



Mobile screening plants

# **MOBISCREEN**

## **MSS 502 | MSS 802 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

**MOBIREX**  
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 worldwide





# MOBISCREEN MSS 502 EVO | MSS 802 EVO

Where flexibility meets output.

As powerful mobile screens for coarse elements, the MOBISCREEN MSS 502 EVO and MSS 802 EVO have been designed for evolving challenges in different applications. With their ingenious machine design and flexible conversion options, an optimal throughput can be guaranteed for natural stone and recycling applications.

Changing work locations and new applications often pose challenges for screening plants. The mobile screens for coarse elements are ideally prepared for this. The large range of screen media and simple setting of screen parameters enable easy adaptation of the MSS 502 EVO and the MSS 802 EVO to new application conditions.

If a fine end-product needs to be screened from a very coarse feed material, the plant can be quickly converted from three to two final grain sizes. It also stands out with ease of operation and ideal ergonomics.



Flexibility in the foreground



Main focus on operability



Ergonomics at a glance





# THE HIGHLIGHTS

Perfectly equipped.

## 01 Feed hopper

- > Generously dimensioned feed hopper
- > Hopper rear walls can be folded at three heights (MSS 802 EVO)

## 02 Control system

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

## 03 Drive

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

## 04 Screen

- > Double-deck screen casing with effective screening
- > Large setting and adjustment range of screen angle

## > Material flow

- > Optimized material guidance for high throughput
- > Line coupling for process and safety linking

## > Safety and ergonomics

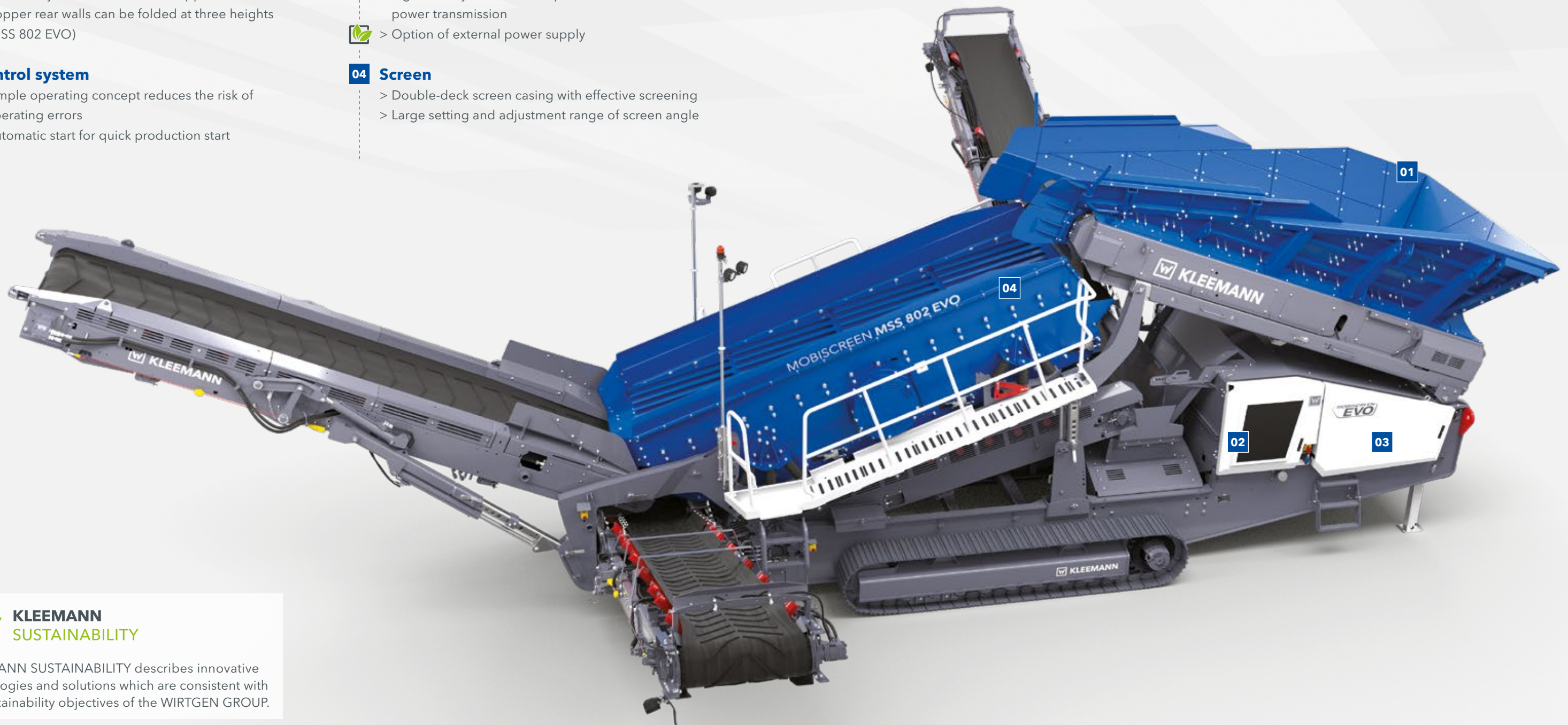
- > Fast and ergonomic servicing thanks to excellent accessibility

## > Transport

- > Simple transportation and fast set-up

## > Environmentally friendly solutions

- > Reduced dust and noise
- > Low fuel consumption



**KLEEMANN**  
SUSTAINABILITY

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



# INGENIOUS FEED HOPPER

For short set-up times.

