

Mobile screening plant

MOBISCREEN MSC EVO



A LONG HERITAGE OF EXPERTISE

Efficient crushing and screening plants.

For the past 100 years, KLEEMANN GmbH has been developing and manufacturing machines and plants for the natural stone and recycling industries.

High levels of performance and innovative details, simple handling and maximum safety for the operator - this is what KLEEMANN crushing and screening plants stand for.

THE KLEEMANN PRODUCT RANGE

MOBICAT

Mobile jaw crushers

MOBIXREX

Mobile impact crushers

MOBICONE

Mobile cone crushers

MOBISCREEN

Mobile screening plants

MOBIBELT

Mobile stackers

Over 100 years of
tradition

A WIRTGEN GROUP Company
An internationally active group of companies



With more than 200
subsidiaries and dealers in Germany and abroad

KLEEMANN

MOBISCREEN MSC 702(i) | 703(i) | 952(i) | 953(i) EVO

Where flexibility meets precision.

The MOBISCREEN MSC EVO classifying screens stand out with their flexibility, excellent transport properties, fast set-up times and efficient operation - and all this with the best performance values. The screening plants are available in double-deck or triple-deck versions.

The MOBISCREEN MSC EVO mobile screening plants are designed for many different application conditions and feed materials in natural stone and recycling. In spite of the wide variety of tasks, the exact separation of fractions is clearly the highest priority. High precision is achieved thanks to an optimal material flow, the best possible utilisation of the screening surface and the simple adjustment of screening parameters

such as screening angle and vibrating amplitude. This applies both to individual applications as well as the interlinked combination of plants. Operation of the screening plants takes place via a mobile control system, which means that all functions are easy to control and operating status and machine functions can be viewed at any time.



Precision in the foreground



Main focus on output



Operability at a glance



MOBISCREEN
EVO

THE HIGHLIGHTS

Perfectly equipped.

01 Feed hopper

- > Feed hopper with large holding capacity
- > Simple material flow thanks to variable hopper widths

02 Feeding conveyor

- > Extra-wide feeding conveyor for efficient use of the screening surface

03 Screen

- > 2- or 3-deck screen casing with effective screening
- > Large setting and adjustment range of screen angle

04 Control system

- > Simple operating concept reduces the risk of operating errors
- > Automatic start for quick production start

05 Drive

- > Clever hydraulics concept for efficient power transmission
- > Option of external power supply

> Material flow

- > Optimised material guidance for high throughput
- > Line coupling for process- and safety-related linking of plants

> Safety & ergonomics

- > Fast and ergonomic servicing thanks to excellent accessibility

> Transport

- > Simple transportation and fast set-up

> Environmentally friendly solutions

- > Reduced dust and noise
- > Low fuel consumption



KLEEMANN SUSTAINABILITY describes innovative technologies and solutions which are consistent with the sustainability objectives of the WIRTGEN GROUP.

A WELL-DESIGNED FEED HOPPER

The first step towards an optimised material flow.



The MSC EVO classifying screen's feed hopper is generously sized and designed for optimum material flow.

The feed hopper has a large holding capacity and can be loaded conveniently with a wheel loader. Two size variants are available: 8 m³ and 10 m³. The 10 m³ hopper, which is available as an option, can be loaded with a wheel loader with a shovel

width of up to 5 m. To protect the feed hopper, it can be equipped with a wear lining made of wear-resistant steel (KRS) or rubber.



Foldable slotted grate and vibrating slotted grate

To prevent damage to the screen surfaces by excessively large feed material, the feed hopper is equipped as standard with a foldable slotted grate with a gap width of 100 mm. Any existing clogged material can be released conveniently using the mini radio remote control via the hydraulic automatic folding device.

A double-deck vibrating slotted grate is available as an option, which can be equipped with a wire mesh in the lower deck. This enables coarse material to be sorted out and the plant to be fed with a defined grain size.

KLEEMANN > GOOD TO KNOW

The conveying speed of the hopper discharge conveyor can be controlled steplessly. The layer thickness on the feeding conveyor can therefore be adjusted to achieve optimum product quality combined with a high material throughput.



8 m³
Standard hopper

10 m³
Large hopper (optional)

A WIDE FEEDING CONVEYOR

For homogeneous material distribution.

The extra-wide feeding conveyor ensures uniform material distribution, which results in efficient screening surface utilisation and optimised throughput performance.

