



Mobile coarse screens

MOBISCREEN MSS



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 industry.

High levels of performance and innovative details, simple handling and maximum safety for the operator - and always with a focus on sustainability. 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

KLEEMANN

MOBISCREEN MSS 502 EVO | MSS 802 EVO | MSS 1102 PRO

Where flexibility meets output.

The mobile screens for coarse elements MOBISCREEN MSS 502 EVO, MSS 802 EVO and MSS 1102 PRO 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 screening parameters enable easy adaptation of all three members of the product family of screens for coarse elements to new application conditions.

If a fine end-product needs to be screened from very coarse feed material, the plants can be quickly converted from three to two final grain sizes. Different sizes and output - united by what matters most: a powerful diesel-hydraulic drive system, ease of operation and ideal ergonomics.



Focus on flexibility



Main focus on operability



Ergonomics at a glance



THE HIGHLIGHTS

Perfectly equipped.

01 Feed hopper

- > Generously dimensioned feed hopper
- > Foldable hopper rear wall for loading with upstream plants with a low discharge height

02 Digital solutions

- > Simple operating concept reduces the risk of operating errors
- > Automatic start for quick production start
- > With SPECTIVE CONNECT, important information is available on your smartphone or tablet

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

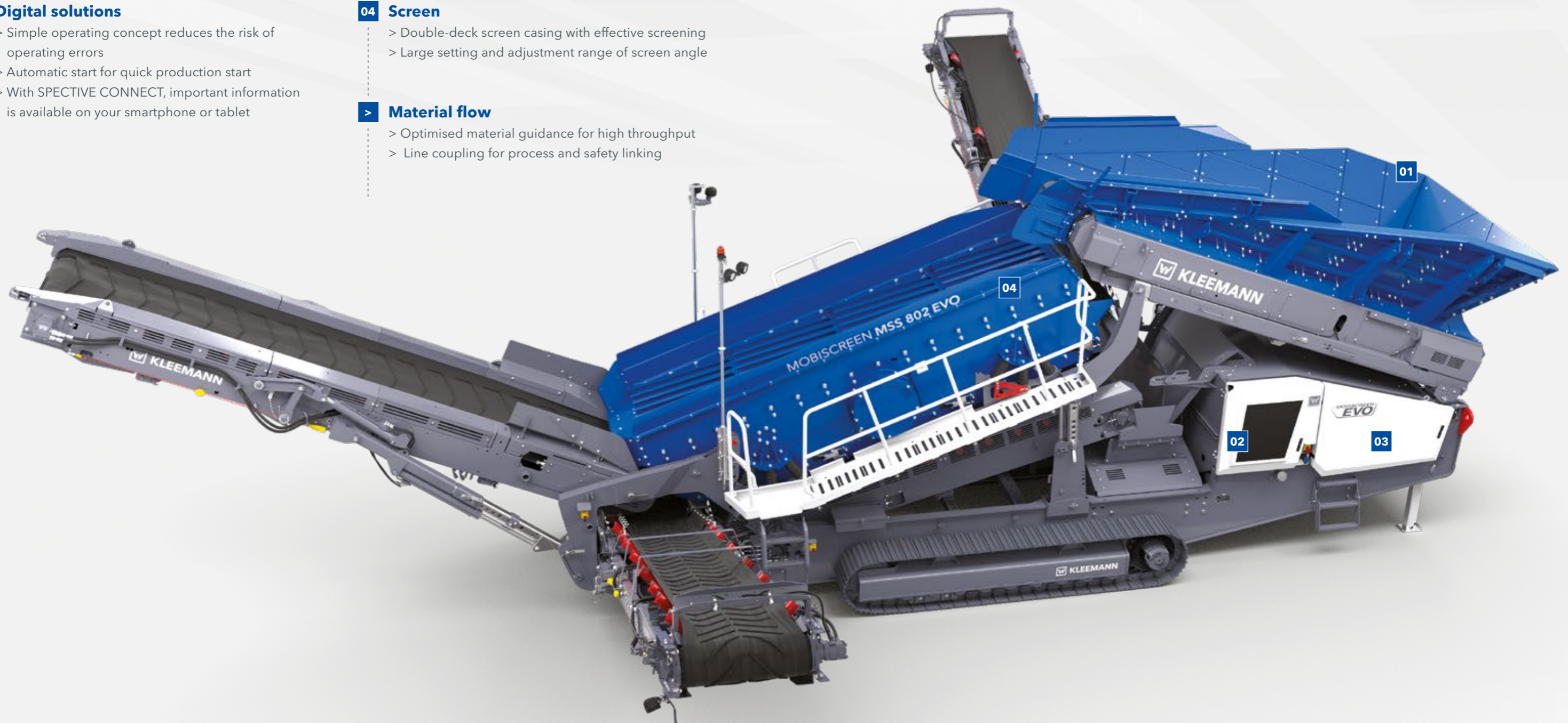
- > Optimised material guidance for high throughput
- > Line coupling for process and safety linking