MSS 502 /  
MSS 802 EVO

up to 386 / 551 US t/h  
Feed capacity

26" x 16" x 10" /  
32" x 20" x 12"  
max. feed size

8.4 / 11.9 yd<sup>3</sup>  
Hopper volume of basic hopper



MSS 802 EVO



The MOBISCREEN EVO plants' feed hoppers are generously dimensioned and designed for an optimised material flow.

The rear wall of the feed hopper can be folded to three heights on the MSS 802 EVO and to two heights on the MSS 502 EVO. This ensures optimum material transfer even if the discharge height of an upstream plant is low.

Filling aids (option), which can be individually folded, are available to enable simple loading with a wheel loader from the side and rear. Moving the feeding unit and filling aids in and out as well as unlocking/locking the filling aids can be carried out safely and conveniently from the ground with the mobile operating device.

### Robust and low-wear design

The hopper walls are heavily reinforced to ensure a long service life. For instance, the screen for coarse elements can withstand harsh operating conditions, with feed material up to an edge length of 16" or 20"\*. The changeable KRS (KLEEMANN Resistant Steel) wear plates can be easily replaced and also protect the hopper against damage and a high degree of wear.

\* Grain size 26" x 16" x 10" MSS 502 EVO,  
32" x 20" x 12" MSS 802 EVO

**i** With particularly coarse feed material, the screening plants for coarse material can be equipped with an optional apron feeder.

## KLEEMANN > GOOD TO KNOW

With the optional filling aids, which can be folded comfortably on both sides using a mobile operating device, the wheel loader operator always has a good view into the hopper. Throwing over the hopper can be prevented.





# INTUITIVE OPERATING CONCEPT

For simple handling.

With the increasing demands that are placed on modern screening plants, their complexity also increases. At the same time, the technology needs to be safe and as easy to control as possible - without the need for long training sessions. This is precisely why the intuitive operating concept of our MOBISCREEN plants is so powerful.

With the easy-to-use control using a mobile operating device, the handling of the screen for coarse elements is user-friendly and intuitive. The operating concept, which its easy-to-

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



### Automatic mode

Safe and quick production start

### The hardware components

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

An optional radio remote control is also available for even more comfortable control of the driving functions and the hopper discharge conveyor.

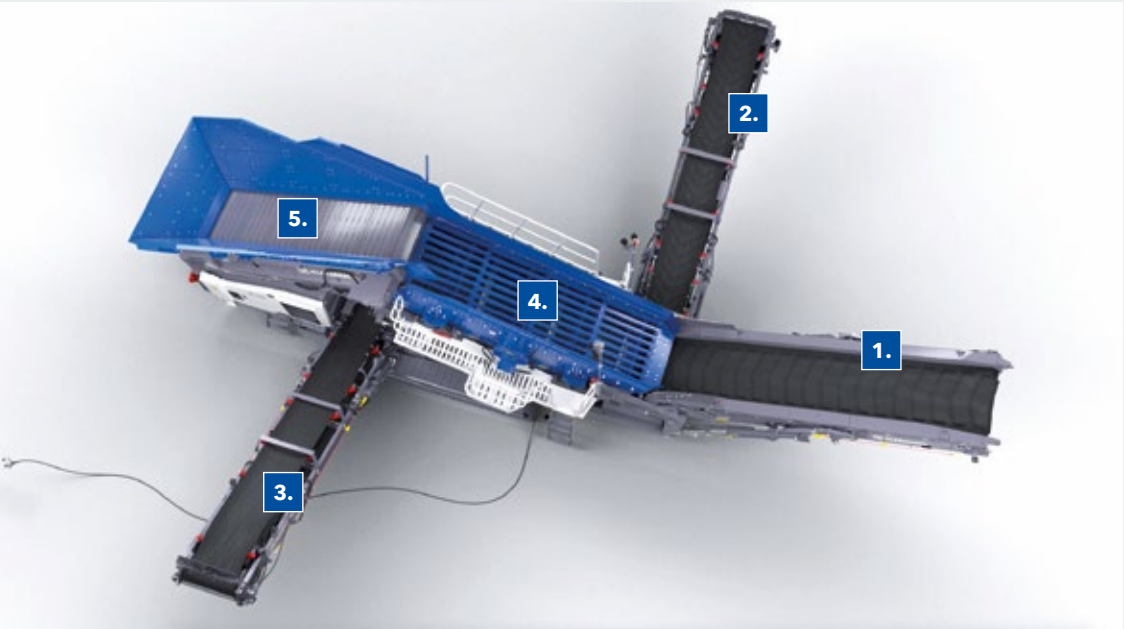


MSS 502 EVO

### KLEEMANN > GOOD TO KNOW

#### Automatic mode for quick production start

A further advantage of the screening plants for coarse materials is the automatic mode. Once the diesel engine is switched on, at 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!