The MOBISCREEN MSC EVO screening plants feature a 1,200-mm-wide feeding conveyor, which is available in a smooth or cleated design.



1,200-mm-wide feeding conveyor | **Smooth or cleated belt** design



Uniform material transport - including wear protection

The adjustable distribution plate on the feeding conveyor **01** guarantees even distribution of the feed material over the complete width of the screen casing. Via the robust impact plate (wear plate), **02** the feed material slides smoothly onto the first screen surface which significantly increases its service life. The movable feeding conveyor allows optimal loading via the impact plate at different screening angles and with different material compositions.

The optional roll-back protection prevents the material from rolling back. The screen blankets (option) at the screen extend the dwell time of the material and prevent the feed material from jumping over onto the upper deck. Both elements, depending on the feed material, ensure uniform material transport.



- 01** Distribution plate
- 02** Impact plate (wear plate)

EFFECTIVE SCREENING

For best results.

The MOBISCREEN MSC EVO classifying sieve boxes are designed for high outputs at 7 or 9.5 m².

Optimum distribution of the material on the screening surface is guaranteed by adapting the screening angle to the material properties. Productivity and classification accuracy are therefore increased. Thanks to excellent accessibility from all sides and the quick-clamping wedge system, a simple screen surface change is guaranteed.

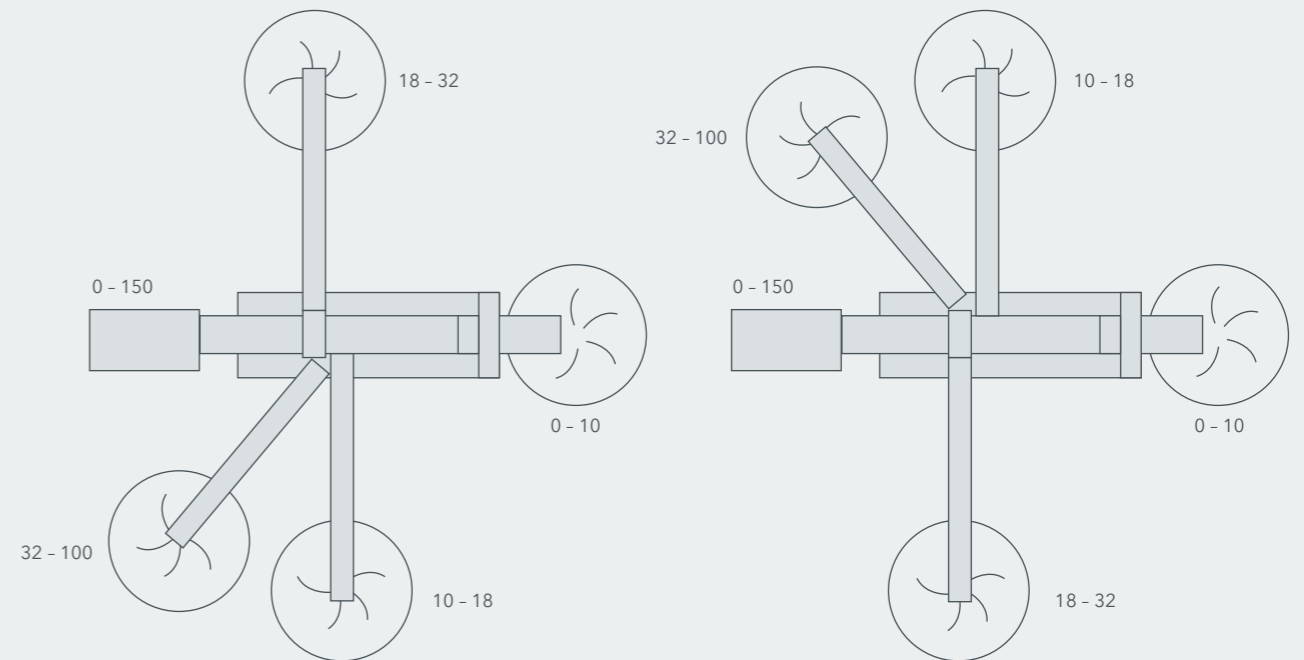
Large selection of screen surfaces for application flexibility

The wide range of screen surfaces enables high application flexibility. Screen beaters can be used for sticky and/or damp feed material to clear blocked screen surfaces again by knocking and therefore maintaining screening efficiency even under difficult conditions.