> Safety and ergonomics

- > Fast and ergonomic servicing thanks to excellent accessibility

> Transport

- > Simple transportation and fast set-up



INGENIOUS FEED HOPPER

For short set-up times.

**MSS 502 / MSS 802 EVO /
MSS 1102 PRO**

up to 350 / 500 / 750 t/h
Feed capacity

6.4 / 9.1 / 12.3 m³
Hopper volume of basic hopper



MSS 1102 PRO

The MOBISCREEN MSS 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 and MSS 1102 PRO. 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 the MSS EVO plants to enable simple loading with a wheel loader from the side and rear. On the MSS 1102 PRO, part of the fixed hopper - including the permanently bolted filling aids - can be folded back to allow for easy rear loading with a wheel loader. Moving the feeding unit in and out, folding of the filling aids as well as their unlocking and locking 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 and can process feed material up to an edge length of 400 or 550 mm*. With the MSS 802 EVO, the interchangeable KRS (KLEEMANN Resistant Steel) wear plates can be easily replaced and also protect the hopper against damage and a high degree of wear. Thanks to its welded wear lining made of durable KRS, the MSS 1102 PRO provides optimal protection - even under the harshest operating conditions.

* Grain size	MSS 502 EVO	MSS 802 EVO	MSS 1102 PRO
	640 x 400 x 240 mm	800 x 500 x 300 mm	880 x 550 x 330 mm

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 (only MSS EVO), 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.



DIGITAL SOLUTIONS

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, with its easy-to-

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



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 also 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. With the large radio remote control, which is available for the MSS 1102 PRO as an option, the set-up and driving processes, the functions of the feeding conveyor, and other operating functions - such as the water spray system - can be operated from a safe distance.

