

**Compact
Concrete
Mixing
Plants**

**H 1
H 1,25
H 1,5
H 2**



A member
of the group
of companies
SCHWING

Stetter



**Stetter compact concrete mixing plants:
Efficient. Rugged. Reliable.**



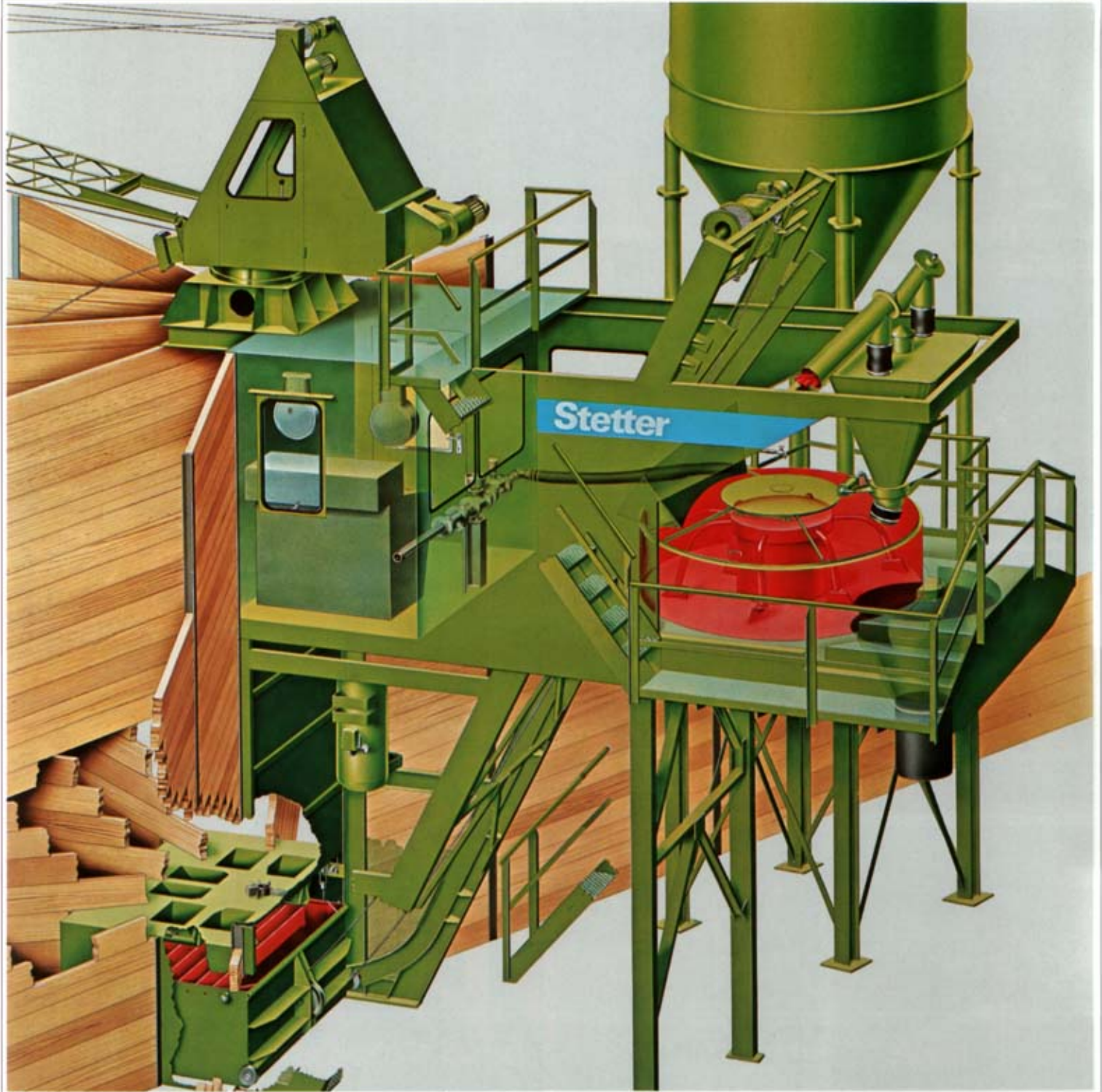
Successful all over the world.

H 1 with turbo-mixer

For about 30 years, we have successfully analysed the problems in the field of concrete fabrication. More than 1000 Stetter concrete mixing plants with turbomixer capacities between 0.5 and 3.5 m³ of compacted concrete per batch produce at home and abroad, day after day, more than half a million cubic meters of concrete. The approved plant program comprises the pitless compact concrete mixing plants with

concrete discharge heights suitable for truck mixer charging. They have been developed for operation at large-scale sites or in precasting factories. Compact concrete mixing plants are efficient, rugged and reliable; rare maintenance and pollution-free operation are other features. Due to a speedy and cost-saving set-up and the low shipping volume (low freight costs) they are especially suitable for appli-

cations abroad. Preassembled in our works they stand for a substantial reduction of the required time of erection at site. Basically, the mixing plants are composed of only two fully preinstalled and preassembled structural units: a) The lower section with Stetter batching table for large live storage, batching gates, aggregate weighing equipment, pneumatic system, frame supp-



This concept will convince you too.

