

# HORIZONTAL CONCRETE MIXING PLANTS

Horizontal Concrete Mixing Plants HN 1.5 – HN 4.0 | H 5 – H 6

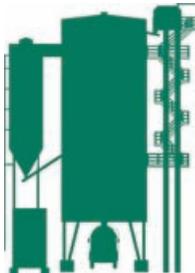


## SCHWING-STETTER MOVES CONCRETE. **WORLDWIDE.**

Wherever concrete is produced and moved is where you will find Schwing-Stetter machinery.

With plants in Germany, Austria, USA, Brazil, Russia, China and India as well as with more than 100 sales and service facilities, the group of companies is always close to the customer.

Our wide range of products with something for every application is what makes Schwing-Stetter the No. 1 system supplier for concrete machinery worldwide.



CONCRETE MIXING PLANTS



TRUCK MIXER



TRUCK-MOUNTED CONCRETE PUMPS



STATIONARY CONCRETE PUMPS



SEPARATE PLACING BOOMS



CONCRETE RECYCLING PLANTS

## OUR EXPERIENCE COUNTS. THE MODULAR MIXING PLANT GENERATION.

Stetter horizontal concrete mixing plants HN 1.5 – HN 4.0 and H 5 – H 6 incorporate the experience of over 45 years in mixing plant technique.

Depending on the requirements, the HN-type series is equipped with pan mixer or twin-shaft mixer. While designing the plant, high importance was attached to the access thereby facilitating maintenance. In addition, the generously dimensioned space allows this plant to be offered in a wide variety which can be taken from a modular system. H 5 – H 6 are plants for mass requirements, which can be suited to the individual demands by adapting the design.

The HN-plant can be supplied completely mounted in our works or as partially assembled unit, e.g. for export with locally manufactured components.

HN 1.5 – HN 4.0 have been designed as stationary plants or as semi-mobile plants without foundation.



**THE HORIZONTAL MIXING PLANTS HN 1.5 – HN 4.0.**  
**RELIABLE, COST-EFFECTIVE, MODULAR.**



*HN 3.0 with twin-shaft mixer, capacity 120 m<sup>3</sup>/h compacted concrete.*



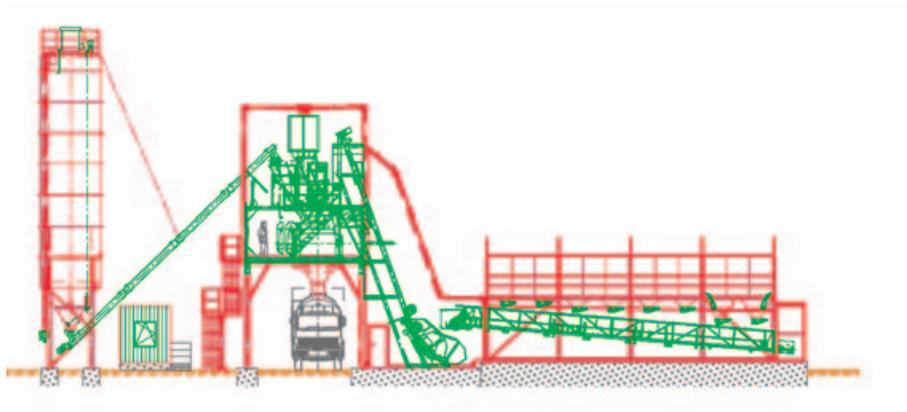
*HN 2.25 with pan mixer, capacity 100 m<sup>3</sup>/h compacted concrete.*