### Mobile, wired operating device

can be connected on both sides

### Radio remote control

Operation of driving functions and hopper discharge conveyor



# POWERFUL DRIVE

For efficient power transmission.

The MOBISCREEN MSS EVO plants have a well-thought-out hydraulic concept which guarantees efficient power transmission.

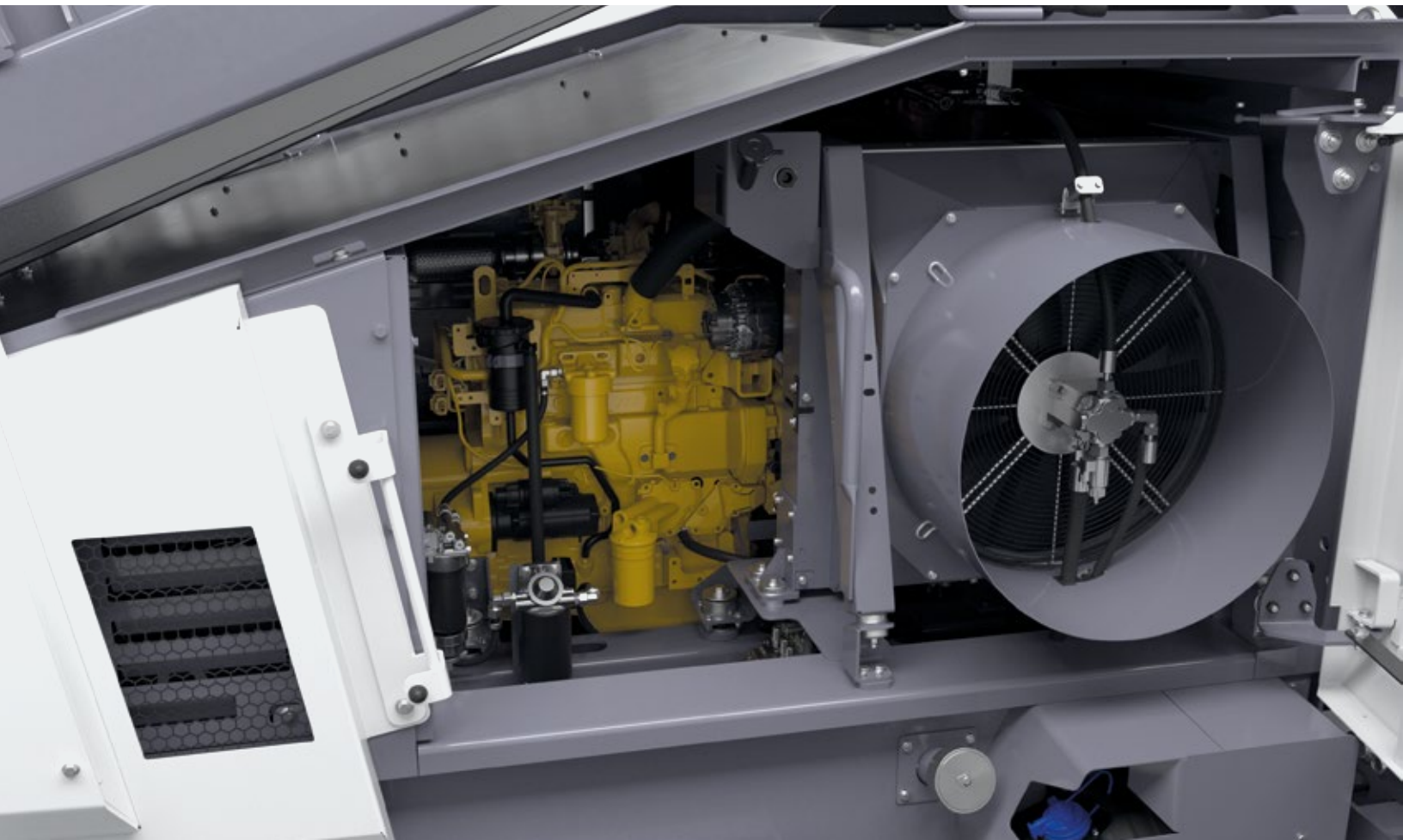
The MSS EVO plants stand out with their powerful diesel-hydraulic drive concept and reduced operating costs. All maintenance-relevant components are easily accessible. Service intervals for changing engine oil and filters are designed

to be extra long. The plants can be conveniently refuelled from both sides, should one side be inaccessible due to a stockpile. The machines are also relatively quiet which benefits both the operator and the environment.