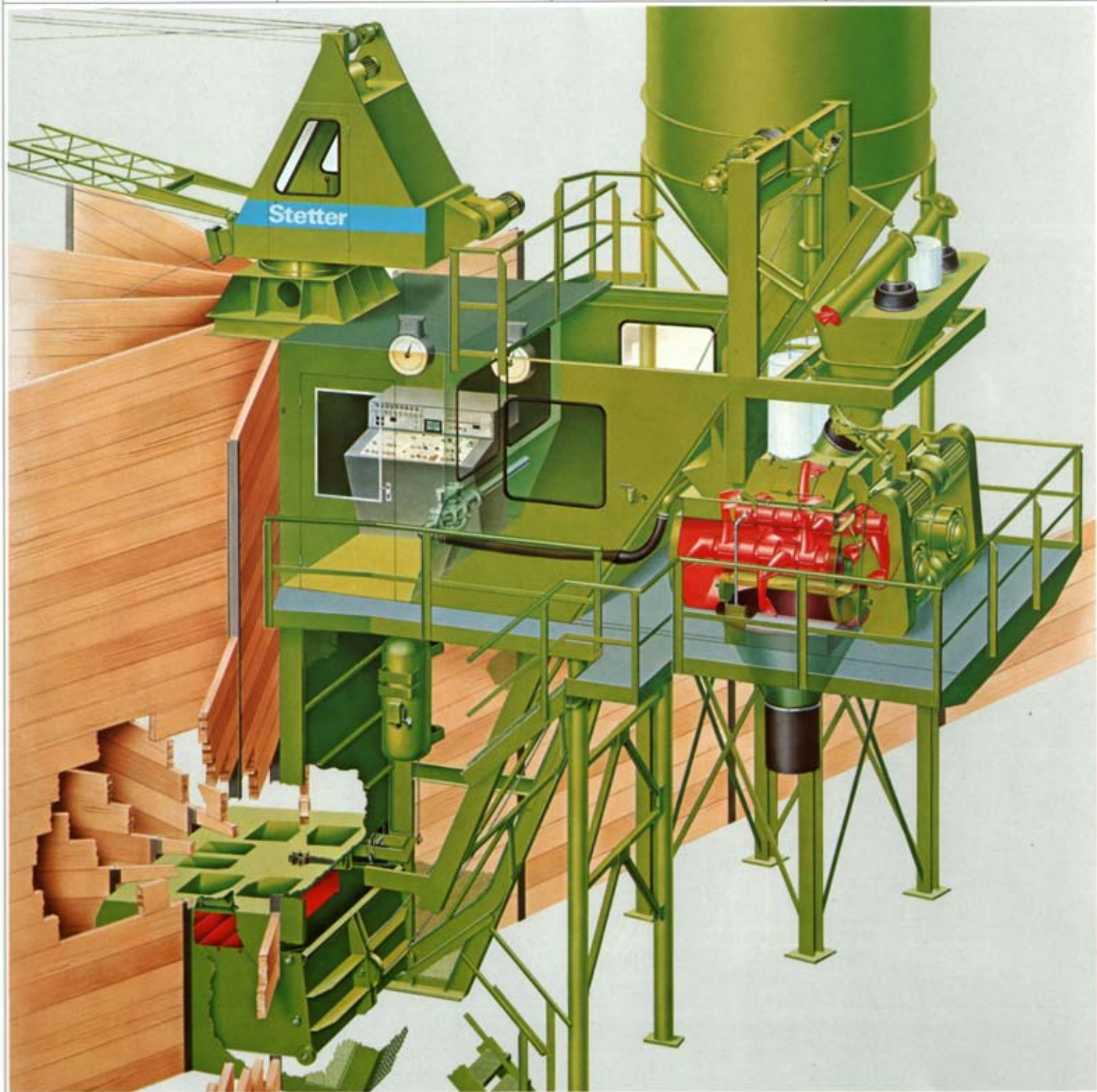
ort for upper section, lower section of the feeder track and safety guard for the lower feeder travelling range.

b) The upper section incorporating the turbomixer, upper section of the feeder track, feeder drive, feeder, cement scale, enclosed control cabin, electric controls and water batcher. The Stetter batching table in connection with the patented special-type feeder (low-built design with bottom

discharge) guarantees an optimum live storage.