*HN 1.5 with pan mixer, capacity 78 m<sup>3</sup>/h compacted concrete.*

## THE VERSIONS:

### IN-LINE SILO, WITH SKIP OR INCLINED BELT CONVEYOR.

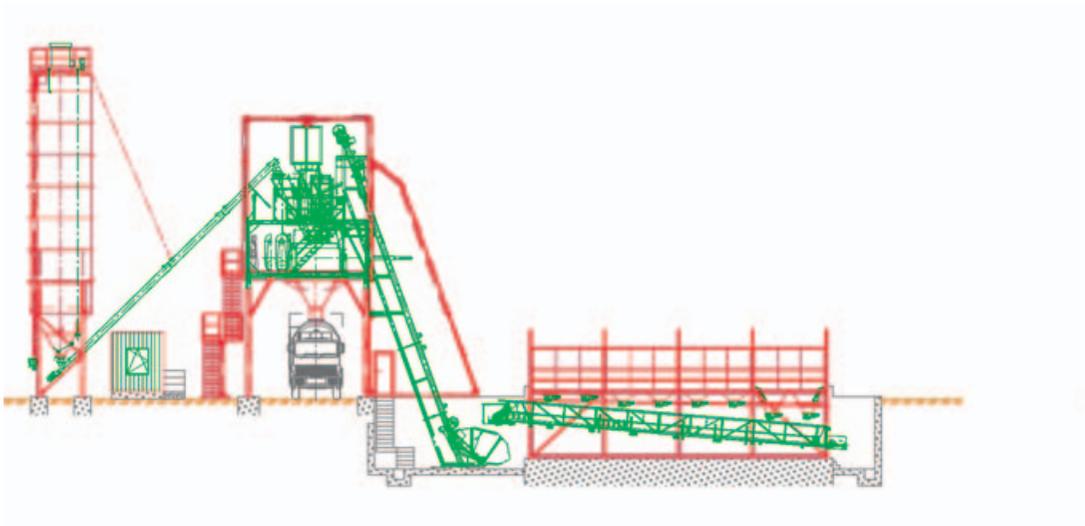


#### VERSION 1: IN-LINE SILO WITH SKIP

If four or more types of aggregates are used, they can be stored in an in-line silo. Each aggregate component is kept in a steel or a concrete silo provided by the customer. An intermediate storage facility can also be built if the aggregates cannot be delivered at short notice for large concrete requirement.

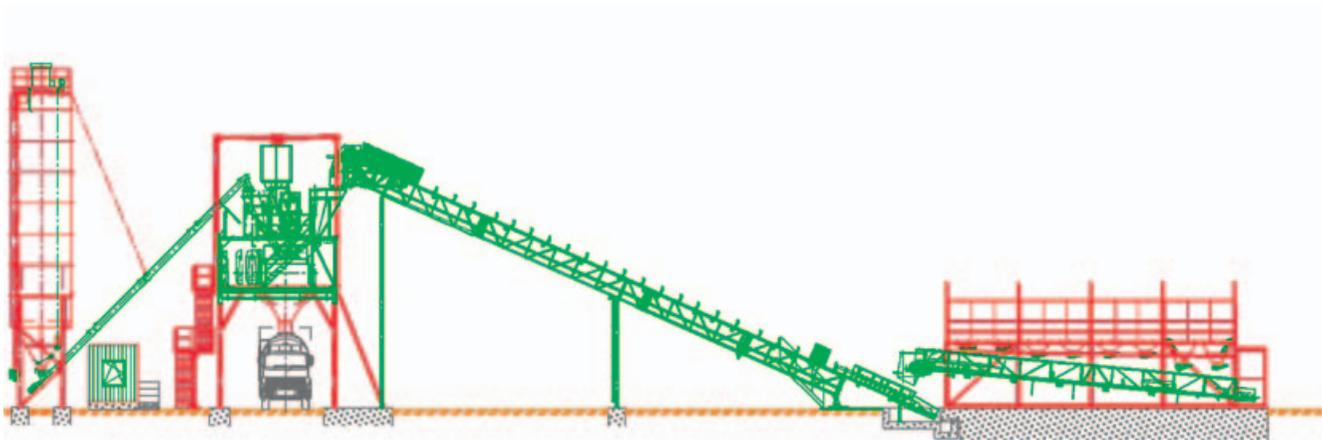
Weighing of aggregates is done on a weighing belt appropriate for calibration. The belt conveyor feeds and transfers the aggregates into the feeder skip of the mixing plant as soon as the weighing process has been completed. The in-line silo compartments are fed by wheel loaders or belt conveyor equipment.

As an alternative to a complete delivery of the plant, the modular concept also allows the supply of locally manufactured components, such as in-line silo, cement silo, plant housing platforms, stairs, etc. Due to this possibility, the transport cost and customs duties can be reduced and the relatively lower procurement cost level of some export countries can be made use of.



### VERSION 2: SEMI-SUNK IN-LINE SILO

Sinking of the in-line silo into a pit is economically worthwhile. The required ramp becomes extremely short or is not necessary at all. The space required is less, and in addition the operating costs for the wheel loader are reduced. In winter operation, the pit execution decreases the expense for works' logistics, and heating of the in-line silo becomes considerably cheaper.