**Diesel-hydraulic**  
drive

**98 / 133 hp**  
Drive output MSS 502 / MSS 802 EVO

 **Electric operation**  
via external power supply



## Efficient drive

The temperature-controlled fan ensures a significant reduction of noise emissions, saves diesel and reduces the amount of dust entering the engine compartment.

Electric operation via an external power supply is possible with the optional electric-hydraulic Dual Power drive. This means that environmentally friendly work with zero emissions can be performed with even lower operating costs.



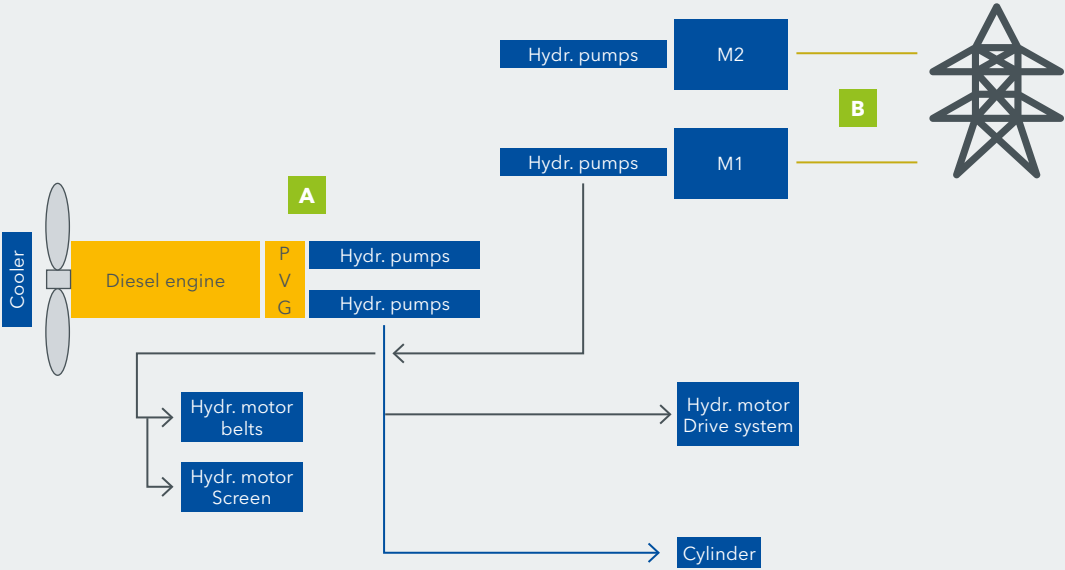
MSS 502 EVO

## KLEEMANN SUSTAINABILITY



> Drive via diesel engine **A**

> Drive via external power source **B**





# EFFECTIVE SCREENING

For best results.

The screen casing of the MOBISCREEN MSS EVO is designed for high outputs with a generously dimensioned screening surface.

The large selection of screen media such as punched plates, slotted grates, finger screens and wire cloth enable a high degree of flexibility in the application. Above all, the configurability of each individual screen segment means that