The plants are equipped with pan or twin-shaft compulsory mixer producing in one batch freshly-mixed concrete in all consistency ranges for 0.5 up to 2 m³ compacted concrete. Since the capacity is dependent on the mixing cycle the plant output can be increased by mixing cycle time reduction.

**H 1,25 · H 1,5
H 2
with
twin-shaft
trough
mixer**



Compact concrete mixing plant with star batcher

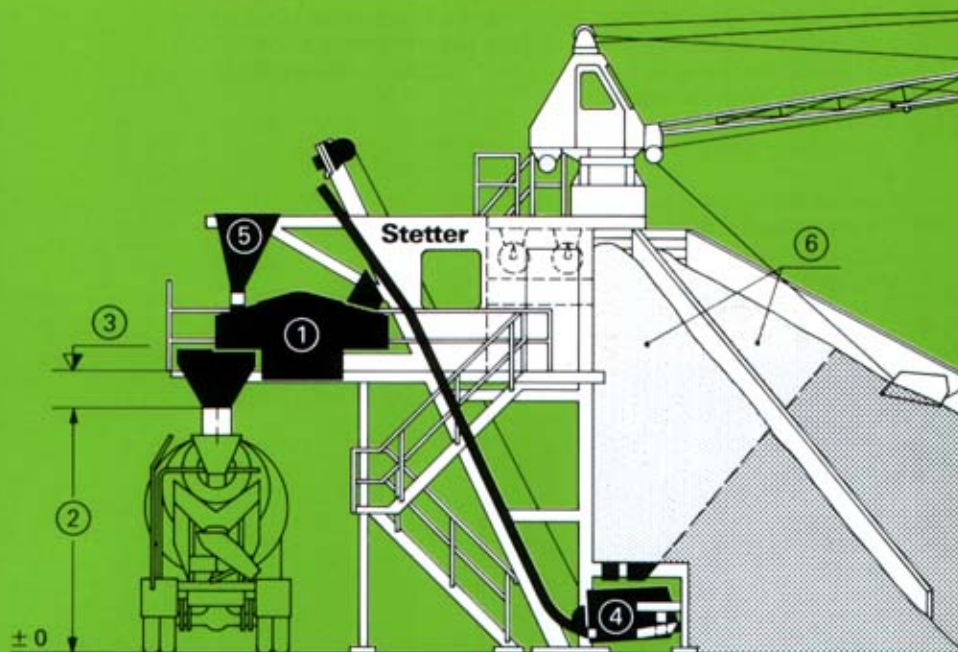
A star-type arrangement of star batcher and radial scraper gives you a large aggregate storage capacity, so that irregularities in aggregate supply will not affect mixer operation. Optimum live storage means that you have available a maximum volume of aggregates while at the same time the grainsize partition walls are reasonable in height (costs rise out of proportion with the height of the partition walls). An optimum live storage

requires a batching table as it has been incorporated in Stetter plants for years: The discharge openings with the batching gates are located at the bottom of, not beside, the storage area. They are arranged in a horizontal plane. The centre of the star-type radial aggregate arrangement is well within the radial stockpile. This provides a storage angle up to 210° without dead corners allowing wide opening sectional deposits and ensuring an effec-

tively increased live storage. This means that a smaller floor space is required for a given storage capacity. The cement silos are set up on either side of the mixing plant or at the front end of the mixing plant.



Set-up location and operating conditions determine the method of aggregate storage to a great extent.



Technical Data (standard versions)		H 1	H 1,25	H 1,5	H 2
① Mixer size (charge/compacted fresh concrete)					
a) pan mixer	l	1500/1000	–	–	–
b) twin-shaft compulsory mixer	l	–	1875/1250	2250/1500	3000/2000
Output (compacted fresh concrete)	m ³ /h	58	70/73	79/83	93
② Concrete discharge height	m	3.91	3.92	3.92	3.90
③ Mixer platform height	m	4.48	4.88	4.88	4.88
④ Aggregate weigher	kg	2500	3500	3500	5000
⑤ Cement scale	kg	500	750	750	1000
Total storage – 15 m compartment radius	m ³	1500	1500	1500	1500
Total storage – 19 m compartment radius	m ³	2000	2000	2000	2000
Storage angle	degrees	210	210	210	210
⑥ Live storage	m ³	100	100	100	120
Aggregate grades		4–6	4–6	4–6	4–6
Cement grades	up to	4	4	4	4
Water connection	nominal i. d. (mm)	65	80	80	80
Operating pressure	bar	5–6	5–6	5–6	5–6
Connected load (approx.)	kVA	100	120	140	160

