PRODUCTS AND SOLUTIONS SKAKO CONCRETE - HEART AND BRAIN OF YOUR CONCRETE BATCHING PLANT



THE BRAIN... SIMPLE FULL CONTROL AND WITH SKAKO AUTOMATION TECHNOLOGY



Streamline business processes:

- Fast calculation of key figures
- Materials for each batch
- Visualizing consumption Reduction of costs
- Increase of productivity The SKAKO Performance Manager (SPM) measures the Overall Equipment Efficiency

Manage inventories:

- Resource planning
- Alert of defined minimum inventory level
- Monitoring inventory movements





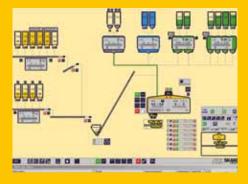
SKAKO control system and equipment was developed by SKAKO's own staff and customers looking to increase productivity and ensure correct mixing ratio and a homogeneous, improved quality.

Simplify order processing:

- Automated production control
- Managing deliveries to production stations Dealing with an unlimited number of
- mix designs

Transport concrete efficiently:

- Accelerating transport
- Optimizing material flow
- Reducing cycle times
- Giving priority to one bucket compared to another



Improve productivity

It enables plants to run a lean, efficient batching operation to fulfill the need of the production machine for concrete.

Improve transport efficiency

The automation system is fully integrated with SKAKO's CONFLEX bucket conveyor system. No subsystems or extra controls are required.

Improve quality

SKAKO's powerful processor gives an extra boost to the memory capability giving the SQL database the storage capacity for thousands of mix designs to meet the accurate proportioning, strength, performance, uniform quality and other customer specified requirements in less time.

Improve inventory planning

SKAKOMAT 600 monitoring optimizes resource planning so that you always have the proper selection and quantity of aggregates, admixtures and other stock materials needed to produce concrete in a timely manner - while avoiding costly overstock inventories and waste.



SKAKO puts integrated automation technology at your fingertips. From ordering, proportioning, mixing with consistency control to transport, SKAKO is ready to improve your process all the way.

SKAKO equipment and solutions are your guarantee for long lifetime, safety and efficiency with concern for communities and the environment.



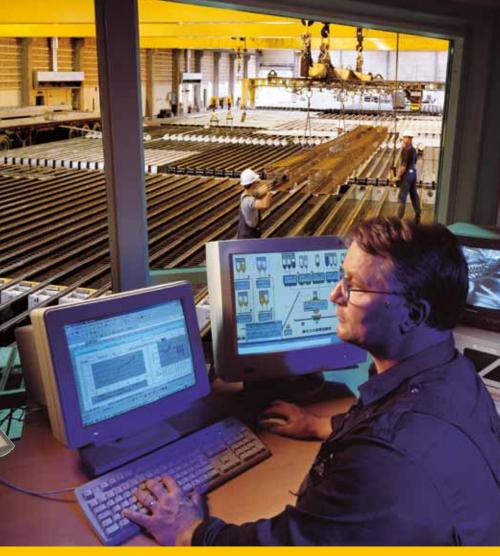
Decentralize control:

- Control terminals located at the production
- stations Ordering minor adjustments at the production stations

Monitor consistency and moisture content:



Check consistency and moisture of mix and moisture of aggregates Having moisture and consistency control integrated into the



Improve humidity and hydration control

SKAKO's moisture meter is fully integrated with the automation system, so you always have access to the actual aggregate moisture values and W/C ratio data to ensure that the concrete has the required consistency.

Simplicity

Finally, the SKAKO automation system simplifies work by being easy to use. SKAKO will also work to simplify your job by providing a wide range of technical services, a customer hotline and new releases to keep your system up to date.

Total data security

The system is designed for optimum reliability of operation, because batching plants cannot afford downtime failures or data loss.



THE HEART...

THE SKAKO MIXER DESIGN FOR QUICKER, CLEANER AND SAFER QUALITY CONCRETE PRODUCTION

Which special design features?

- Varied shovel design, countercurrent movements and different speed of turning shovels
- Interior of mixer designed with no sharp edges or corners
- Particular place, design and size of hydraulically controlled discharge gate
- The safety system of the hatch opening
- Legs raise the mixer by 500 mm off the ground and host wiring and pipes

... and with which benefits?

- creates shifting pressure and vacuum, eliminates dead zones, speeds up the mixing process and produces homogeneous concrete
- facilitates the cleaning, keeps the concrete from getting trapped, and prevents new batch from being mixed with old concrete
- speeds up the emptying, increasing productivity
- Enhance worker safety
- And so make operating and servicing more convenient and protect from dust



Unique two-level shovel technology ensures better controlled high intensive mixing. Bolts are countersunk so concrete will not stick and old concrete will not get mixed with new batches.