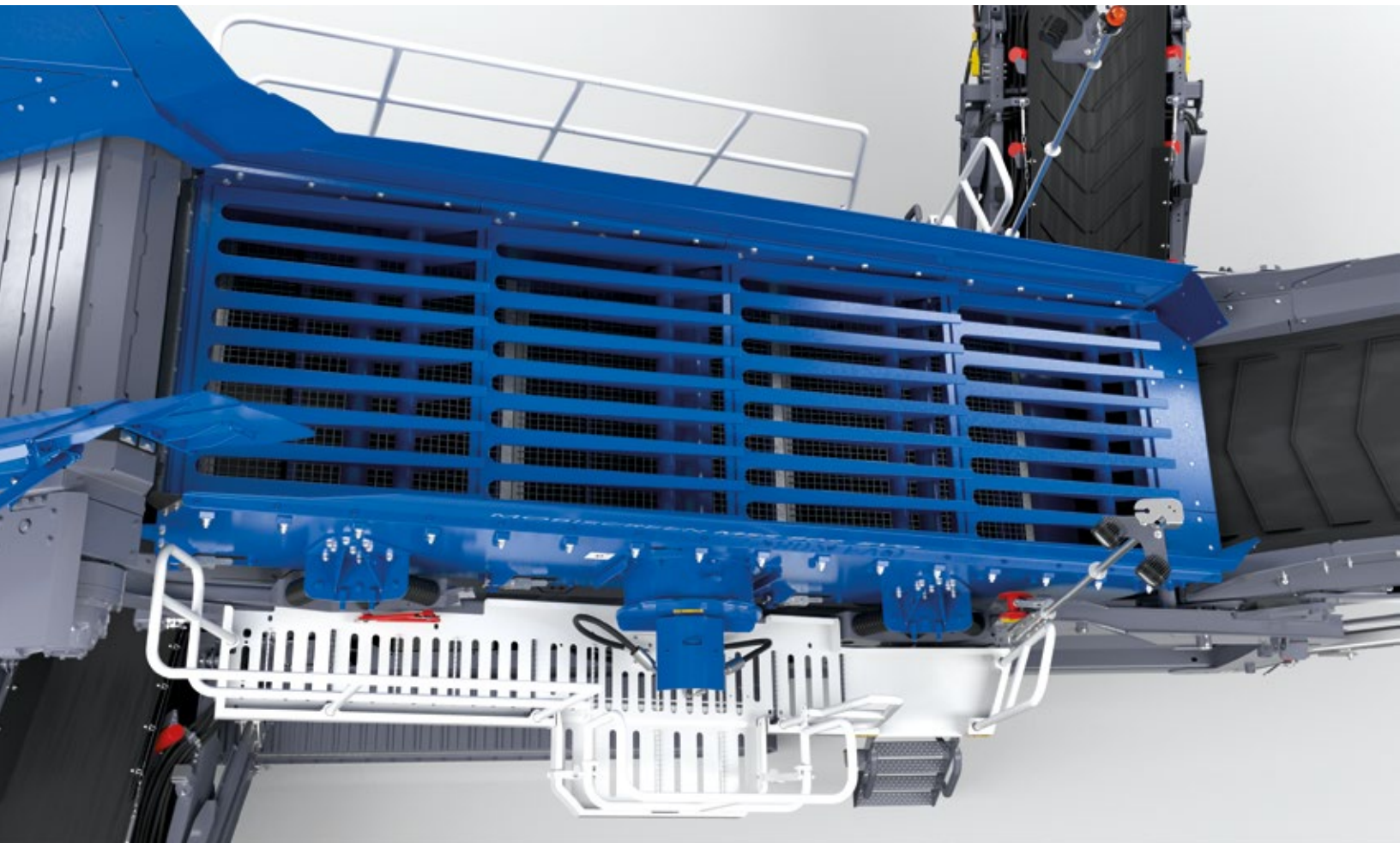
the equipment can be ideally adapted to the application. Thanks to good accessibility from all sides and the quick-clamping wedge system, simple screen media changes are possible.

58 ft<sup>2</sup>  
Screening surface MSS 502 EVO

81 ft<sup>2</sup>  
Screening surface MSS 802 EVO

15.4 - 20°  
Setting range of screen angle

 Large selection  
of screen media



MSS 802 EVO

### Screening efficiency with very coarse material

If you are confronted with material that is difficult to screen in an application, the optional material brakes and/or the chain curtain can be installed at two positions of the screen casing. This offers maximum flexibility for the operator for adapting the upper deck.

The material brake in the top position extends the material holding time, which leads to improved screening capacity. The lower position ensures that coarser material is slowed

down before it is transferred to the main discharge conveyor. This avoids damage.

### Adapting the screen angle, increasing the screening capacity

The screen casing angle's wide setting range of 15.4 - 20° is a further advantage: This allows the plant to be perfectly adapted to the feed material. This optimises the screening capacity in combination with high product quality.

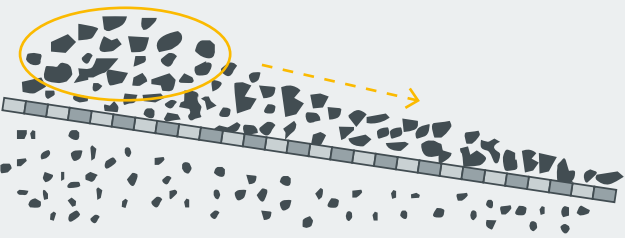
## KLEEMANN > PROCESS KNOWLEDGE



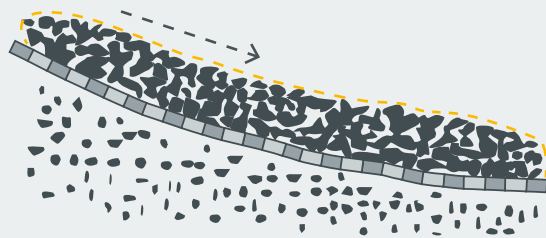
### Screening efficiency in the lower deck

The shape of the lower deck of both plants is a so-called banana profile. This means more screening efficiency in the lower deck with decreasing screen angle of the segments in flow direction. With the steep screen angle of the feeding side, a high flow rate and quick distribution of the material on the screen deck are achieved. On the discharge side the, screen angle is flatter, which extends the holding time and therefore increases the quality of the final product.

#### Straight screen profile



#### Banana profile





# OPTIMIZED MATERIAL FLOW

For high throughput.

The material flow of the MSS EVO plants is optimally designed - for higher total throughput and longer life thanks to reduced wear.