### VERSION 3: IN-LINE SILO WITH INCLINED BELT CONVEYOR

Should the aggregates be fed to the plant via an inclined belt conveyor, the entire skip equipment of the plant is not needed. In this case, an in-line silo with four or more aggregate compartments is placed in front of the inclined belt conveyor. Batching of the aggregates is done via a weighing belt appropriate for calibration. The weighing belt feeds and transfers the aggregates onto the inclined belt conveyor as soon as the weighing process has been completed. The inclination angle to the mixing plant is between  $16^\circ$  and  $24^\circ$ . The aggregates are transported by the inclined belt conveyor into an intermediate storage hopper above the mixer. From there they flow directly into the mixer via a flap valve.

## STETTER PAN MIXERS.

### YOUR GUARANTEE FOR QUALITY CONCRETE.

Stetter pan mixers guarantee production of quality concrete in all slump ranges as they mix intensively, thanks to short mixing paths both horizontally and vertically.

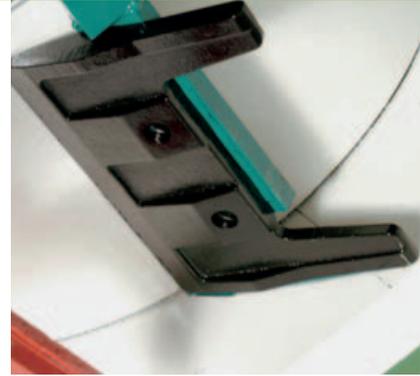
Therefore, homogenous concrete is produced with Stetter pan mixers with short mixing times and low energy input.

The mixing tools of the Stetter pan mixers are laid out to experience extremely low wear. The spring-mounted mixing arms can be adjusted quickly and without difficulty and are protected against wear by polyurethane sleeves. Upon request, our mixers can also be made available with shovels made of synthetic material for particularly long lifetimes instead of the standard mixing shovels made of special chilled cast iron.

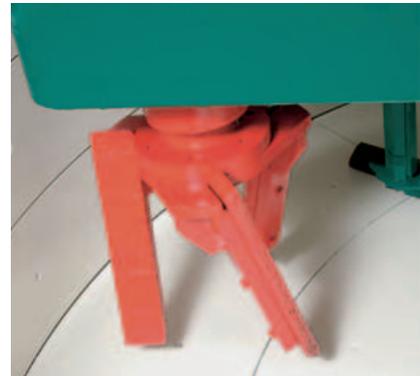
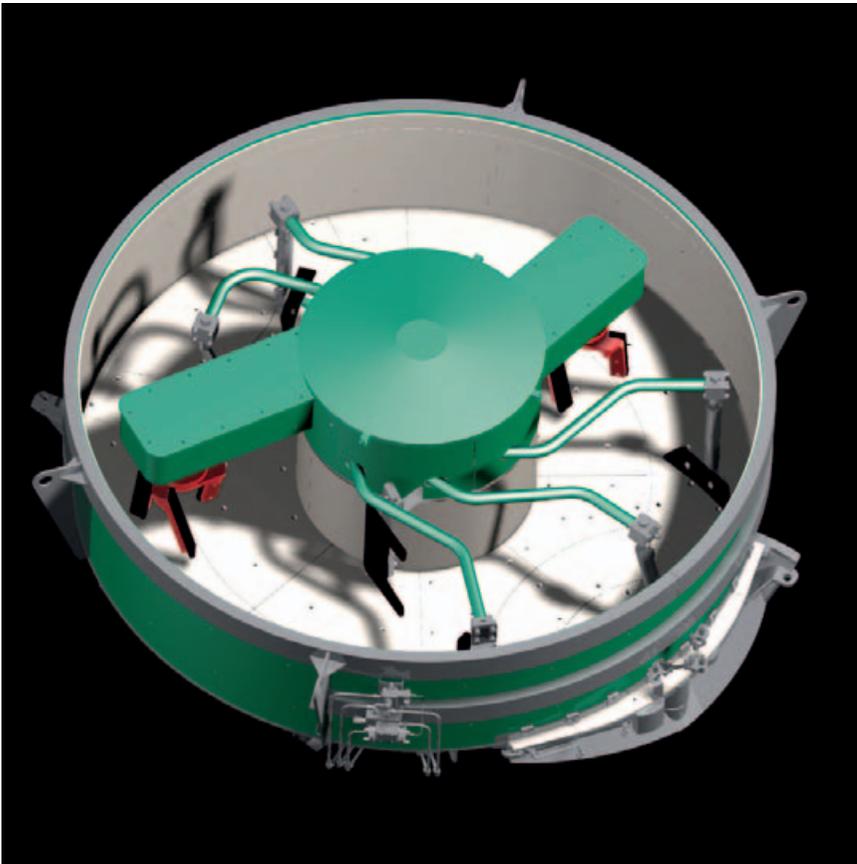
The mixing trough is lined with replaceable wear plates on the inner and outer wall as well as on the mixing trough bottom. The mixing trough bottom can be lined either with normal wear plates made of special steel or special chilled cast iron tiles, depending on the characteristics of the aggregates to be handled. The wear plates on the bottom can be turned upside down. Due to all these sound characteristics we have been able to extend the lifetimes of our mixers considerably.