Side hatches with oil resistant seal make it far easier to access the inside of the mixer. This makes operation and service easy, fast and safe.



Mixing tools can be easily adjusted into optimal

position during servicing

Large hydraulically controlled discharge gate speeds up discharging by up to 23%. Since it opens downward, a smaller platform is needed.





Safety system for hatch openings enhances occupational safety. This rugged mixer meets prevailing quality and EU safety standards.



- Little manpower needed during lifetime
- Side-mounted hatches for safe and easy access
- Fast replacement of wear parts – max. 25 kg
- Low operating and maintenance costs
- Self-lubricating gear in oil sump





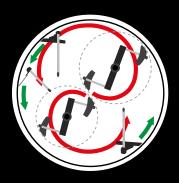
Uniquely designed legs serve a dual purpose. They raise the mixer 500 mm off the ground to make operation and servicing more convenient from below as well as inside. They serve as covered cabinets to protect wiring, pipes and controls from dust.



The high-pressure cleaning unit has a rotating cleaning head. The head spools the inside of the mixer with a high-pressure stream of water to dislodge any debris. The mixer is turned on during cleaning so the shovels scrape the wall free of clinging concrete. After it stops, just empty and the job is done.

Туре	750	1125	1500	2250	3000	3750	4500
Volume I/kg	750/1200	1125/1800	1500/2400	2250/3600	3000/4800	3750/6000	4500/7200
Max. output per batch m ³	0.5	0.75	1.0	1.5	2.0	2.5	3.0
Motor size kW	18,5	30	2x22	2x30	2x37	3x30	3x37
Mixer stars	1	1	2	2	2	3	3

- Fast discharging
- Short delivery time
- Short cycle times
- Low energy consumption
- Excellent visibility







Automatic oil level and temperature control provides early warning response so operator can quickly identify problem and prevent damage.



Automatic grease feeding for continuous lubrication and less service.



for visual control of the mixing process.

THE ARTERIES AND VEINS...

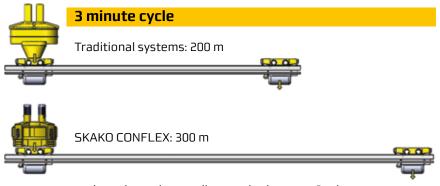
SKAKO CONFLEX BUCKET CONVEYOR – TRAVELS FAST AND ADAPTS

What do you require from a bucket conveyor system?

- To make the bucket travel fast from mixer to work station and back again? And to reduce also the number of conveyors needed?
- Please keep the noise level low!
- Make the bucket conveyor adapt to the mixer plant and not vice versa!
- Make it extendable with fewer difficulties!

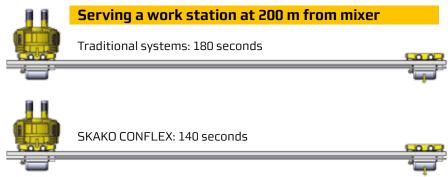
... and how does SKAKO fulfill?

- SKAKO CONFLEX travels at 4.5 m per second!
- The bucket wheels run with wear resistant rubber tires on the rails
- CONFLEX inclines up to 20%. Easy to install to placement height of mixer discharge
- The CONFLEX system has a modular design. Possible to change both track and specifications. Switch tracks possible if two buckets must pass each other



SKAKO

... serves a work station at longer distance in the same 3 minutes



... faster bucket conveyour improves your productivity by > 20 %



The control system controls up to 5 buckets, 30 work stations and 8 mixers.



A SKAKO conveyor bucket

A flexible and sealed discharge system?

- The entire layout is entered into the SKAKOLINK control and software and makes it possible to adapt the speed and approach the movable station correctly
- To combine more mixing plants with several work stations?
- CONFLEX travels up to 4.5 m/sec.
- The control system controls up to 5 buckets, 30 work stations and 8 mixers



SKAKO

CONFLEX is available in three sizes each of them with rotating and bottom discharge – the bottom one with completely sealed closure system. Possibly even buckets with a two compartment hopper to separate two kinds of concrete

20,

 Always to know the exact position of the bucket? To let it seek and find also movable stations?



Rotating discharge

Bottom discharge - crosswise

Bottom discharge - lengthwise



When turning, the CONFLEX uses a small radius of curvature.



A SKAKO CONFLEX conveyor bucket arriving at work station.

