



MIXING TECHNOLOGY

## BATCHING AND MIXING PLANTS



OUR COMPANY

# WHO IS HESS GROUP?

MIXERS, HANDLING SYSTEMS, CONCRETE BLOCK AND PAVER MACHINES, AND PACKAGING LINES

Our passion is developing technically superior machines for the production, processing, and handling of high-quality concrete products — and we have been doing so since 1948.

As a driver of new sustainable innovations and with a distinctive team spirit in an international environment, we continuously expand HESS GROUP's leading market position.

# HESS GROUP WORLDWIDE

As part of the TOPWERK GROUP, HESS GROUP is represented worldwide. With eight international TOPWERK locations and a global network of representatives, HESS GROUP offers optimal service to its customers.



## OUR VISION

## It is our endeavor to discover and create new market needs in close collaboration

with our customers. For this, we develop solutions that make us and our customers innovative pioneers in the concrete block and paver industry.

#### Product

Each of our products is developed specifically according to our customers' needs. Our concrete block and paver plants are characterized by their durability and reliability and can be upgraded with the latest technology even after years.

#### Team

Open and honest communication is essential to us. We work together and develop solutions and results as a team and across departmental boundaries.

### OUR

## **MISSION**

We enable our customers – in collaboration with us – to produce the best concrete blocks and pavers efficiently. The following four factors are paramount:

#### Customers

Our customers are at the center of our actions. We are a reliable and honest partner who, together with them, shapes the digital future of our industry.

### Individual Action

Each of us has high standards for our personal work results. Taking responsibility for one's own actions and seeing mistakes as opportunities for improvement is part of our culture.

## OUR VALUES

As an innovative manufacturer of high-quality concrete block and paver plants, we – together with our customers – ensure our mutual market leadership.



## Quality

For us, quality means combining durability and reliability with the latest technology.

#### Innovation

Innovation involves transforming the market through technology. By continuously enhancing automation, swiftly responding to market needs, and broadening refinement options, we ensure the long-term viability of our products.

#### **Customer Focus**

In partnership with our customers, we fulfill individual requirements. We support them operationally as a know-ledgeable and trustworthy partner.

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HESS BATCHING AND MIXING PLANTS

## PERFECT MIXING **RESULTS IN A SHORT TIME**

We provide the necessary mixing plants for the production of high-quality concrete products, including paving stones, curbstones, hollow blocks, slabs, pipes, manholes, and precast components. Our mixing plants are equipped with all the essential batching devices for aggregates such as cement, water, and additives.

Our SM series concrete mixers are designed to deliver optimal mixing results in minimal cycle time while ensuring easy accessibility. Depending on customer needs and the layout of the plant, we offer a variety of concrete transport systems, including concrete buckets and belt conveyors. Additionally, we provide our premium Colormix dosing systems for colored concrete products.



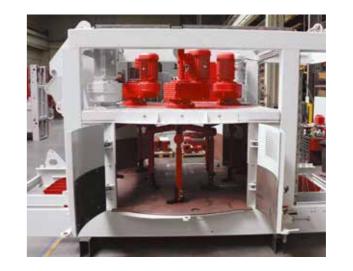
Interior view of mixer with mix material



Mixer SM 2250 with large access for cleaning and maintenance



Colormix dosing system



SM 3375 with double-sided access for cleaning and maintenance

## **FEATURES OF** PLANETARY MIXER SERIES SM

- Self-supporting design with lower and upper
- Separate drive system (for tool plate and mixing stars)
- Stopping and re-starting the filled mixer at any time
- Two large opposite doors for optimal cleaning and maintenance
- Two large discharge openings in the bottom
- Significantly less concrete residues and cleaning effort due to special water supply
- Optionally, a special conveying device for cement addition to the mixer is available (almost dust-free cement addition)
- Due to high mixing intensity, particularly suitable for concretes with low water-cement ratio
- Modern microwave moisture measurement
- Ventilation (dust removal) via airbag or external extraction
- High safety through key transfer system



SM SERIES

## **BASE CONCRETE MIXER**

The SM series base concrete mixers are true powerhouses, specifically designed to produce large quantities of concrete.