From the large feed hopper, via the spacious material transfer onto the screen deck, through to the discharge conveyors: The entire process of the material flow is perfectly planned - without any bottlenecks.

The discharge heights of the discharge conveyors on the MSS 802 EVO can be optionally increased with the long version of the 56" wide crusher discharge conveyor and/or telescopic side discharge conveyors, which increases the stockpile volume and therefore the intervals for clearing the stockpiles. In addition, the use of the wheel loader and the associated costs are reduced.

The discharge heights of all discharge conveyors can be adjusted flexibly so that the transfer of the screened product to a downstream crusher can be adapted perfectly.

The speed of all conveyor belts is infinitely adjustable and can be easily fine-tuned. A magnetic separator (MSS 802 EVO only) and magnetic drum protect downstream crushers and increase material quality.

**Line coupling - linking process and safety**

For smooth material flow across several crushing and screening stages, the machine can be equipped with the line linking option. A process and safety linkage with all KLEEMANN plants from the EVO and PRO series is possible. For even greater flexibility in the application, the stockpile probe required for the process coupling can be placed on any of the plant's discharge conveyors.

KLEEMANN > PROCESS KNOWLEDGE

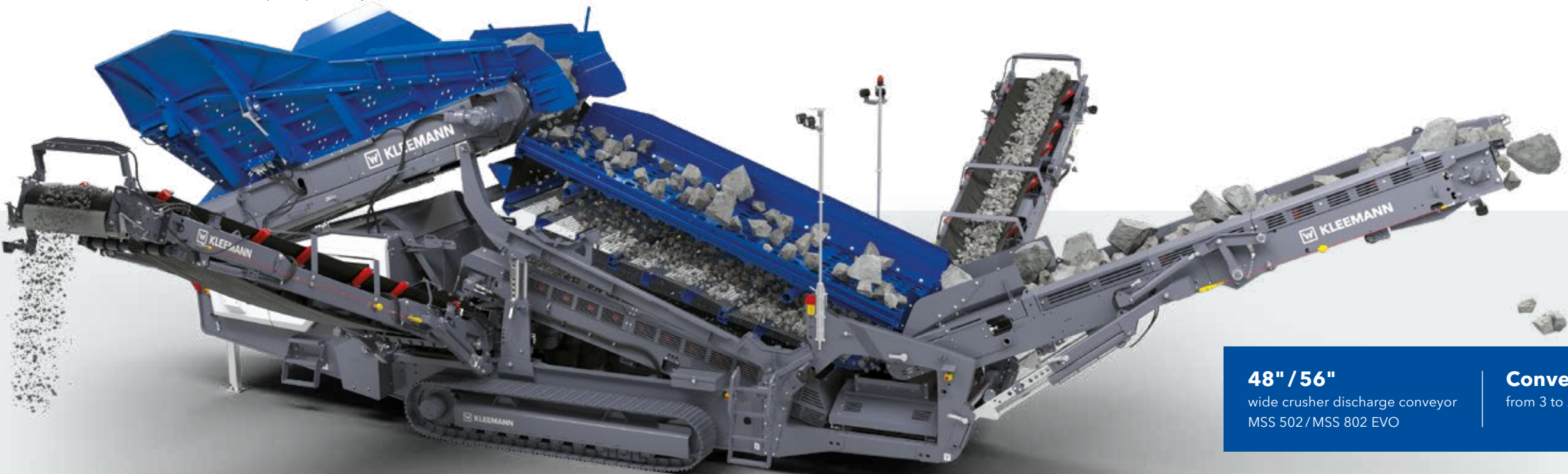
**Conversion from 3 to 2 final grain sizes**

The MSS 502 EVO as well as the MSS 802 EVO can be converted from 3 to 2 final grain sizes, which increases application flexibility. This conversion is generally required when

- > more material is fed than a screen deck can actually screen.
- > a fine fraction is screened from relatively large feed material and, for instance, the fine harp screen needs to be protected against falling coarse material.



**i** The MSS 802 EVO can drive a stockpile conveyor via an optional hydraulic port.



**48" / 56"**  
wide crusher discharge conveyor  
MSS 502 / MSS 802 EVO

**Conversion**  
from 3 to 2 final grain sizes

**infinitely adjustable**  
conveyor speed and discharge height



# SAFETY AND ERGONOMICS

For high operating comfort.

A machine has to be easy to operate and safe, but convenient maintenance is also very important to the operator.

All machine components of the screen for coarse elements are especially easy to access to guarantee trouble-free production, simple operation and fast service.

For instance, the machine is equipped with long and wide platforms for safe screen media changes and other maintenance work.

For ergonomic changing of the screen media in the lower deck, the screen casing of the MSS EVO plants can be moved into a horizontal position.

Cleaning the hopper discharge conveyor undersize is quick and simple thanks to a removable chute.