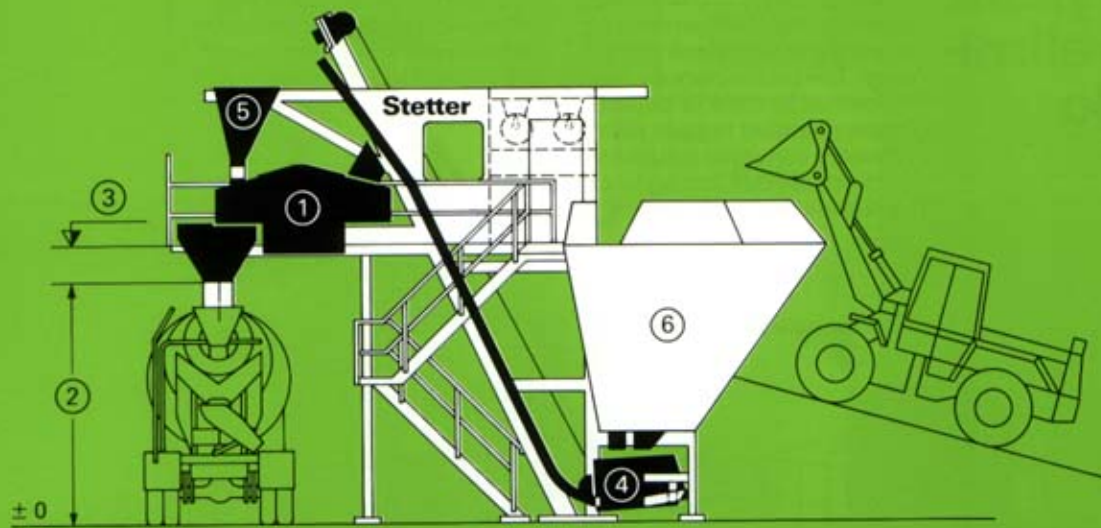
Talk with us about the most economical solution.

Compact concrete mixing plant with compartment batcher

The mixing plant with compartment batcher is determined for applications where plant location has to be changed quite frequently. With this storage arrangement there is no need for the big grain-size partition walls. Instead of the radial scraper, a front end loader or belt conveyor or bucket-type elevator fills up the live storage. The compartment batcher has 4 or 5 compartments which are made up of

easy-to-assemble panel elements. The batcher is set up on the batching table and secured to the upper frame section.





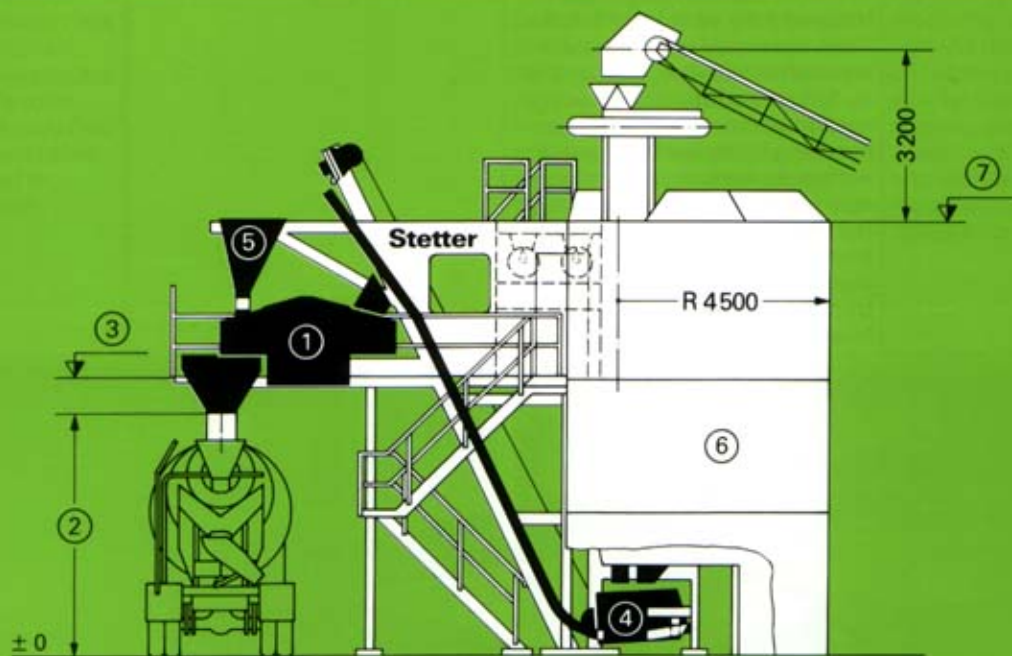
Technical Data (standard versions)		H 1	H 1,25	H 1,5	H 2
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③ Mixer platform height	m	4.48	4.88	4.88	4.88
④ Aggregate weigher	kg	2500	3500	3500	5000
⑤ Cement scale	kg	500	750	750	1000
⑥ Live storage – batcher with 4 compartments	m ³	35	35	35	–
Live storage – batcher with 5 compartments	m ³	60	60	60	60
Aggregate grades		4 – 5	4 – 5	4 – 5	5
Cement grades	up to	4	4	4	4
Water connection	nominal i. d. (mm)	65	80	80	80
Operating pressure	bar	5 – 6	5 – 6	5 – 6	5 – 6
Connected load (approx.)	kVA	75	90	110	120
Other compartment batchers on request					