- High speed up to 4.5 m/sec.
- Inclines up to 20%
- Low noise
- High safety factor
- Flexible

SKAKO PLANT SOLUTIONS

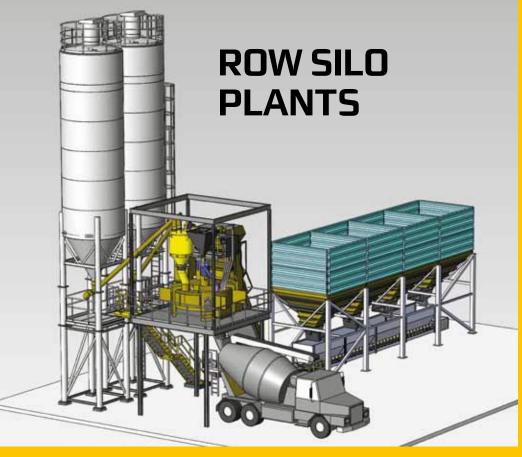
MASTERMIX – MAXIMUM MODULARITY AND MOBILITY



Mastermix provides you with a complete, concrete factory with a capacity of up to 3,000 litres per batch. The range is designed for large jobsites and can be adapted to suit any assignment, thanks to its modular design.

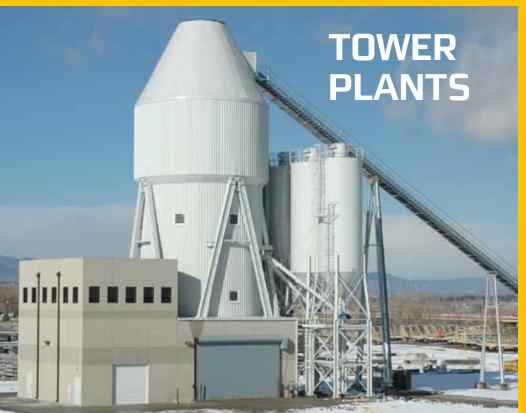
TEN GOOD REASONS

- Fast installation, reduced civil engineering, precabled and pretested
- Easily removable and transportable
- Modular: 4-8 compartments, 2 outlet gates or one big per compartment, up to 5 screw entrances
- Safe: Platform with secure railing, anti-slippery landing, floor level access to maintenance component
- Comfortable: Easy access for cleaning/inspection, bracket to lift up spares, flexible and resistant chute
- Automation/optimization of production
- Ergonomic: Wide access platform around mixer, plating easy to wash
- Maximum output capacity
- Proven strength and reliability
 - Environment: Galvanized weigh hopper for clean or recycled water



TEN GOOD REASONS

- Optimal opportunities to tailor the solution to your specific needs
- The modular build caters for all your needs
- An unlimited number of rows and compartments
- Different surface treatments: Painted or galvanized
- Walls are trapezoidal profiles and are easy to assemble
- Easy access to the silo through a manhole
- An inlet box on the silo deck prevents contamination of materials
- Roof constructions can be supplied in a wide range of designs
- Cladding is available with or without insulation
- A wide range of supplementary equipment, such as heating or shock blasters for the silo cone





The large integrated platform makes cleaning easy and allows the installation of both counter-current mixers and twin-shaft mixers

TEN GOOD REASONS

- An eco-friendly choice with optimal utilization of the resources
- Reduced power consumption on account of short distance material transport
- The best possible utilization of the production area, high capacity – small footprint
- A minimum of moving parts means less maintenance costs
- A high level of modularity with many of options for customerspecific adaption
- A wide range of extra equipment such as platforms, ladders, stairs and crane beams
- Make your company visible with a conspicuous landmark
- Frost-free storage of aggregates in heated, insulated silo compartments
- No spillage during proportioning
- Short proportioning cycles result in fast production start-up and high output



ANALYZE YOUR NEEDS FOR CONCRETE PRODUCTION...

SKAKO CONCRETE is a professional and experienced group specialized in development, supply, installation and servicing of complete plants for production of concrete.

SKAKO CONCRETE's main purpose is to develop solutions adapted to future requirements, meeting the individual needs of our customers and so helping them strengthening their position in their market. We offer knowledge, experience, flexibility and understanding of your situation. Basis of this are mutual discussions and co-operation.

CONTACT SKAKO CONCRETE

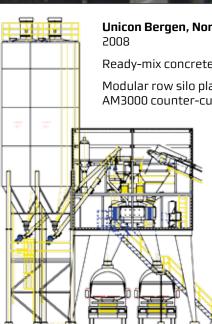
AND LET US DESIGN AND PROPOSE

YOUR FUTURE RELIABLE, FUNCTIONAL, RATIONAL, COMPACT, SAFE AND ENERGY SAVING PLANT! ...