Fast homogeneous mixing process and short mixing times are great advantages in producing high-quality concrete blocks and pavers.

When developing these mixers, performance, long-term use, and ease of maintenance were considered. Their efficiency and versatility make them a fundamental tool in the concrete industry.

### **TECHNICAL OVERVIEW BASE CONCRETE MIXER**

	SM 1500	SM 2250	SM 3375	SM 4500
Dry filling [ ]	1,500	2,250	3,375	4,500
Max. filling weight [ kg ]	2,400	3,600	5,400	7,200
Compacted concrete output / batch [ m³ ]	1	1.5	2.25	3
Main drive [ kW ]	22	30	2 x 22	3 x 22
Number of mixing stars and agitator [ pcs ]	2	2	3	3
Skip hoist drive [ kW ]	18.5	18.5	22	30

Technical changes reserved.

## **FEATURES MIXER SM SERIES** STARTING FROM SM 1500

- Self-supporting design with lower and upper frame
- Two large double-winged doors for good accessibility
- Tools
  - 2/3 mixing stars with PU shovel, optional with cast steel shovel
  - Side & bottom scrapers
  - Fast discharge tool
- Electrically driven slide plate as concrete outlet
- Two concrete outlets optional
- Water supply from below for optimal distribution (optional from above)
- Stopping and restarting the loaded mixer at any time



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## FACE CONCRETE MIXER SM 500

The powerful SM 500 is ideal for the production of high-quality face concrete products. Especially in combination with a base concrete mixer of the SM series, individual, high-quality products with a solid base and finest face mix layer can be produced.



#### **TECHNICAL DATA SM 500**

Dry filling [ ]	500
Max. filling weight [ kg ]	800
Compacted concrete output / batch [ m³ ]	0.333
Main drive [ kW ]	15
Number of mixing stars and agitator [ pcs ]	1+1
Skip hoist drive [ kW ]	7.5

Technical changes reserved.

## **FEATURES**

- Sturdy base frame
- Two large doors with robust lock for good accessibility
- Optimized arrangement of mixing tools
- Optimized Pan diameter
- Tools
  - Mixing star with PU shovel, optional with cast steel shovel
  - Powerful agitator with wear-resistant rods
  - Side & bottom scrapers
- Hydraulically driven segment slide plate as concrete outlet
- Water supply from below for optimal distribution (optional from above)
- Optimal mixing results at all filling levels
- Minimum filling quantity of 160 l
- Optional high-pressure cleaning
- Stopping and re-starting the filled mixer at any time

COLORMIX DOSING SYSTEM



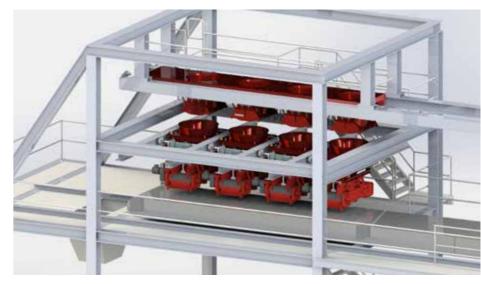
Solution Advanced: Installation of a draw plate with silo extension onto the machine hopper



Solution Professional: Dosing of face concrete with three hoppers



Solution Ultimate: Dosing of concrete with up to four concrete hoppers Colormix system base concrete mix



Colormix system face concrete mix

## **3 COLORMIX SYSTEMS**

## **ADVANCED**

Installing a draw plate with a silo extension on the concrete block and paver machine silo allows for efficient production of Colormix products. The mixing plant supplies concrete in various colors onto the draw plate. The draw plate opens in adjustable sequences, enabling the differently colored concrete to flow into the machine hopper. This solution is suitable for both the face and base mix hopper.