The pan mixer can be equipped with up to three hydraulically actuated discharge gates which are driven by the mixer motor. The dustproof mixer cover can be opened up to 70 % for maintenance and cleaning.

Available as additional equipment are steam injection and high-pressure cleaning systems.



*Pictures top left and right: the inner and outer scraper support mixing and discharging effect.*



*Agitators with reinforced agitating tools experience particularly low wear.*



*Large-dimensioned mixer discharge with hydraulically actuated sliding gate for fast discharging.*

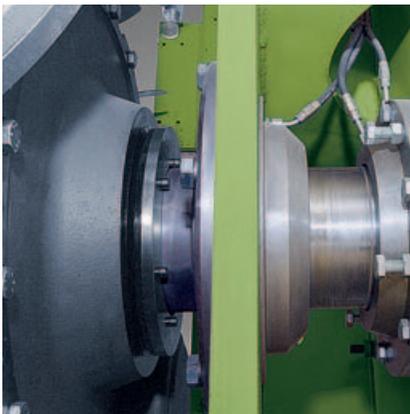
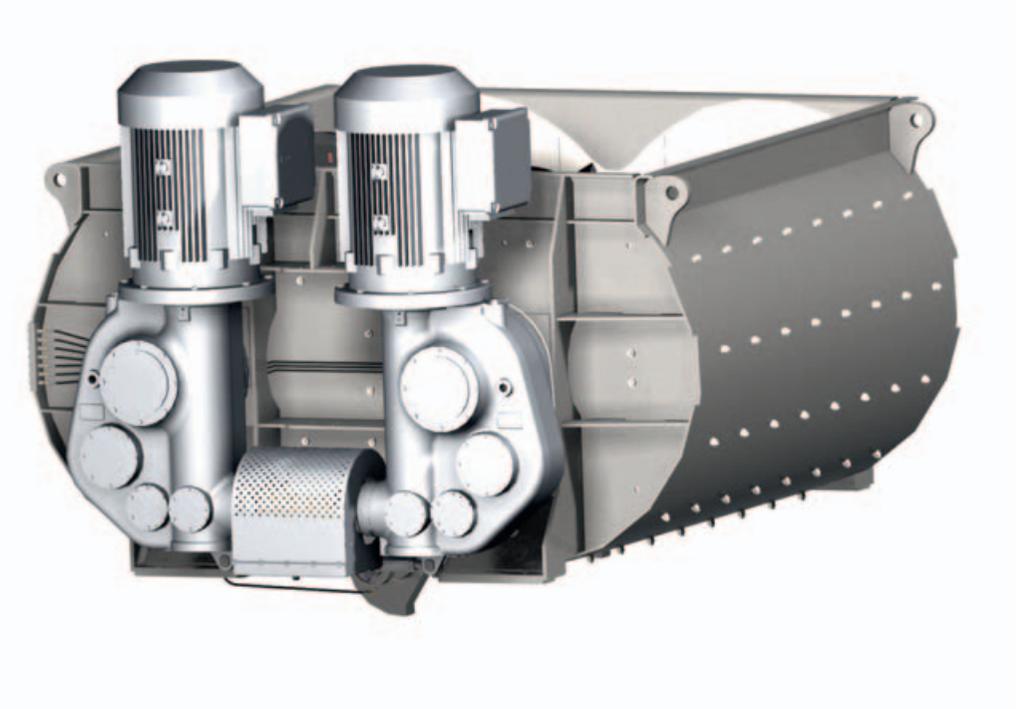


*The drive with planetary gear and flange-mounted hydraulic pump.*



*Power failure? Taking this into account, we have integrated a hydraulically operated manual discharge device.*

**STETTER TWIN-SHAFT MIXER.**  
**EXCELLENT MIXING EFFECT AND**  
**TIME SAVING.**



*Separated: sealing and bearing.*



*The discharge gate.*



*The pneumatic discharge gate operation.*

Excellent mixing effect with short mixing and discharge times, a wide range of applications as well as low wear: these are the characteristics of Stetter twin-shaft mixers – trough mixers in compact design with two mixing shafts rotating against each other made of high-strength heat-treated steel.