KLEEMANN > GOOD TO KNOW

The layout of the oversize grain conveyor can be configured on the left or right. High flexibility in the machine layout in combination with upstream KLEEMANN crushing plants can therefore be guaranteed.



7 m²
Screening surface MSC 702(i)/703(i) EVO

9.5 m²
Screening surface MSC 952(i)/953(i) EVO

Screen angle setting ranges

20 - 38°
MSC 702(i) EVO

20 - 30°
MSC 703(i) EVO

20 - 31°
MSC 952(i) EVO

20 - 27.5°
MSC 953(i) EVO

INTUITIVE CONTROL

For simple handling.

With the increasing demands that are placed on modern screening plants, their complexity also increases. At the same time, the technology must be safe and as simple as possible to master - without long training sessions. This is precisely where the strength of the MOBISCREEN MSC screening plants' intuitive operating concept lies.

With the easy-to-use control via a mobile operating device, the handling of the classifying screens is user-friendly and intuitive. The operating concept, which impresses with easy-to-

understand symbols, reduces the risk of operating errors and facilitates work.



Hardware components

The mobile, wired operating device can be connected on three sides of a plant. The functions to be carried out can be optimally viewed at a safe distance, which ensures a high level of work safety. Machine status such as diesel consumption or an initial fault detection can also be viewed at a glance.

An optional radio remote control is also available for comfortable control of the driving functions, the slotted grate and the hopper discharge conveyor. The hopper discharge conveyor can also be switched on and off and its speed can be adjusted. In the standard equipment, a mini radio remote control complements the wired operating device which permits convenient operation of the foldable slotted grate from the wheel loader.

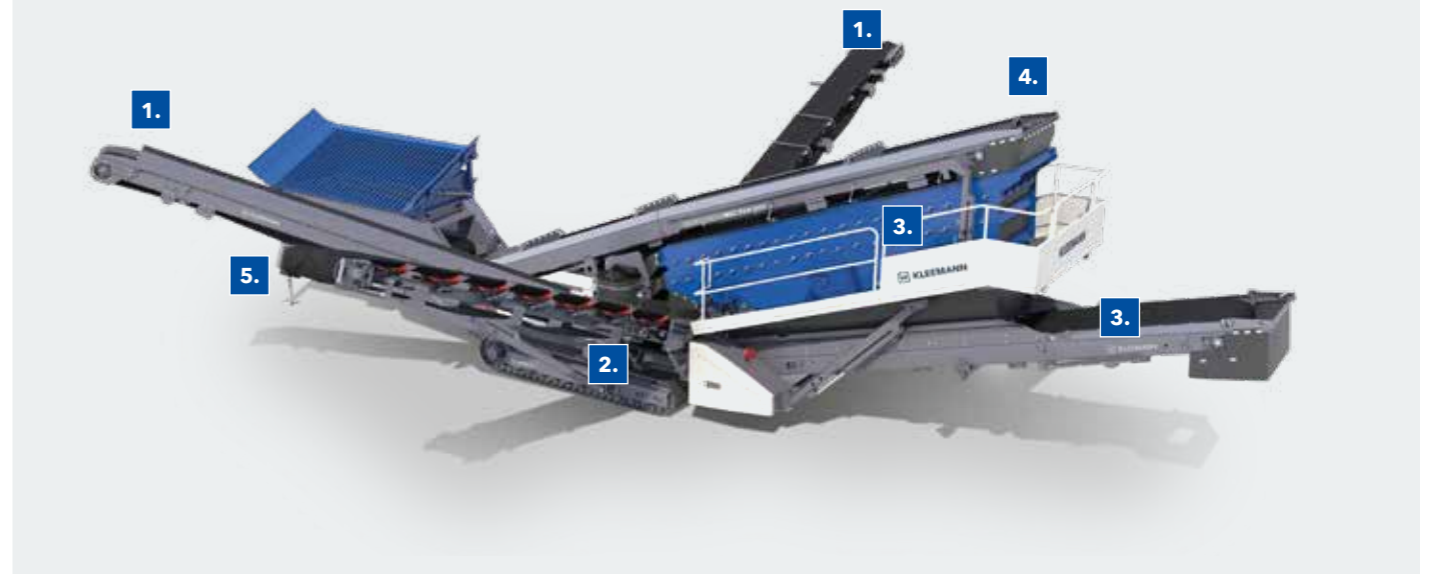
The WITOS FleetView telematics solution

The MSC EVO classifying screens feature the WITOS FleetView telematics solution. The system-supported preparation, transmission, visualisation and evaluation of machine and position data make fleet and service management in day-to-day work even more efficient. Even users with only one plant benefit from WITOS FleetView: from support in maintenance and diagnostic processes to targeted plant monitoring - the range of services is very diverse.