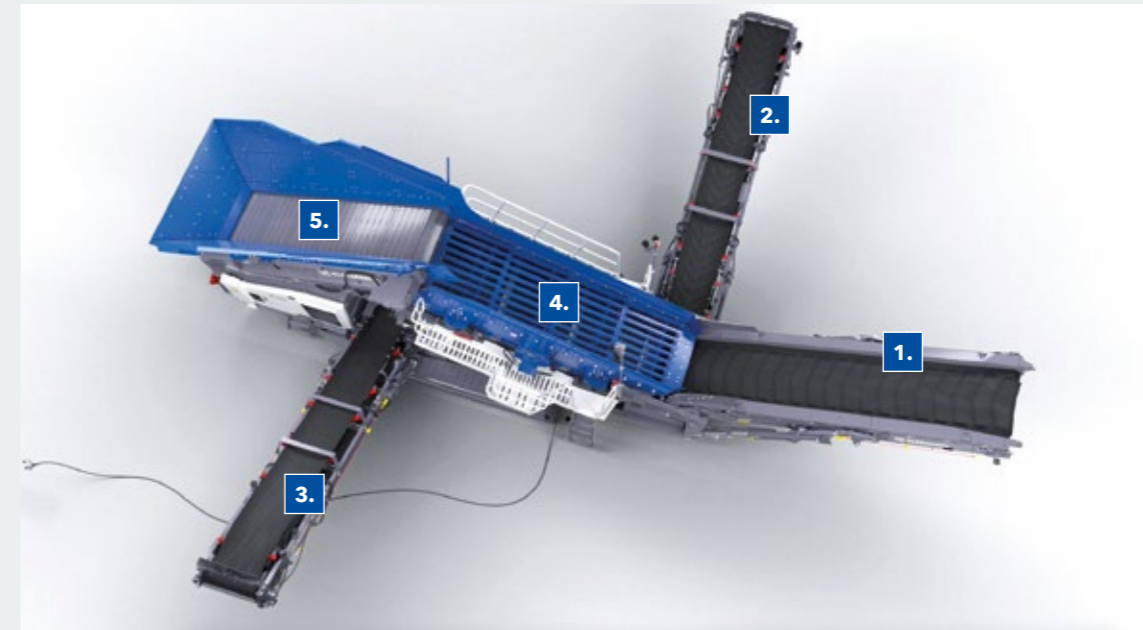


MSS 502 EVO

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!



Automatic mode
Safe and quick production start

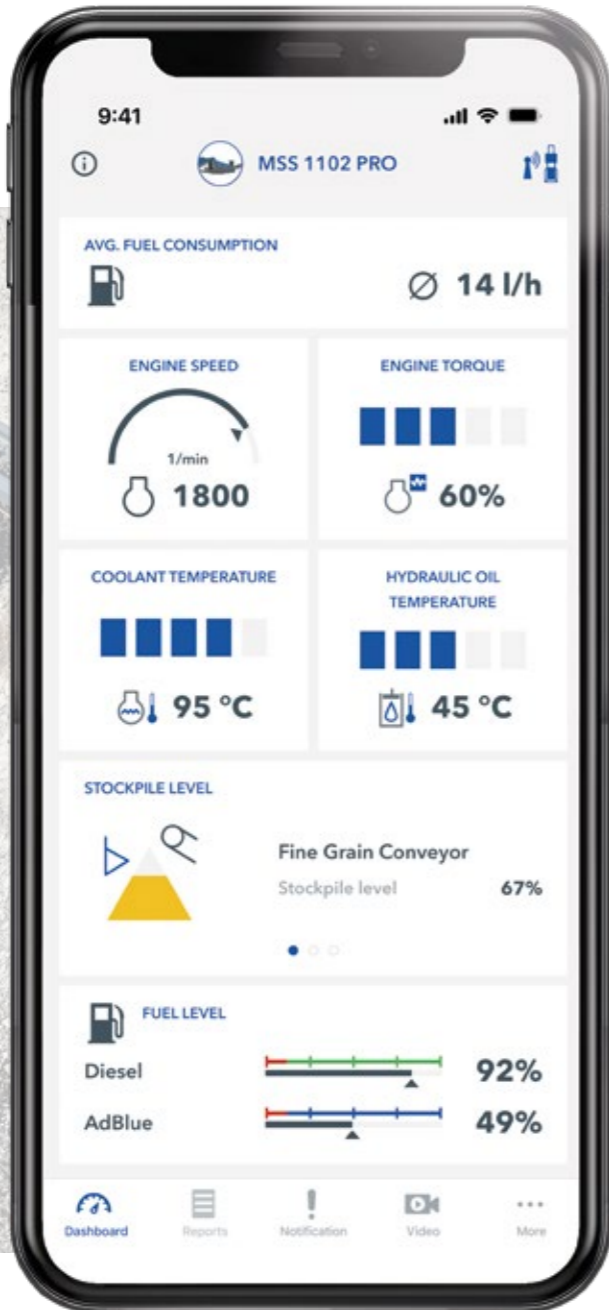
Mobile wired operating device
can be connected on both sides

Radio remote control
Operation of driving functions and hopper discharge conveyor

SPECTIVE CONNECT

With SPECTIVE CONNECT (optional), operators have all relevant data on speed, consumption values and fill levels on a smartphone or tablet, prepared in a clearly arranged manner. SPECTIVE CONNECT also offers detailed troubleshooting aids to assist with service and maintenance.

