixing shovels	number	2/3	2/3	2/3	2/3	3	
Number of side scrapers	number	1	1	1	1	1	













Mixer type and max. added	litres*	1500	2250	3000	3750	4500	6000/6750
materials and water	Kg*	2400	3600	4800	6000	7200	9600/10800
	Lbs*	5290	7940	10580	13230	15880	21160/23810
Finished quantity of concrete	litres*	1000	1500	2000	2500	3000	4000/4500
	yd³*	1.31	2.00	2.63	3.27	4.00	5.23/ 5.89
Motor power output	kW/HP	45/60	75/ 100	100/ 134	110/150	132/ 177	160/ 215 180/ 241
Number of spiders	number	2	2	3	3	4	4
Number og mixing shovels	number	4+1	6	8 + 2	8 + 4	10 + 2	10 + 2
Number of side scrapers	number	1	2	2	2	2	2

^{*}The stated number of liters and/or kg cannot be exceeded.

We reserve the right to make any alterations in the technical specifications.





Your partner for the concrete industry - From ideas to conclusions

Haarup have the equipment, know-how and expertise required by the concrete industry. This ensures an optimum solution and the necessary security when investing. Haarup are your natural choice when investing in all types of batching and mixing plants.





Haarup - the specialist

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