KLEEMANN > GOOD TO KNOW

Automatic mode for quick production start

Automatic mode is an additional positive feature. After the diesel engine is switched on via the push-button, the plant is started up and all subsections and conveyors automatically start up one after the other. This ensures the correct starting sequence and the plant is quickly ready for production. Operating errors are ruled out!



Automatic mode
Safe and quick production start

Mobile, wired operating device
can be connected on three sides

Radio remote control for operation of
driving functions, slotted grate and hopper discharge conveyor

POWERFUL H-DRIVE

For efficient power transmission.

The MOBISCREEN MSC EVO classifying screens have a well-thought-out hydraulic concept that guarantees efficient power transmission.

The MSC EVO plants excel with their powerful H-DRIVE diesel-hydraulic drive concept and reduced operating costs. All maintenance-relevant components are easily accessible. The lubrication points are arranged centrally on the plant

to ensure comfortable maintenance. Service intervals for changing engine oil and filters are designed for maximum intervals.

Efficient drive

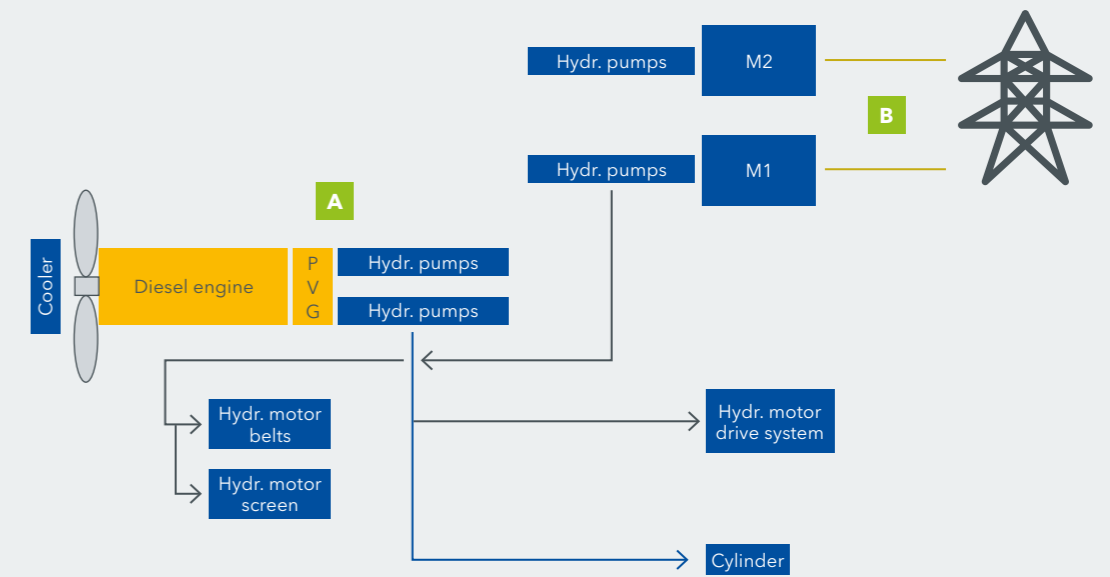
The classifying screens are equipped with an optional Start-Stop system, which can considerably reduce consumption in idling phases. The optional electro-hydraulic Dual Power drive enables electrical operation via an external power supply. Emission-free work is therefore possible as well as lower operating costs.



KLEEMANN SUSTAINABILITY

> Drive via diesel engine **A**

> Drive via an external power source **B**



Diesel-hydraulic
drive



Electric operation
via external power supply

73 - 77 kW
Drive power MSC 702/703(i) EVO

94 - 98 kW
Drive power MSC 952/953(i) EVO

OPTIMISED MATERIAL FLOW

For high throughput.

An optimal material flow on classifying screens is indispensable if you want to process large volumes efficiently.