The stockpile monitoring function provides a display of the current status of material stockpiles. When a certain predefined value is reached, the operator receives a message that the stockpile should be cleared as soon as possible. This facilitates work and increases productivity.



John Deere Operations Center™

The screens for coarse material MOBISCREEN MSS are integrated in the John Deere Operations Center™ – the central and user-friendly telematics platform of the WIRTGEN GROUP for professional management of complete work sites. It networks operators, plants, site managers and dispatchers, supports the simple planning of maintenance intervals through integrated maintenance plans, contributing to higher machine availability and value retention. In addition, relevant machine data provides a valuable basis for the efficient control of machine deployment and forward-looking project planning.

POWERFUL DRIVE

For efficient power transmission.

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

The MSS 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.

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.

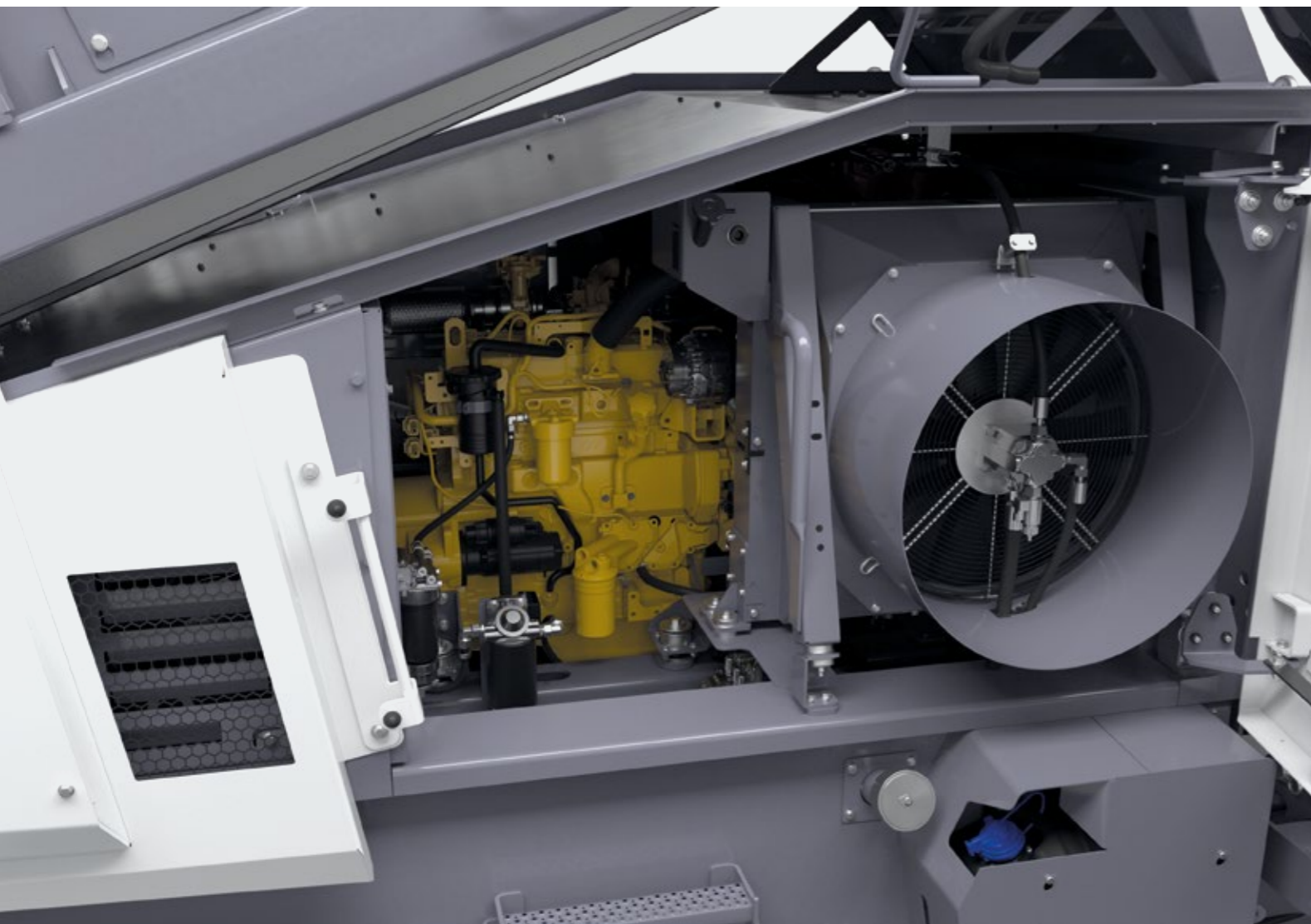


MSS 502 EVO

Diesel-hydraulic
Drive

73 - 77 / 94 - 98 / 164 kW
Drive output MSS 502 / MSS 802 EVO / MSS 1102 PRO

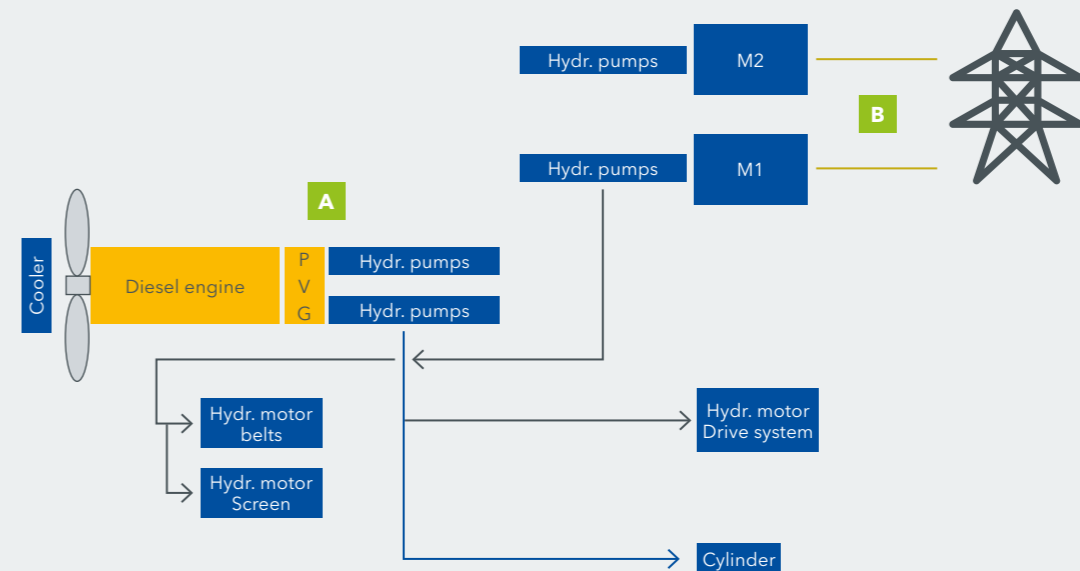
Electric operation
via external power supply



KLEEMANN > PROCESS KNOWLEDGE

> Drive via diesel engine **A**

> Drive via external power source **B**



EFFECTIVE SCREENING

For best results.