## **PROFESSIONAL**

Three concrete hoppers are placed side by side, each containing differently colored concrete. Each hopper is equipped with a discharge belt that regulates the position of the concrete as it is released onto the collection belt. The frequency-controlled collecting belt to the face mix silo of the concrete block machine can be moved left and right by an electric motor to distribute the concrete evenly into the machine hopper. Since all belt drives are speed-controlled, the color gradient in the final product can be accurately reproduced. Additionally, all parameters can be stored in the corresponding recipes.

## ULTIMATE

The premium solution for producing multicolored concrete products involves a setup with up to four concrete hoppers. These hoppers are filled using a flying bucket that has the same number of buckets, which helps prevent contamination of colors before dosing. The discharge belts are both movable and speed-controlled. Additionally, the collection belt is also movable and speed-controlled, ensuring a controlled distribution of multicolored concrete into the hopper. This setup guarantees the reproducibility of defined color gradients in the final product. All parameters can be stored based on specific recipes. A similar system is also available for base concrete.

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# BATCHING AND MIXING PLANT CONTROL

CONTROL OVER ALL FUNCTIONS



## Holistic process overview

With just one glance, the entire process of the mixing plant is captured. This enables quick and efficient monitoring and control.

## Minimal interaction required

Components are controlled with as few mouse clicks as possible. This reduces the effort for the operator and increases productivity.

## Intuitive user interface

The design is clear and easy to understand. An intuitive user interface makes it easier to control the batching and mixing plant.

## Simple and reliable moisture control in the concrete

Our moisture measurement and water dosing are characterized by intuitive handling and precise function. The entire effort for process-safe handling of concrete recipes has been reduced to a minimum.

## Precise diagnostics

The diagnostic function supports quick troubleshooting and minimizes downtime. Context-related tooltips or pop-up messages help with this.

## Shift management

The software features a shift management system. Complete shift processes are logged, and all production-relevant data of the manufacturing process are collected and stored.

## Comparable recipes

The additional function of comparable recipe data extends your plant visualization, allowing you to compare the current parameters of the batching and mixing plant with previously stored recipes.