Compact concrete mixing plant with preliminary silo

In comparison with the previously outlined aggregate storage alternatives the solution with preliminary silo offers a substantially larger live storage. The preliminary silo is divided into 4 up to 6 compartments receiving the different grain sizes. The preliminary silo are topped up by truck or bucket loader charging hopper with vibratory conveyor troughs via an overhead belt conveyor or bucket elevator with branch belt

and slewable distributor belt. This plant layout is advantageous in case frost protective measures must be taken, and it guarantees a true one-man operation. This set-up is also interesting whenever the given overall height does not permit the installation of a tower plant.




Technical Data (standard versions)

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a) pan mixer	l	1500/1000	–	–	–
b) twin-shaft compulsory mixer	l	–	1875/1250	2250/1500	3000/2000
Output (compacted fresh concrete)	m ³ /h	58	70/73	79/83	93
② Concrete discharge height	m	3.91	3.92	3.92	3.90
③ Mixer platform height	m	4.48	4.88	4.88	4.88
④ Aggregate weigher	kg	2500	3500	3500	5000
⑤ Cement scale	kg	500	750	750	1000
⑥ Aggregate storage (geom. volume/live storage) silo I	m ³	270/200	270/200	270/200	270/200
	silo II m ³	370/300	370/300	370/300	370/300
	silo III m ³	470/400	470/400	470/400	470/400
⑦ Elevation for aggregate silo I	mm	7140	7140	7140	7140
Elevation for aggregate silo II	mm	9640	9640	9640	9640
Elevation for aggregate silo III	mm	12140	12140	12140	12140
Aggregate grades		4 – 6	4 – 6	4 – 6	4 – 6
Cement grades	up to	4	4	4	4
Water connection	nominal i. d. (mm)	65	80	80	80
Operating pressure	bar	5 – 6	5 – 6	5 – 6	5 – 6
Connected load (approx.)	kVA	95	110	130	165

The lower section

We have subdivided the plant into two fully wired and fitted main assembly units for quick erection at the site. The complete, fully wired and fitted lower section comprises the Stetter batching table, batching gates with pneumatic cylinders, aggregate weighing equipment, frame support for upper section, pneumatic system with air-service unit, lower section of feeder track and safety guard for the lower zone of feeder movement.

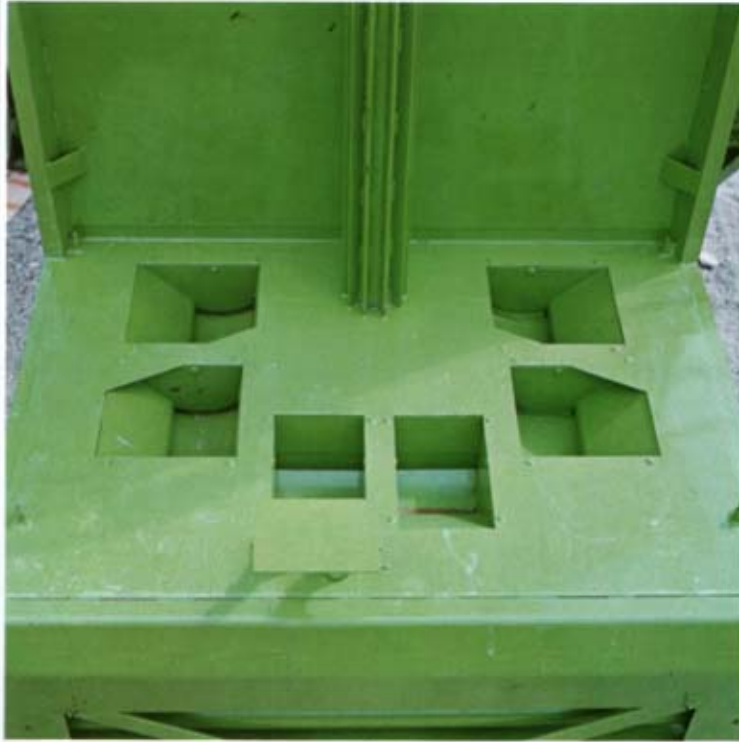


Assembly is made in our works.

Stetter batching table with six batching gates for optimum live storage. Perfect and smooth material flow, as aggregates are accommodated vertically over batching gates. Where only five grain sizes are used, two batching gates are connected in parallel for sand 0–2 mm. (Illustration below).