Thanks to Stetter's heavy-duty mixing unit, an intensive agitation of the mixture is reached resulting in fast homogeneity of the mixture. The new compact drive concept offers numerous advantages in daily operation. At first there is the easy access to all components of the mixer for maintenance and repair. And, thanks to the monobloc design with motor and gearbox forming one unit, misalignments and deviations in angles between the axles cannot cause problems.

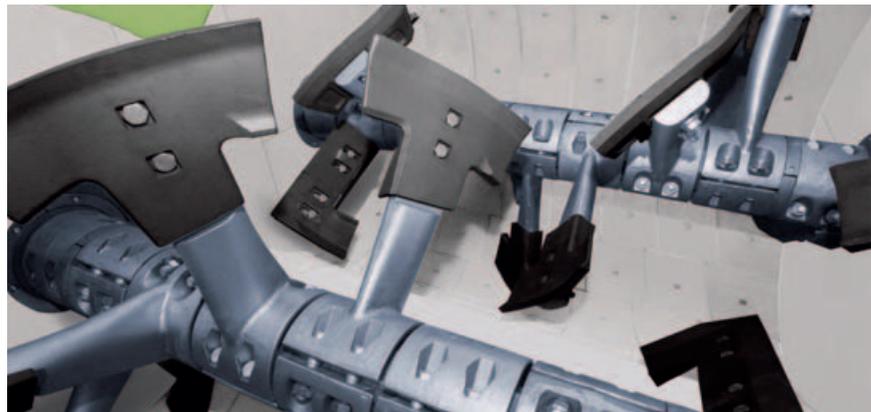
The mixing arms, made of high-quality cast steel, are arranged on the two hexagonal mixing shafts in a spiral shape. A large overlapping of the tools and a low filling factor were envisaged. An intensive exchange of the mixture is guaranteed together with the flow-supporting blade configuration.

Moreover, the low peripheral speed and the special design of the mixing tools as well as the application of high-quality cast material provide for a long service life of the wear parts.

Even more: the mixing shafts are sealed towards the interior with a slide ring seal. An automatic grease lubrication system can be supplied for these four slide ring seals as an option.

Durable spherical roller bearings are used for the mixing shafts. The bearings are arranged outside of the shaft sealing and accommodated in a separate housing. All these features result in low maintenance requirements and save time and cost.

Optionally available: a special mixing unit for coarse grain for production of dam concrete. This enables the use of aggregates up to a grain size of 180 mm.



*The robust and high-capacity mixing unit is designed to be particularly energy saving.*

# SOPHISTICATED IN THE DETAILS.

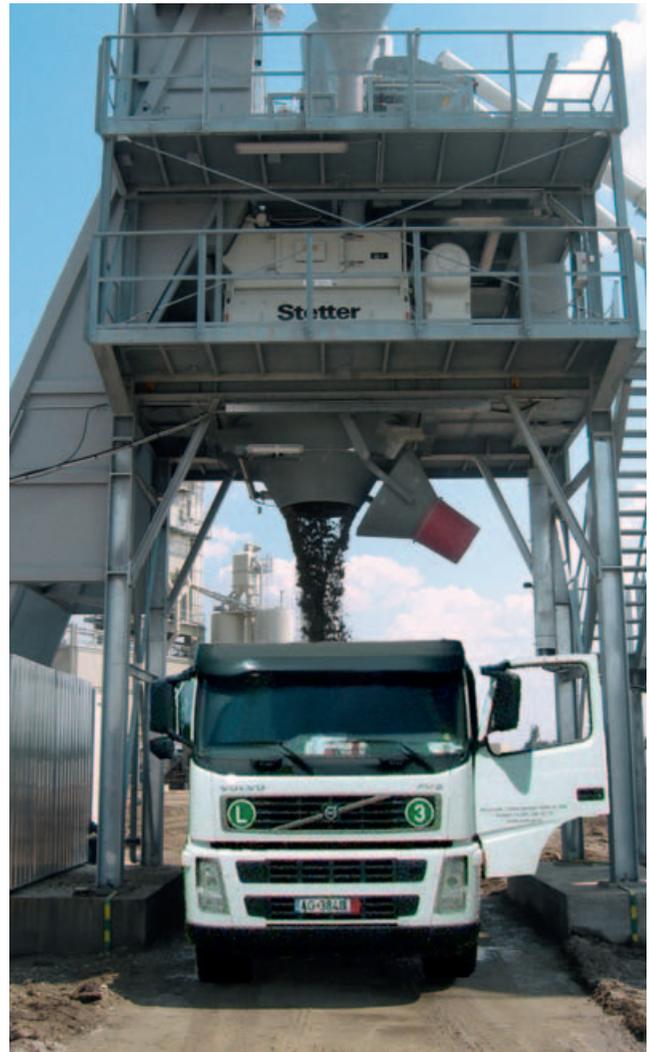
## THE HORIZONTAL MIXING PLANTS HN 1.5 – HN 4.0.