On the MOBISCREEN MSC EVO classifying plants, the feed hopper width opens in the direction of the material flow. The material is thus transferred perfectly from the hopper discharge conveyor onto the complete width of the generously dimensioned feeding conveyor.

The dosing flap on the hopper unit, which is either lockable or can be adjusted using weights, also ensures a continuous material flow. The impact bar on the belt discharge guarantees homogeneous material distribution on the screening surface.

High discharge

The discharge heights of the discharge belts are designed to the highest possible level, which increases the stockpile volume and with it, the time intervals for clearing the the stockpiles. The use of the wheel loader and the associated costs are therefore reduced.

The discharge height of the fine grain discharge conveyor can be flexibly adjusted so that a transfer of the screening material to a downstream crusher can be optimally adapted. The conveying speed of all discharge conveyors is infinitely adjustable and can therefore be fine tuned.

Line coupling - process and safety linking

For smooth material flow across several crushing and screening stages, the classifying screens can be equipped with the line coupling option. A process and safety linkage with all KLEEMANN plants from the EVO and PRO series is possible. The stockpile probe required for the process coupling can be placed on any of the side discharge conveyors or on the oversize grain conveyor for more application flexibility.

i The MSC EVO screening plants feature a hydraulic port for operating a hydraulically-driven stacker.



SAFETY AND ERGONOMICS

For high operating comfort.

**A screening plant must be easy and safe to operate.
Convenient maintenance is just as important.**

All machine components of the classifying screen plants are exceptionally easy to access to guarantee trouble-free production, simple operation and fast service.



Convenient screen surface changes

The plants are equipped with long and wide platforms safe screening surface changes surface and other maintenance work. The screen casing can be installed in the lower deck in a maintenance position for ergonomic screen surface changes.

Safety in the foreground

The MSC EVO classifying screen plants are ideally configured for safety as well. For instance, all cylinders relevant to function and safety are equipped with lowering brake valves. Even if a hydraulic line is damaged, the respective cylinder stays in its current position - to protect the machine operator and the machine. Safety on the work site is also increased thanks to plant operation via the mobile operating device and therefore at a safe distance and with an ideal view.

SIMPLE TRANSPORT

Quickly on site.

The MSC EVO classifying screens are extremely versatile and very easy to transport thanks to their compact dimensions.

The side discharge conveyors are hydraulically folded and remain on the machine for transport. Thanks to the mobile operating device, set-up is very simple, fast and can be carried out from a safe distance. Precise loading and positioning of the

plant is convenient thanks to stepless drive control. High ground clearance prevents the plant from contacting the ground during loading and unloading and enables space-saving positioning on the low loader.



Transport height

- > MSC 702(i) EVO/ MSC 703(i) EVO: 3,400 mm
- > MSC 952(i) EVO/ MSC 953(i) EVO: 3,385 mm

Transport width

- > MSC 702(i) EVO/ MSC 952(i) EVO: 3,000 mm
- > MSC 703(i) EVO/ MSC 953(i) EVO: 3,200 mm

Transport length

- > MSC 702(i) EVO/ MSC 703(i) EVO: 16,525 mm
- > MSC 952(i) EVO/ MSC 953(i) EVO: 17,960 mm



 **High flexibility**
for changing work locations

 **Short make-ready times**
thanks to uncomplicated set-up

ENVIRONMENTALLY FRIENDLY SOLUTIONS

For a green future.



KLEEMANN
SUSTAINABILITY

The MSC EVO classifying screen plants are equipped with several environmentally friendly innovations.

The screening plants feature engines that comply with current exhaust emission regulations and boast low fuel consumption.

In the idling phases, in particular, consumption can be reduced further with the optionally available **Start-Stop system**:

- > A probe detects if no material is supplied over a defined period
- > The conveying speed of the belts is reduced, which reduces wear (engine, belts, support rollers) and consumption

- > When material starts being supplied again, the plant is restarted and enters production mode
- > Automatic operation ends if no material is subsequently conveyed for a defined period, with the option to switch off the engine as well



Reducing dust volume

For dust reduction, the MSC EVO screening plants have an optional water spray system at the fine grain conveyor. An additional electric water pump is available as optional equipment for self-sufficient supply of the spray system.

The dust load can also be reduced with an optional belt cover for the feeding conveyor and fine grain conveyor.