The aggregate weigher in a design that may be stamped by the Weights and Measures Authorities, conforms to the regulations for ready-mixed concrete plants in the Fed. Rep. of Germany. Feeder skip moves smoothly into and out of the aggregate weigher frame. Travel distance of feeder skip in weigher frame is only 50 mm. As skip approaches weigher, a special type damper or an eccentric stage drum absorbs

the energy and the skip moves smoothly into weighing position. As the feeder skip moves out of the weigher frame, the special damper minimizes the starting bump. The resulting advantage is absence of shock and vibration and thus longer life of weighing equipment. (Illustration below).



Vibrator-fitted rocker for installation in the sand compartment to keep even wet sand flowing readily. (Illustration on the left).



Pneumatically operated batching gate weigh-batch the aggregates into the feeder. The gates are operated through pneumatic cylinders. (Illustration on the left).



To foresee future requirements, the feeder track is bolted in place to allow easy replacement. (Illustration on the right).



The illustration above shows the safety guard for the lower zone of feeder movement. One side designed as door with safety switch cutting off feeder operation automatically when door is opened. That's safety at the right place. (Illustration above).

Every plant needs maintenance. But whether it is given that maintenance often depends on accessibility. We have given this point careful thought. The air service unit of the pneumatic system with oiler and water separator, for example, is readily accessible. (Illustration above).

Lower section accommodates batching table, aggregate weigher, feeder track, pneumatic system . .

The upper section

The fully wired and fitted upper section incorporates the compulsory mixer, the feeder and feeder drive, the cement scale, the enclosed control cab with the electric control system, and the water batcher.



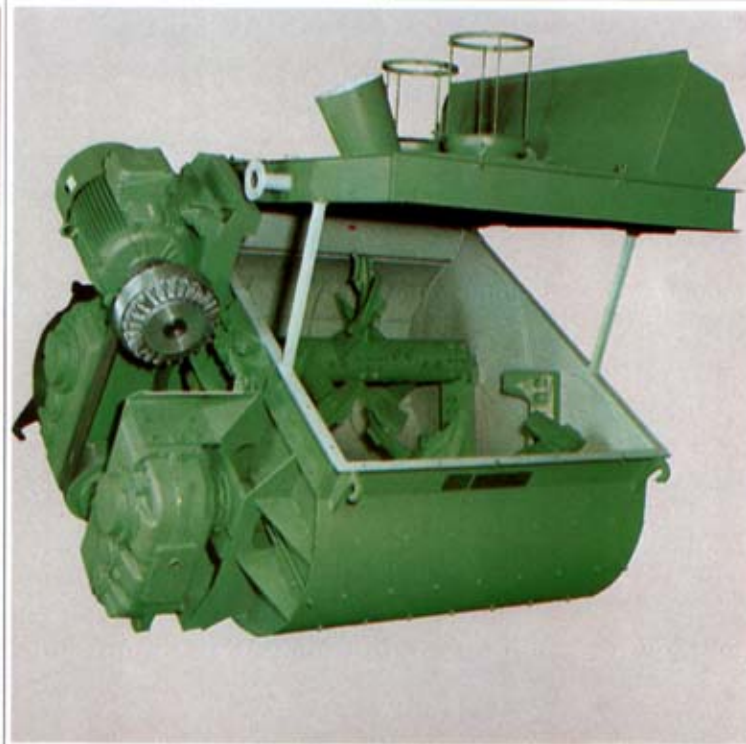
... upper section: with feeder drive, cement scale, water batcher, mixer and control system.

The built-in turbomixer features superior mixing action and spring-mounted mixer arms. The mixing pan is fitted with renewable internal wall, external wall, and bottom wear liners. In accordance with the requirements of the aggregates being handled, the mixer bottom may be lined with normal special-steel wear liners or with special-type chilled cast iron tiles. The wall wear liners may be used either way to give increased life.

The dust-tight mixer cover has two amply sized hinged lid sections for ease of maintenance. (Illustration below).

The cubical design of the built-in twin-shaft compulsory paddle mixer ensures short concrete transport routes with resultant optimum concrete mixing action. Mixing takes place in the radial and in the horizontal levels. The main mixing area is in the zone of mixing paddle overlap. There the cement is disintegrated and finely distributed and at the same time all aggregate ingredients are uniformly moistened and ho-

mogeneously intermixed. Due to the rotation of the mixing shafts in opposite directions, the optimum mixing effect is obtained at low peripheral speed at the blade edges. (Illustration below).



Special-type feeder in low-built broad-area construction for low batching level, large live storage, and small dead storage. Rope sheave arranged in the middle and wide wheel base for perfect and quiet running along track. Rollers are ball-bearing-mounted. And best of all, the feeder need not tip to empty as in most plants – it has an amply sized bottom discharge gate. This accounts for uniform, rapid discharge without shocks and

bumps. Rapid discharge increases overall plant efficiency. (Illustration on the left).