*The large-dimensioned skip with an optimum shape guarantees complete emptying.*



*The mixer discharge for filling truck mixers.*



*Discharge onto open truck.*



*Forced dedusting from the mixer.*



*The cement weighing system for up to seven types of cement.*



*Ice weighing system for weighing of flake ice.*

No matter which plant you opt for: these are the advantages you receive, thanks to the compact modular system of Stetter horizontal mixing plants:

- Fast erection
- Accessibility all around
- Very spacious and convenient mixer and weighing platform
- Clear arrangement and ease of maintenance
- Optional supply of a mixer ventilation filter
- Optional supply of a mixer cleaning system
- Optional supply of an ice weighing system
- Optional supply of a powder weighing system
- Optionally available with housing
- Optional supply of a camera system for the mixer
- Optional foundations for the complete plant for semi-mobile application



*Nozzle heads for cleaning of the mixer.*

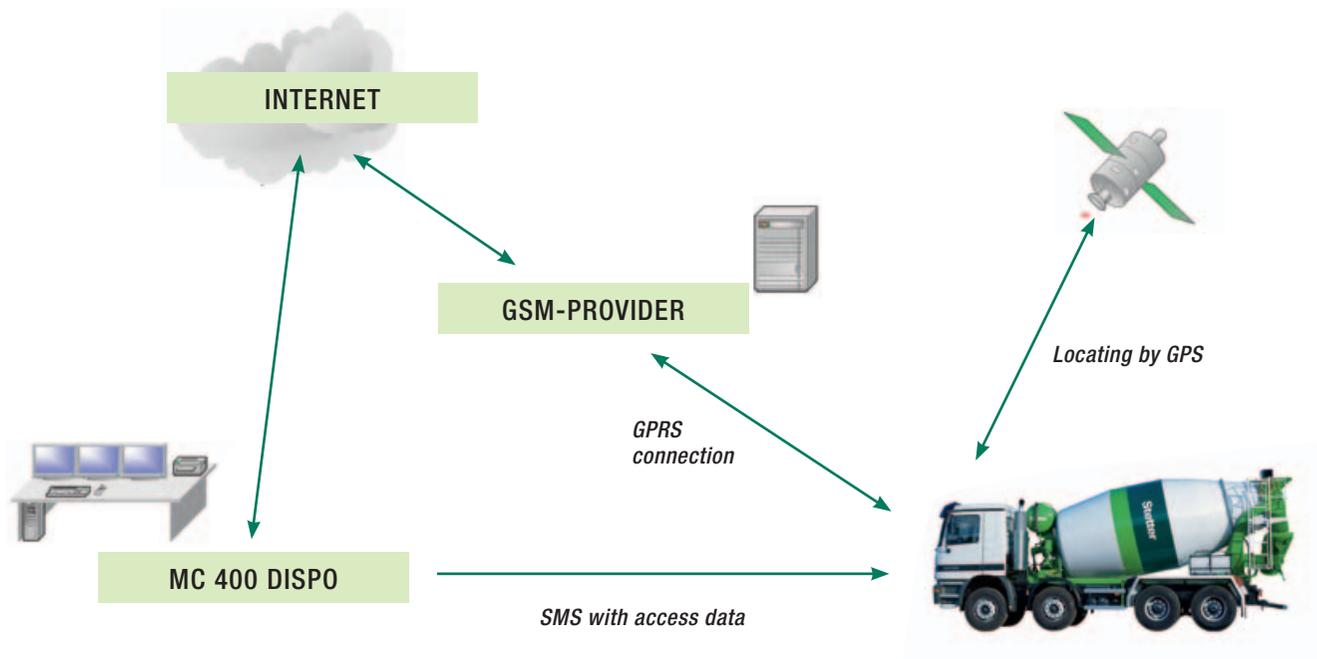
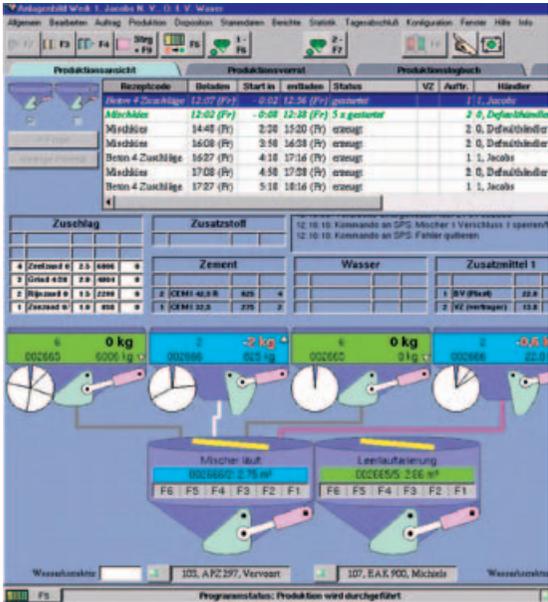