Additional options increase operating comfort

Standard LED lighting is already included in the basic plant, the optional premium lighting enables even better illumination of the material flow and transfer areas. Easy refuelling of the machine is possible from both sides. The refuelling can also be performed using a pump incl. hose system.

Safety first

The MSS EVO plants are also ideally equipped when it comes to safety. All functional and safety-relevant cylinders are fitted with lowering brake valves. Even if a hydraulic line is damaged, the affected cylinder remains in its current position – to protect both the operator and the machine. Operating the plants via the mobile control unit and therefore from a safe distance and with the best possible overview also boosts safety on site.



● Standard lighting + Premium lighting

Standard lighting

The standard lighting includes the illumination of the travel path, inclines and the work platforms.

Premium lighting

The premium lighting includes headlights for extended illumination of the material flow and the transfer areas, as well as a mobile work lamp.





# EASY TRANSPORT

Quickly on site.

The MSS EVO plants 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 unit, set-up is simple and safe, thanks to a sufficient distance from the subsection, and can be viewed easily.

The crawler track unit's infinitely variable speed control enables precise and safe loading on the low-loader, as well as accurate positioning on site.



# ENVIRONMENTALLY FRIENDLY SOLUTIONS

For a green future.



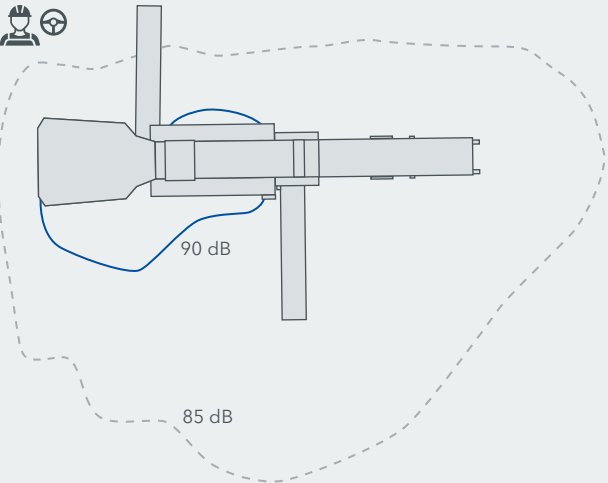
The plant for coarse elements is equipped with environmentally compatible innovations.

The MSS EVO plants have a temperature-controlled fan. As a result, noise and diesel consumption are reduced. With the average lower fan speed, the amount of dust getting into the power pack is also reduced. The option of electric operation via the optional external power supply also allows work with zero emissions and even lower operating costs.

An additional electric water pump is also available as optional equipment for self-sufficient supply of the spray system.

## KLEEMANN > GOOD TO KNOW

Thanks to the temperature-controlled fan, the coarse screening units are very quiet. This makes working close to the machine much more pleasant and easier on the operator.





# 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 simple assistance both on the building site as well as 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](http://www.wirtgen-group.com/service)



## Spare parts

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

> [parts.wirtgen-group.com](http://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](http://www.wirtgen-group.com/training)



## Telematics solutions

Construction machines with leading technology and perfected telematics solutions work hand-in-hand in the WIRTGEN GROUP. The Operations Center\* – the platform for digital solutions for process, machine and service optimization – allows you not only to simplify maintenance planning for your machines but also to increase your productivity and cost-effectiveness.

> [www.wirtgen-group.com/telematics](http://www.wirtgen-group.com/telematics)

\* John Deere Operations Center™ (formerly WITOS) is currently not available in all countries. Please consult your responsible branch or dealer if you have any questions in this area.



# SCREENING TECHNOLOGY

The matching screen media for optimum results.

During day to day operation, screen media are really put to the test. Original KLEEMANN GRADE screening media are subject to exceptionally high quality standards to ensure that the desired material is screened consistently and reliably over time.

The screening result itself is determined by a variety of factors. The main influencing factors are the grain shape, moisture content and feed quantity. For KLEEMANN coarse screening plants, GRADE offers a large selection of screening media for

the upper and lower decks, which can be equipped to suit the application and the desired end result. The individual screen segments can be freely configured. Application flexibility at its best!

- 01

**FS-GRADE finger screens**
  - > Can be used for materials that are difficult to separate such as damp and sticky loamy soil
  - > Separation of flaky and bulky screen material
- 02

**SG-GRADE slotted grates**
  - > Preferred application in natural rock processing for loamy, cohesive and wet feed material
  - > Separation of flaky and bulky screen material
- 03

**PP-GRADE punched plates**
  - > Frequent use in gravel processing, recycling and natural rock processing mainly in coarse and/or abrasive material for precise separation
- 04