Cementscale may be calibrated – to conform to the regulations for ready-mixed concrete plants in the Fed. Rep. of Germany. Although the cement weigh hopper has steep slopes, it is additionally equipped with a vibrator as standard and features a large-area filter for a clean atmosphere. (Illustration on the right).

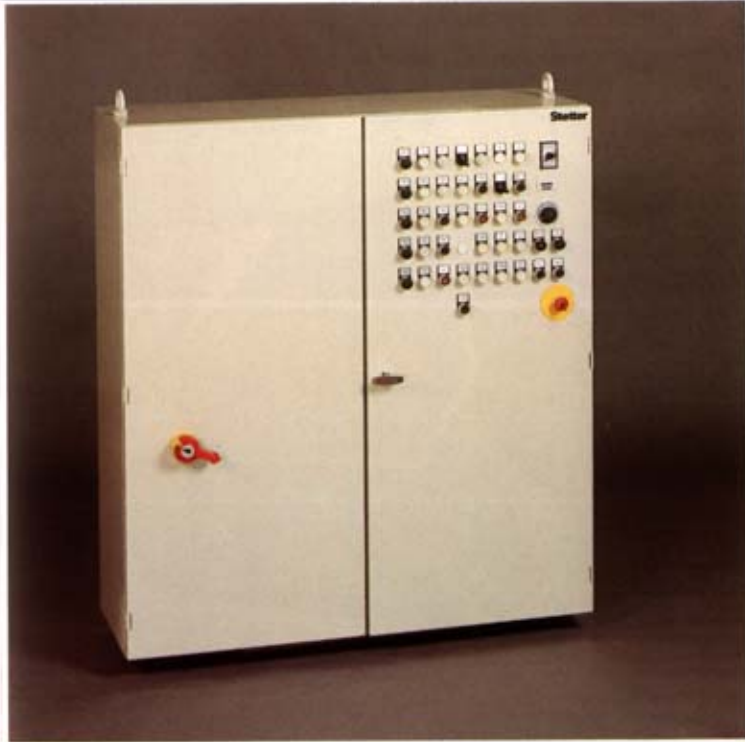


At the site you need only join the two main units. This saves time and money.

Control systems

Stetter has experience from more than 30 years of developing and producing control systems. Our engineers in close cooperation with our concrete technology experts develop control concepts to meet the requirements of tomorrow in the field of concrete fabrication. We offer a complete system of control variants. Manual operation or semi-automatic or fully automatic. Or fully automatic with microcomputer system

with EDP. The clear cut breakdown ensures an optimum of adaption to special requirements suitable for your plant. Of course Stetter control systems can be supplemented or extended subsequently at any time. Discuss your special problems with us. Stetter will be pleased to advise you.



Fully automatic control system series 400. Type 420 execution for concrete mixing plants with operator's stand at the plant with visual contact to the measuring and weight indicators, operating elements at the front doors. (Illustration top)

Fully automatic control system series 500. Desk-type. (Illustration top right)



Fully automatic control system series 600. Type 623 with electronic batching system SM 56 for aggregates, cement/filler, water and admixtures, with 5 or 10 recipes. (Illustration right)

Control systems developed and produced by us.



Fully automatic control system series 900. Type 990 in micro-computer technology with delivery note printer for disposition and calculation. Installation in a separate operator's cabin. (Illustration left)