Start-stop system

low consumption in idle phases

Water spray system and belt cover

for dust reduction

YOUR WIRTGEN GROUP CUSTOMER SUPPORT

Service you can always rely on.

Place your trust in our reliable and fast support during the complete life cycle of your machine. Our wide service offer includes suitable solutions to meet all of your challenges.



Service

We keep our service promises - with fast and uncomplicated assistance both on the building site and in our professional workshops. Our Service team has received expert training. Thanks to special tools, repair, care and maintenance work is completed quickly. Upon request, we can support you with tailored service agreements.

> www.wirtgen-group.com/service



Spare parts

Original parts and accessories from WIRTGEN GROUP can ensure the high reliability and availability of your machines in the long term. Our experts will be glad to advise you on application-optimised wear part solutions. Our parts are available worldwide, at any time and are easy to order.

> parts.wirtgen-group.com



Training

Staff responsible for the WIRTGEN GROUP's product brands are specialists in their areas and have decades of application experience. Our customers also greatly benefit from these experts. In our WIRTGEN GROUP training courses, we gladly pass on our knowledge to operators and service personnel.

> www.wirtgen-group.com/training



Telematics solutions

Construction machines with leading technology and perfected telematics solutions work hand-in-hand in the WIRTGEN GROUP. Intelligent monitoring systems such as WITOS or JDLink* not only facilitate the maintenance planning of your machines but also increase productivity and economy.

> www.wirtgen-group.com/telematics

SCREENING TECHNOLOGY

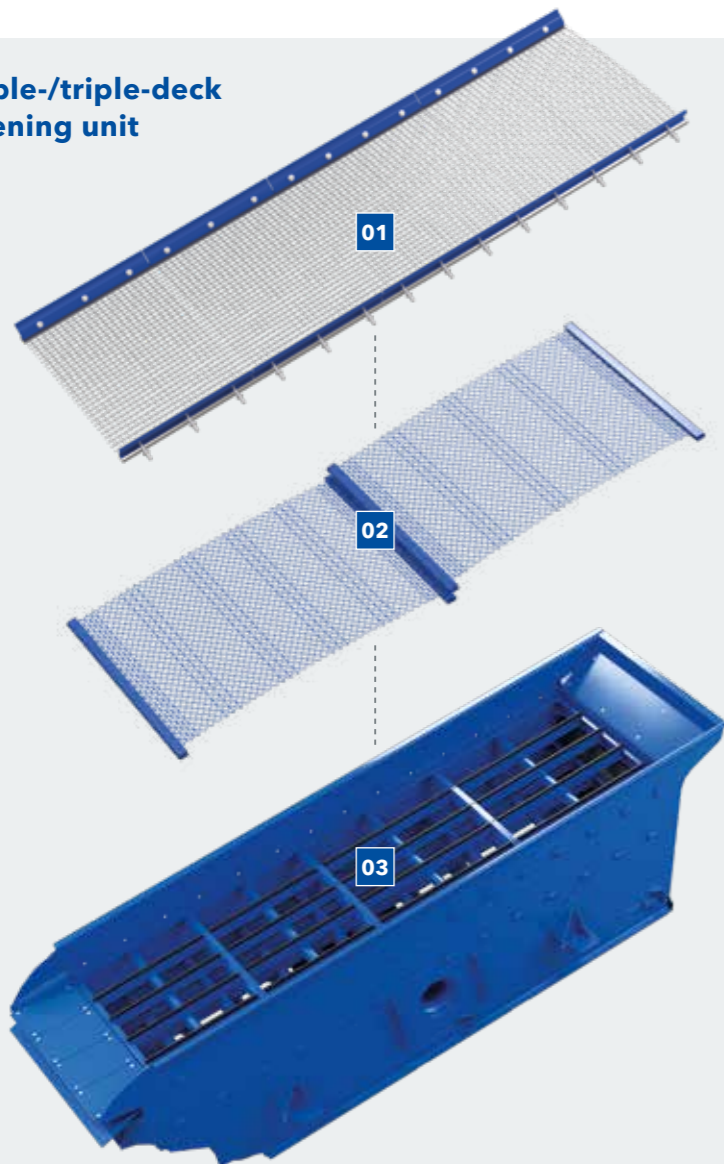
Ideally matched screen surfaces ensure optimum results.