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

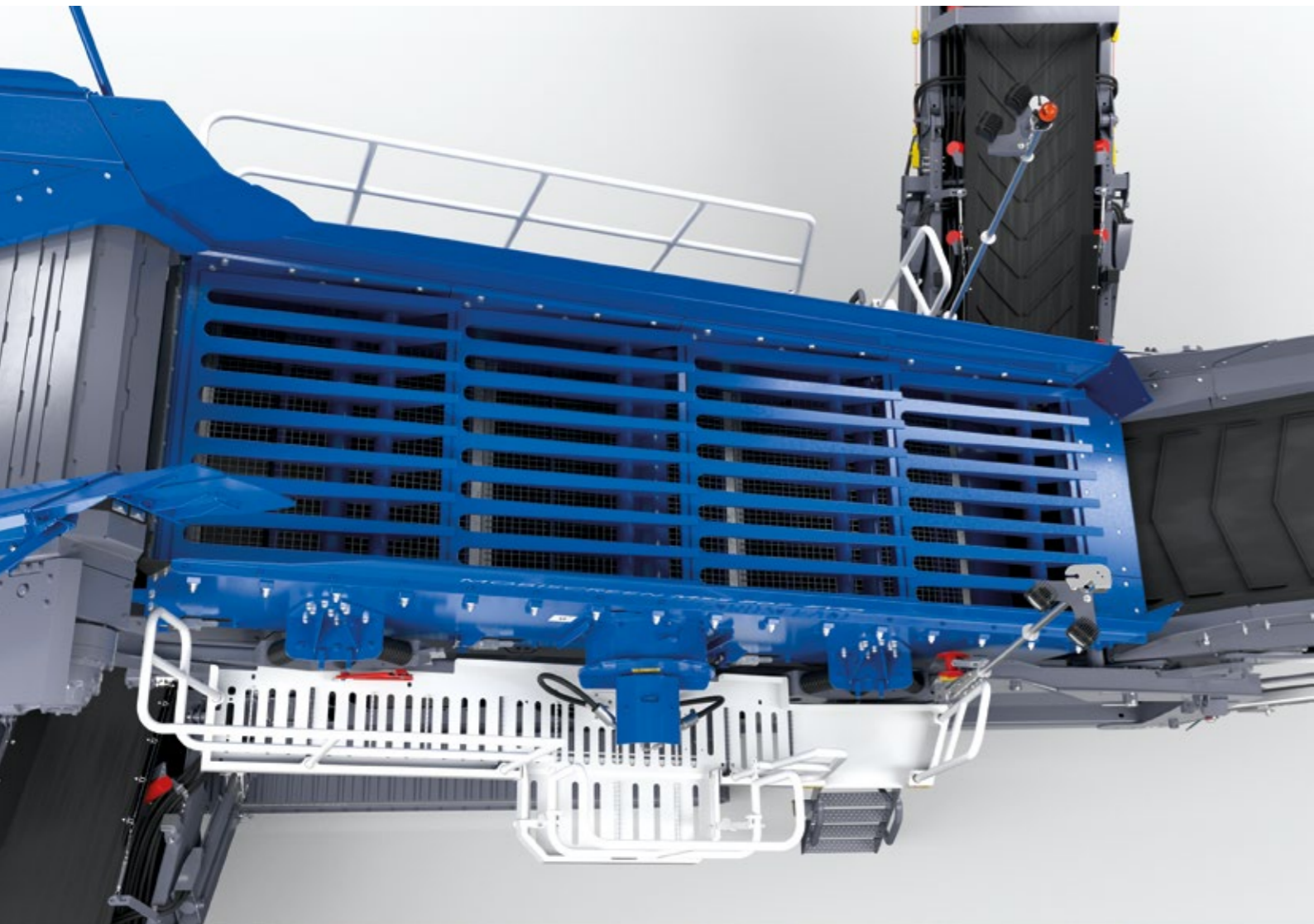
The large selection of screen media, such as punched plates, slotted grates, finger screens and wire cloth enable a high degree of flexibility in the application. Above all, the configurability of each individual screen segment means

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.

MSS 502 / MSS 802 EVO / MSS 1102 PRO

5.4 / 7.5 / 11.2 m²
Screening surface

15.4 - 20° / 12.5 - 17°
Setting range of screen angle MSS EVO / PRO



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° (MSS EVO) and 12.5 - 17° (MSS PRO) 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.