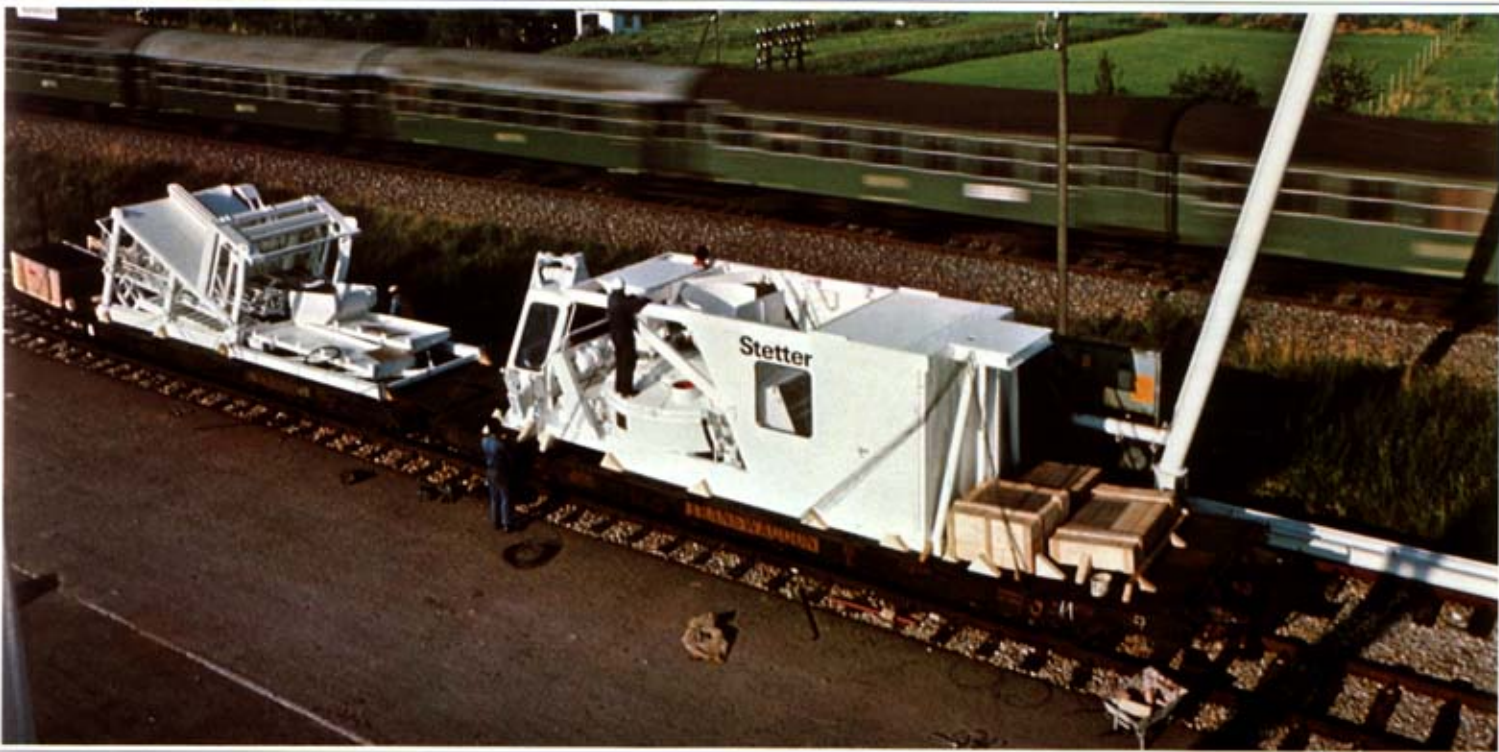
Fully automatic control system series 900. Type 960: Industrial PC with dealer, customer, construction site data memory, order handling, recipe and consumption memory, delivery note printer, log printer. Power and control part in a separate control cabinet. Operating part with illuminated operational chart integrated in the desk. (Illustration below)



Transport

Saving money begins with the transport. Therefore we have designed the two main units of the plant to allow transport on normal lorries. A semi-trailer will take the complete upper and lower sections. Another lorry is, of course, required to take the radial scraper, the cement screw conveyors, the access stairs, and the maintenance walkways. Transport by rail is no problem either. To sum up: There is no need for a low

loader or special vehicle for transport, which definitely is another cost-saving asset.



Stetter compact plants. Easy change of plant location. Low transport volume.

Erection

All assembly and fitting work has, in fact, been done in our works. At the site you need only join the few assemblies – this does not take much time and saves cost, also when it comes to a change of the plant location occasionally. As mentioned before, the Stetter compact concrete plants do not require pits which, of course, means low foundation cost. The illustrations show how the plant is erected.



**Stetter unit construction system:
Rapid erection. Low costs.**

We offer a complete line of ready-mixed concrete equipment

Concrete mixing plants, truck mixers, concrete pumps and concrete recycling plants. A system which covers every single requirement in the ready-mixed concrete industry. »All from one source« – that means only one partner. For purchasing. For servicing. For spare parts. This will enable you to simplify your own business structure to a considerable extent. Our wide range of equipment permits full adaption to

site conditions and to the specific requirements of your clients, whether at the manufacturing stage (mixing plant), the transporting stage (truck mixer) or the placing stage (concrete pump). Waste concrete is inevitable in the manufacture and handling of ready-mixed concrete. Our recycling plants permit the reconditioning of residual concrete – a most economical method of environmental control.



Waste recovering

with Stetter concrete recycling plants available in two different sizes and washing capacities.

Transporting

with Stetter truck mixers available in capacities of 6, 7, 8, 9, 10 and 12 m³ or as 8, 9, and 10 m³ mounted on a semitrailer. Drive hydraulically via secondary drive of truck or by separate engine. Equipment for fluid concrete or mortar. Combined with belt conveyor or concrete pump.



Mixing

with Stetter mixing plants. In modular construction. Horizontal or vertical aggregate storage. In stationary or mobile execution. Turbo or twin-shaft trough mixer. Outputs from 32 up to 150 m³/h fresh compacted concrete (depending on consistency).



Pumping

with SCHWING concrete pumps. Either stationary or truck mounted. Distributing booms with heights from 16 to 52 m. Pump capacity from 56 up to 130 m³/h. Concrete distribution equipment for all building sites.



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