*Admixture weighing system for chemical additives.*



*Water weighing system with discharge pump for pressurised feeding of water into the mixer.*

# STETTER CONTROL SYSTEMS. QUALITY FROM OWN DEVELOPMENT AND PRODUCTION.



Wagen	Liefer.	Gebäude	Fahrzeug Typ	Fahrzeug
Wagen 1	27	11.00 m²	Fahrzeu	100, 11.0 m², A2C 257
Wagen 2	8	20.00 m²	Lehrwagen	107, 20.0 m², EAK 900
Wagen 3	7	13.00 m²	Fahrzeu	106, 13.0 m², 111
Wagen 4	10	10.00 m²	Fahrzeu	007, 10.0 m², 26635
Wagen 5	20	10.00 m²	Fahrzeu	104, 10.0 m², 211146
Wagen 6	11	10.00 m²	Lehrwagen	005, 10.0 m², 8111 889
Wagen 7	39	10.00 m²	Fahrzeu	006, 10.0 m², BOSMAN

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Stetter is well experienced in the development of control systems.

The solutions are perfectly adapted to the requirements and needs of the concrete industry.

We handle your projects professionally with a high degree of flexibility and reliability and keep on providing you with service, even after installation.

Only this way are we able to ensure customers' satisfaction which we have achieved with several thousands of installed control systems.

### 1. TRIED AND TESTED SOLUTIONS FOR THE CONCRETE INDUSTRY

Production of concrete requires more than just a simple control system for the mixing plant. The complete stage of expansion of our software for the control system comprises the preparation of quotations, the planning of orders, production of concrete, fleet management and invoicing.

Different statistical evaluations are required to control production and turnover. If several concrete mixing plants are part of the total production turnover, networking, a common data stock and a transparent control are the most important factors.

All this is offered by Stetter – customised exactly to your specifications.

### 2. QUALITY AND RELIABILITY

We attach special importance to tried and tested first-class components when selecting the hardware. Only this way are we able to assure you of smooth operation, even under the most difficult conditions. Our control systems are checked with the most modern test and simulation tools during their development. An extensive final testing ensures constant high quality.

### 3. FLEXIBILITY AND INVESTMENT SECURITY

The architecture of our software produced with the most modern methods of development in our own works guarantees the highest flexibility: thanks to their possibilities in configuration, software and systems offer simple adaptation to your operating schedule – even if it changes in a few months.

Also, preparation of wiring diagrams and manufacture of switch cabinets is done in our own works. So we can optimally suit the control systems to our concrete mixing plants.

Upon request, we integrate our control systems also in external installations.



# STETTER HORIZONTAL MIXING PLANTS HN 1.5 – HN 4.0 | H 5 – H 6.

Wherever quality is in demand.