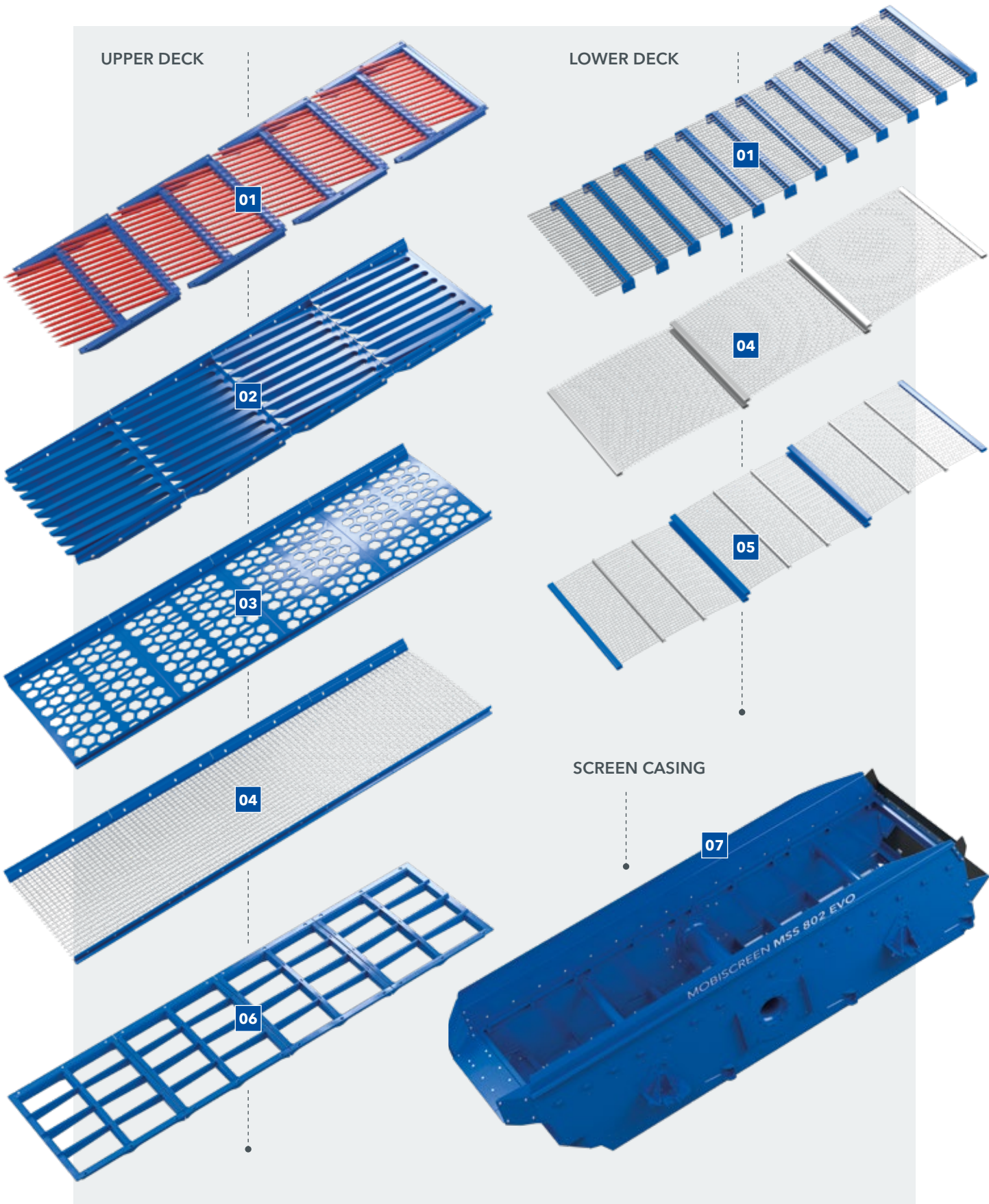
**QM-GRADE wire cloth - square mesh / rectangular mesh**
  - > For screening fine and medium coarse material
  - > Different wire qualities and thicknesses available (thicker = longer life, thinner = higher production)

- 05

**Harp screens**
  - > Available in different versions: PM-GRADE G-Harp/Piano Wire, DM-GRADE S-Harp, RM-GRADE W-Harp/Long Slot
  - > Recommended for particularly damp and sticky material that is difficult to screen
  - > DM-GRADE: With self-cleaning effect through the natural vibration of the longitudinal wires
- 06

**Intermediary frame**
  - > Used for supporting the screen media with punched plate and wire cloth
- 07

**Screen casing**
  - > Double-deck screen casing





# TECHNICAL DATA AT A GLANCE

MOBISCREEN MSS 502 | MSS 802 EVO

TECHNICAL DATA



**MSS 502 EVO**

- > Screen size (W x L): 4' 5" x 13' 1"
- > Feed capacity: 386 US t/h
- > Feed size: 26" x 16" x 10"
- > Weight: 58,200 - 73,950 lbs

TECHNICAL DATA



**MSS 802 EVO**

- > Screen size (W x L): 5' 1" x 16'
- > Feed capacity: 551 US t/h
- > Feed size: 32" x 20" x 12"
- > Weight: 70,350 - 84,900 lbs





# KLEEMANN



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