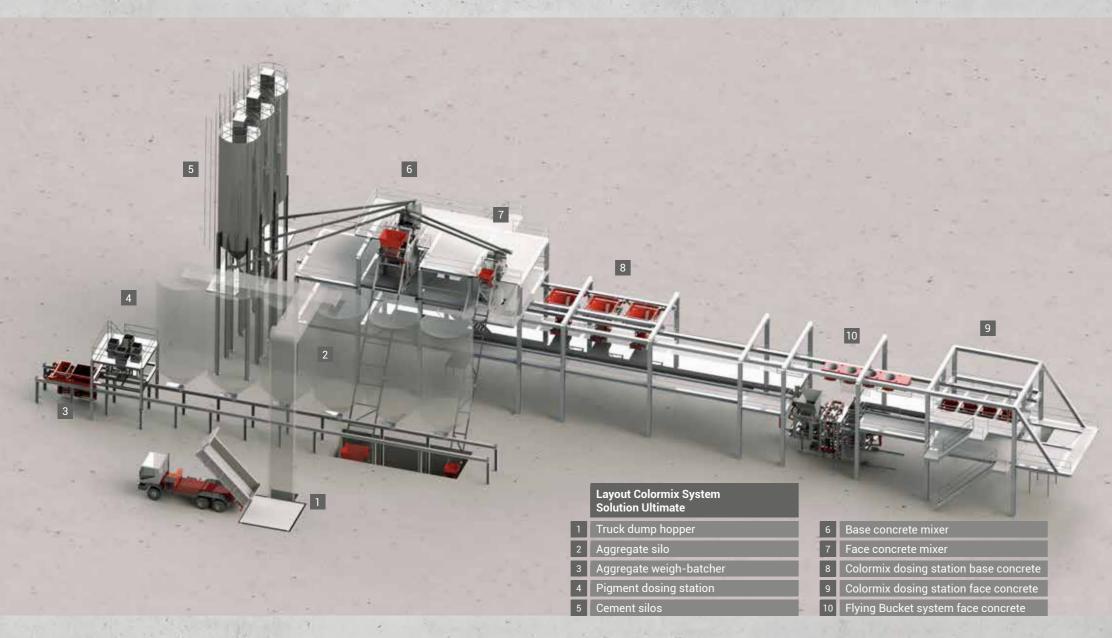
## Comprehensive statistical analysis

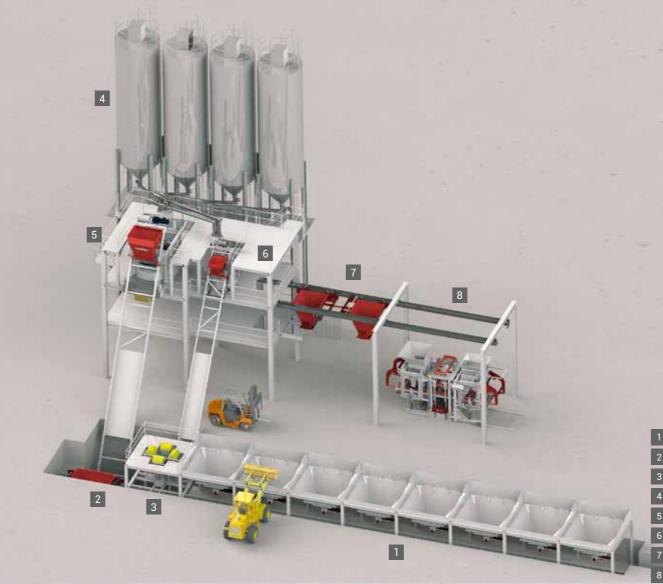
All relevant data points of the mixing process are collected, stored, and available for evaluation. An optional connection to the ERP system of the customer is available. All material consumption data from the mixing plant can thus be managed by the customer.

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COMPLETE PLANTS

COMPLETE PLANTS





## Layout Colormix System Solution Advanced

- 1 Aggregate sil
- Aggregate weigh-batche
- 3 Pigment dosing station
- 4 Cement si
- ociniciti silo
- 5 Base concrete mixer
- 6 Face concrete mixer
- 7 Double flying bucket sys
- 8 Colormix device with draw

END PRODUCTS























### AFTER SALES SERVICE

## **SERVICE PORTFOLIO**

Our team will support you in all your needs and commit to first-class service to fulfill your requirements. Benefit from our many years of experience and find the right solution with us. Our services ensure for optimum plant uptime:

**Retrofit** Customized solutions for

conversions and upgrades

Parts High-quality spare parts, intuitive

cloud-based catalog, AI parts identification

**Concrete** Optimize the production and quality

Technology of your concrete products

Service on site Fast, competent on-site service,

minimal downtime

**Hotline** Support hotline for technical issues

Consulting Individual solutions, professional

advice, experienced team of experts



#### **Smart**Parts

More efficient spare parts procurement through intuitive and interactive identification and ordering



## **Smart**Check

Improved availability and effectiveness of your plant through HESS plant inspection



## **Smart**Cloud

360° overview of the HESS plant and processes



## **Smart**Academy

More effective plant operation & maintenance through training your employees



## **Smart** Vision

Faster troubleshooting and reduced downtime through live video transmission and support from HESS engineers



# BE PART OF OUR EVOLUTION...

SmartFamily gives you a 360° view of your HESS concrete block and paver plant.

This solution includes services and functions in the areas of training, spare parts, inspection, maintenance employing a dynamic maintenance calendar, remote support, and monitoring of your entire HESS plant.

The central feature of **Smart**Family is the **Smart**Cloud.



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## **HESS Group GmbH**

Freier-Grund-Strasse 123 57299 Burbach-Wahlbach, Germany

Phone: +49 2736 4976 0 E-mail: info@hessgroup.com

www.hessgroup.com

We put concrete into shape