## EVERYTHING AT A GLANCE: THE TECHNICAL DATA OF THE COMPACT CONCRETE MIXING PLANTS HN 1.5 – HN 4.0 AND H 5 – H 6.

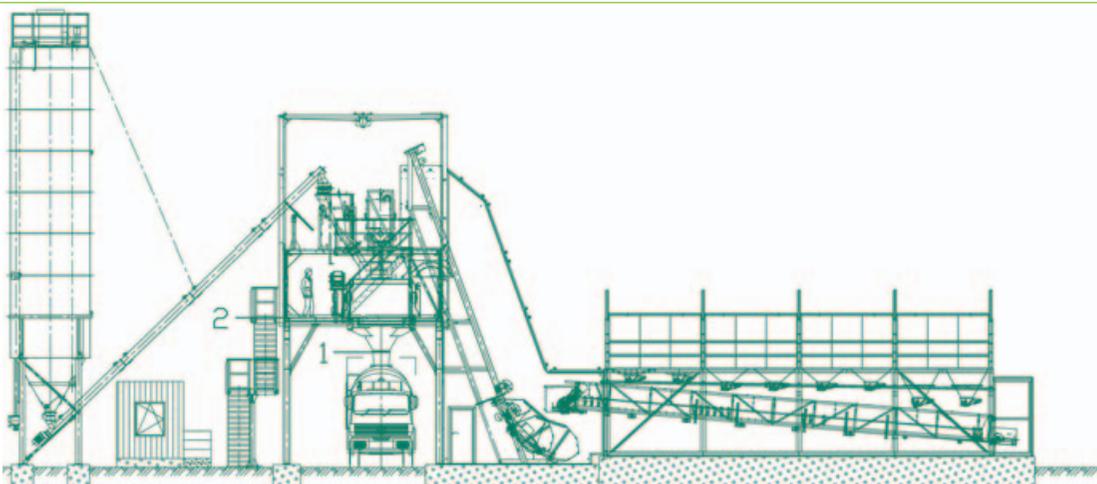
### TECHNICAL DATA (STANDARD TYPES) HN 1.5      HN 1,67

#### MIXER SIZE (FILLING QUANTITY/COMPACTED CONCRETE)

Pan mixer	m <sup>3</sup>	2.25/1.5	2.5/1.67
Twin-shaft mixer	m <sup>3</sup>		2.5/1.67
Capacity (compacted concrete with 30 s mixing time)	m <sup>3</sup> /h	75	80
Max. capacity (compacted concrete)	m <sup>3</sup> /h	79	88
Concrete discharge height <sup>1)</sup>	m	4.15	4.15
Height of mixer platform <sup>2)</sup>	m	5	5
Aggregate weighing system/in-line silo	kg	3,750	4,175
Cement weighing system	kg	750	1,125
Water weighing system	kg	400	600
In-line silo with compartments		4–8	4–8
Aggregate storage with compartment length 3.5 or 4.0 m	m <sup>3</sup>	32/36	32/36
Aggregate storage with increased height	m <sup>3</sup>	40/45	40/45
Types of aggregate		4–8	4–8
Types of cement	bis	6	6
Water connection	DN	80	80
Operating pressure for water	bar	3–4	3–4
Connected load (approx.)	kVA	140	160

*From type HN 4.0 only available as inclined belt conveyor execution.*

HN 2,0	HN 2,25	HN 2,5	HN 3,0	HN 3,35	HN 4,0	H 5,0	H 6,0
3.0/2.0	3.375/2.25						
	3.375/2.25	3.75/2.5	4.5/3.0	5.025/3.35	6.00/4.00	7.5/5.0	9.0/6.0
90	100	110	120	130	150	180	200
102	115	125	150	162	180	200	220
4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
5.45	5.45	5.9	5.9	5.9	5.9	5.9	5.9
5,000	5,625	6,250	7,500	7,500	10,000	12,500	15,000
1,125	1,125	1,500	1,500	2,100	2,100	2,500	3,000
600	600	800	800	1,125	1,125	1,500	2,000
4-8	4-8	4-8	4-8	4-8	4-8	4-8	4-8
32/36	32/36	32/36	32/36	32/36	32/36	36/45	36/45
40/45	40/45	40/45	40/45	40/45	40/45	40/45	40/45
4-8	4-8	4-8	4-8	4-8	4-8	4-8	4-8
6	6	7	7	7	7	7	7
80	80	80	80	80	80	80	80
3-4	3-4	3-4	3-4	3-4	3-4	4-6	4-6
180	200	225	250	250	275	300	320



SCHWING-STETTER ALWAYS CLOSE TO THE CUSTOMER.



- ▧ Parent plant
- Production subsidiary
- Own/independent sales and service company

Subject to technical and dimensional modifications.  
Photos are not binding.  
The exact scope of the delivery is listed in the offer.



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