Screening media are put to a tough test on a daily basis. In order to ensure the permanent and reliable screening of the desired material, original KLEEMANN screen surfaces are subject to exceptionally high quality standards.

The screening result itself is determined by numerous factors. The key influencing factors include the grain shape, the humidity content and the feed volume. A large selection of screen surfaces are available for KLEEMANN classifying screen plants

which can be equipped depending on the application and desired end result. Now this is what we call flexibility in the application!

Double-/triple-deck screening unit



- 01 Square mesh/ rectangular mesh**
 - > For screening fine and medium coarse material
 - > Different wire qualities and thicknesses available (thicker = longer life, thinner = higher production)
- 02 Harp screen**
 - > Recommended for particularly damp and sticky material that is difficult to screen
 - > With self-cleaning effect through the natural vibration of the longitudinal wires
- 03 Screen casing**
 - > Double-deck screen casing
 - > Triple-deck screen casing

Screening unit on feed hopper - foldable slotted grate



- 04 Foldable slotted grate cover**
 - > For separating feed material, gap width of 100 mm
 - > Foldable slotted grate rods are supported on one side but can swing freely and release clogged material when the grate is folded up
- 05 Foldable slotted grate frame**
 - > For supporting the surface, with tilting function

Screening unit on feed hopper - vibrating slotted grate

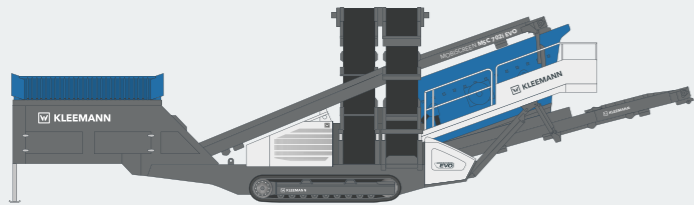


- VIBRATING SLOTTED GRATE - UPPER DECK**
 - 06 Slotted grate**
 - > For separating feed material from coarse material
 - > Gap width 100 mm
- VIBRATING SLOTTED GRATE - LOWER DECK**
 - 07 Square mesh**
 - > For screening fine and medium coarse material
 - > For loading the plant with a defined grain size
 - 08 Screen casing for vibrating slotted grate (optional) on feed hopper**
 - > Double-deck prescreen

TECHNICAL DATA AT A GLANCE

MOBISCREEN MSC 702(i) | 703(i) | 952(i) | 953(i) EVO

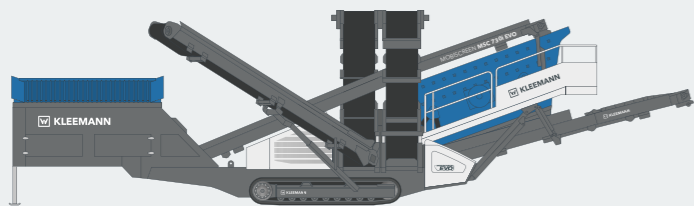
TECHNICAL DATA



MSC 702(i) EVO

- > Screen decks: 2
- > Screening surface: 1,550 x 4,500 mm
- > Weight: 30,500 - 38,000 kg *

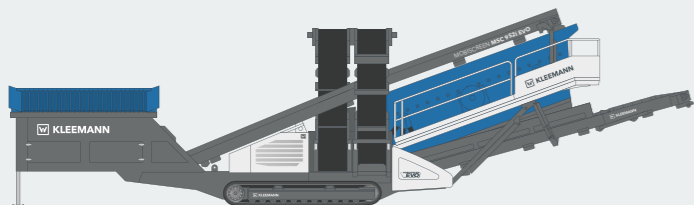
TECHNICAL DATA



MSC 703(i) EVO

- > Screen decks: 3
- > Screening surface: 1,550 x 4,500 mm
- > Weight: 33,500 - 41,000 kg *

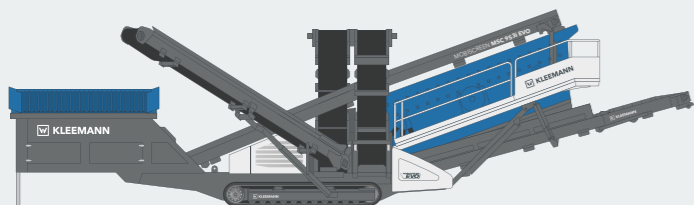
TECHNICAL DATA



MSC 952(i) EVO

- > Screen decks: 2
- > Screening surface: 1,550 x 6,100 mm
- > Weight: 33,000 - 40,500 kg *

