



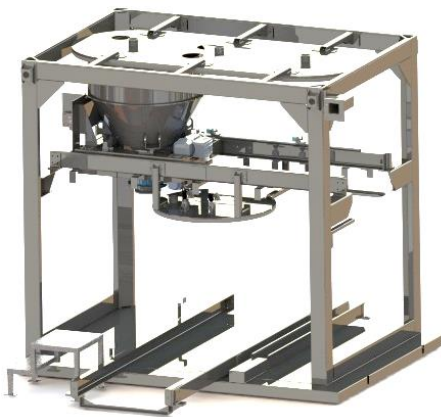


sand silo / day hopper

- multiple cell silos for various sand-sorts
- size designed according the needs of local space and capacity of the plant
- optional sand supply systems with raw sand silos possible
- state of the art level measurement with radar level probes

batch heating-cooling sifter / fluidizer

- guarantees constant and repeatable sand quality
- continuous sand fluidization for taking out fines and dust
- sand conditioning by heating and cooling to maintain constant sand temperature
- double chamber design possible for more than one sand sort



equipment frame with sand balance

- steel construction with bevelled steel sheet in professional execution to carry the main equipment of the sand plant
- sand balance fix or moveable to attend various sand sorts and multiple mixers
- high precise sand metering due to proportional actuated sand metering valves with electro-pneumatic position controllers and sand metering balance with load cells
- sand metering precision $\pm 1,0 \%$ related to the max. batch size
- capacity of the sand weight hopper is corresponding with the maximum capacity of the mixer



component (binder) storage and metering

- for storing a certain amount of liquid binder components to ensure a continuous mixing process
- continuous level control and monitoring, optional component supply systems can be provided
- integrated conveying pumps for continuous circulation of the component
- cooling and heating devices ensures a constant viscosity of the liquids
- precise component dosing with electronic gear flow meters and metering valves
- dosing accuracy of $\pm 1,0g$

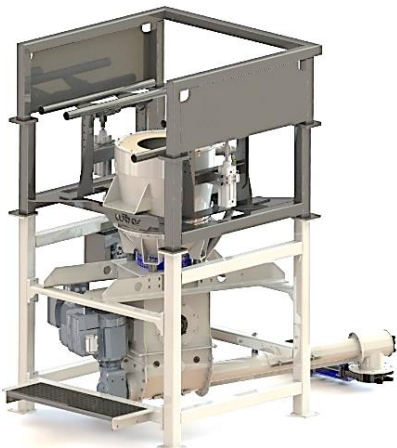
universal high-performance batch mixer

- powerful mixer drive with gear motor
- three arms cast mixer arm with a special wear resistant coating to achieve optimal homogeneous mixtures
- material of mixer wall gives the sand a kneeling effect and prevents sand sticking
- special permanent lubricated labyrinth seal prevents leakage of components (sand, binder) from inside the vessel
- batch mixer can be executed moveable to distribute the sand to more than one discharge places



Technical data	UCM50	UCM100	UCM150	UCM200	UCM300	UCM400	UCM500
volume / max. batch [kg]	50	100	150	200	300	400	500
min. batch [kg]	20	40	60	70	100	150	200
mixing time [s]	60-120						
capacity [kg/h]	1500	3000	4500	6000	9000	12000	15000

- options -



additive dosing devices

- powder additive dosing devices
- precise dosing due to frequency controlled gear motors for screw actuation
- metering done via sand balance of mixer
- additive feeding via
 - manual loading with bags
 - integrated bigbag storage
 - silos
- integrated loosening shaft
- dosing accuracy $\pm 30g$
- can be used for all additives customary in the industry with different bulk densities

sand distribution solutions

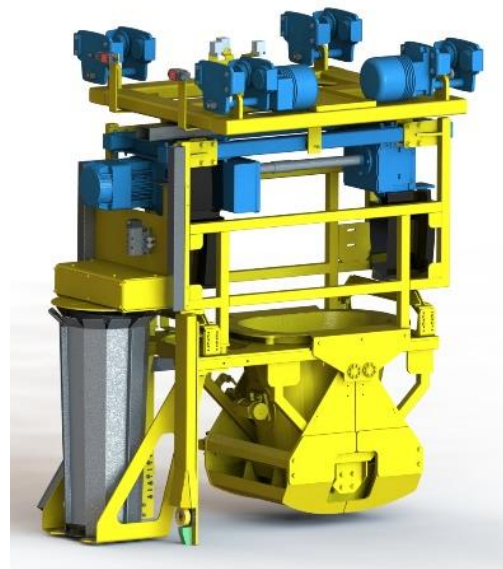
- customized sand distribution systems, even in very limited spaces
- distribution cars for systems with multiple mixers
- distribution cars with double rail, monorail and overhead tracks
- integrated lifting devices to compensate height differences



distribution car



distribution car with monorail tracks with curves and switches possible



distribution car with lifting device for tracks with height compensation

example of sand plant configuration with capacity of 12t/h

- sand silo for two sand sorts
- batch heating-cooling sifter
- moveable sand balance for future installation of 2nd mixer
- coldbox process (2 liquid components)
- travelling mixer to attend a total of 3 core shooters

core production process:	coldbox
plant capacity:	max. 12.000 kg/h
mixer type:	universal high-performance batch mixer, moveable
quantity of mixers:	1 UCM 400kg
mixer capacity:	mixer 1 up to 12.000 kg/h
electric power connection per mixer:	mixer 1: 22.0 kW
number of sand sorts:	2 – new sand and reclaimed sand
sand silo volume:	2 x 5 m ³
sand supply:	by customer with pneum. pressure conveyor
sand heating, cooling and dedusting:	by batch heating-cooling sifter, type: CHKS-1400-2
sand metering:	moveable sand balance, 400 kg
sand metering accuracy:	±1,0 % related to the max. batch size
number of liquid components:	2 pcs. liquids for coldbox binder system (part I & part II)
volume components tank:	approx. 120l each
components metering:	gear pump, with electronic flow meter
components cooling:	by means of cooling coils, cooling water connection heating by electrical heaters
components metering accuracy:	± 1,0 g
sand distribution:	by moveable mixer
length of distribution track:	approx. 10 m