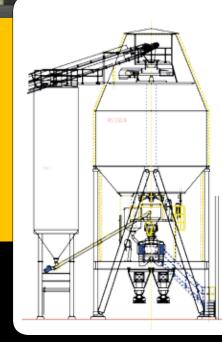
...OF SKAKO PLANTS INSTALLED AL **OVER THE WORLD**





Unicon Bergen, Norway

Ready-mix concrete production Modular row silo plant with AM3000 counter-current mixer



Baltic Tiles St. Petersburg, Russia, 2011

Concrete roof tile production

AM750 counter-current mixer, **SKAKOMAT 600** control system, high silo plant (HS 330/8)

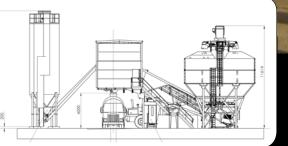


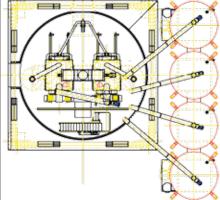
Génie Civil Paris Région, France 2011

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Ready-mix concrete production

Mobile jobsite plant MasterMix





Rocky Mountain Prestress Denver, CO, USA 2007

Precast concrete production High silo type 850, 2 SKAKO mixers and SKAKOMAT 600 control system



...AND ONCE THE **PLANT IS RUNNING...**

SKAKO SERVICE & SUPPORT



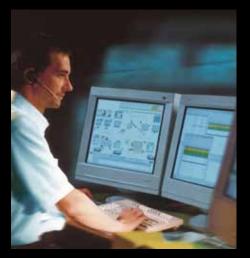
More value for your business

It takes more than high-performance equipment to produce high-quality concrete.

The best solution is a service and support programme that is tailored to meet the unique requirements of your business.

Value-adding service level agreements

SKAKO has three service level agreements to choose from. For more details read on.



Basic

- Hotline telephone and online technical assistance
- Onsite field support within 24 hours for problems that cannot be solved remotely
- Software support and maintenance

Onsite Plus

- Onsite weight calibration
- Onsite electrical service
- Onsite mechanical service
- Hotline telephone and online technical assistance
- Onsite field support within 24 hours for problems that cannot be resolved remotely
- Software support and maintenance

Peak Performance

- Plant and equipment optimization Consulting and instruction
- Training
- Onsite weight calibration
- Onsite electrical service
- Onsite mechanical service
- Hotline telephone and online technical assistance
- Onsite filed support within 24 hours for problems that cannot be
- resolved remotely Software support and maintenance

Our service and support your advantage

Aftersales support

When you invest in SKAKO equipment, you invest in one of the most attractive Íifetime costs of ownership and the reassurance of our dedicated aftersales support team.

SKAKO original spare parts

Ordering original SKAKO spare parts is your assurance of receiving a product that has been produced to comply with SKAKO's requirements for quality and safety. Order directly from us.

Spare and wear parts

You can always contact SKAKO CONCRETE for spare parts by phone, telefax or e-mail. If you know already which part to order, go directly to our webshop via www.skako.com





WE ARE YOUR PARTNERS ALL THE WAY...

Below

CONCRETE

when you define the project ...

our experienced engineers are there for you

when vou install vour plant ...

our technicians can help and direct

when your staff is trained ...

SKAKO offers practical courses

we certify the readiness

when you need

expert hotline at your disposal

when you need service ...

 SKAKO offers service agreements

when you need sp

Online webshop guarantees fast delivery

when you want to

 You will trust in us and start a new project

IN A SHAKY WORLD... **SKAKO DELIVERS CONCRETE RESULTS**

QUALITY CONCRETE – IN FULL CONTROL

Concrete is on the basic leading building blocks of strong communities. Made from 100% natural materials, it forms the foundations of the homes, businesses and major infrastructure projects that communities depend on to live comfortably and prosper.

SKAKO develops the technology and provides the services that make it easier for people to perform better and produce higher quality concrete so essential to best practices today.

SKAKO is one of the world's largest suppliers of complete concrete batching plants for ready-mix concrete, precast concrete and concrete elements.

Our batching plants are under continuous development to ensure we deliver the most efficient capital equipment and plant possible.

SKAKO understands that in today's production environment, productivity improvements and downtime reduction are on the top of every company's priority list. SKAKO equipment is engineered to perform flawlessly under all conditions.



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