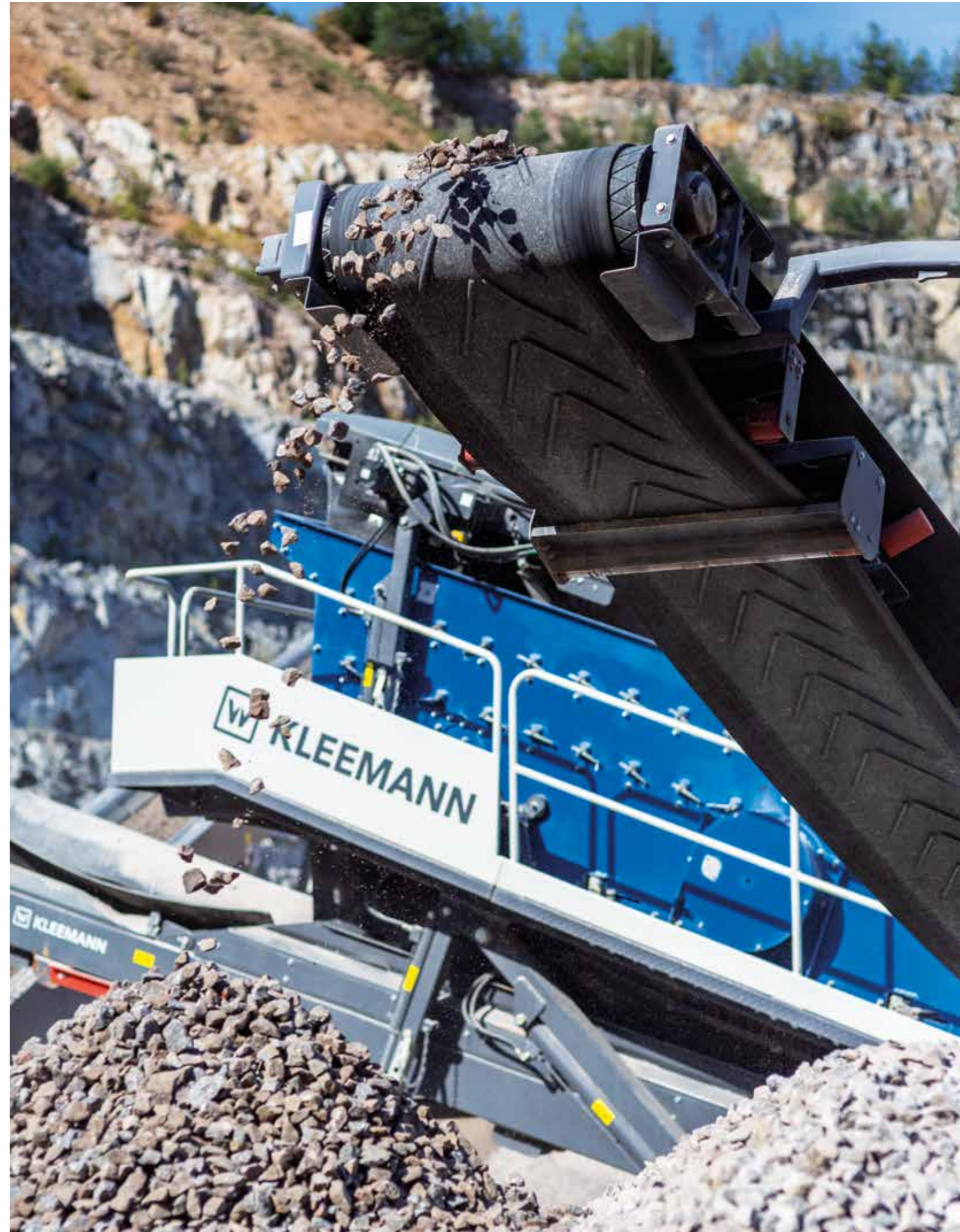
TECHNICAL DATA



MSC 953(i) EVO

- > Screen decks: 3
- > Screening surface: 1,550 x 6,100 mm
- > Weight: 37,000 - 44,500 kg *

* Transport weight of basic plant - max. configuration



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