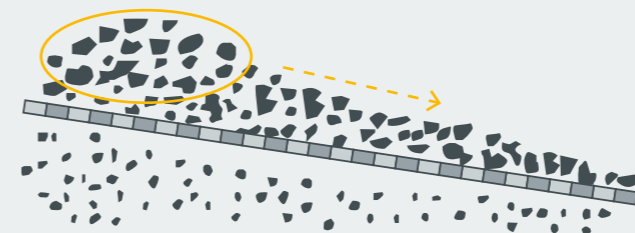
KLEEMANN > PROCESS KNOWLEDGE



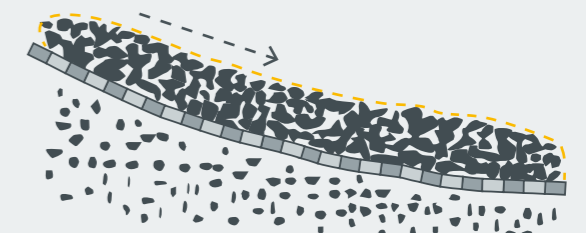
Screening efficiency in the lower deck

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



OPTIMISED MATERIAL FLOW

For high throughput.

The material flow of the MSS 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 1400 mm 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 drums protect downstream crushers and increase material quality.

Line linking - coupling 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.

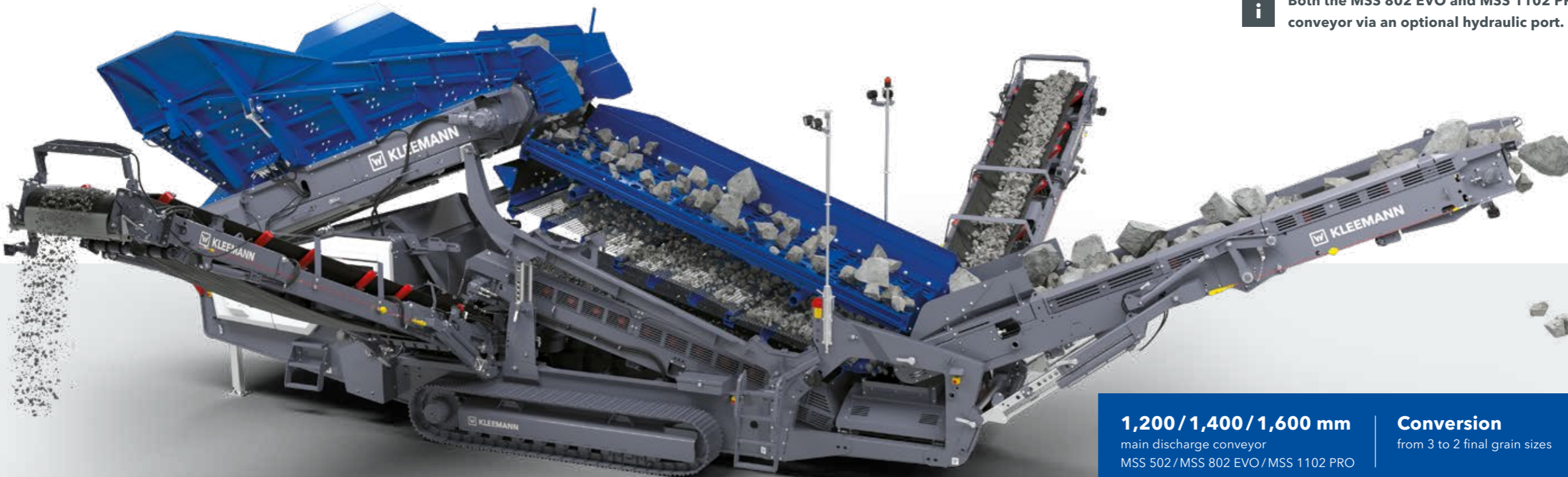
KLEEMANN > PROCESS KNOWLEDGE

Conversion from 3 to 2 final grain sizes

All three members of the product family of screens for coarse material can be converted from 3 to 2 final grain sizes, which increases application flexibility. This conversion is generally advisable if
 > the fine fraction is to be screened from relatively coarse feed material in order to crush the middle and oversize grain together, e.g. in a downstream impact crusher, to the desired grain size.



i Both the MSS 802 EVO and MSS 1102 PRO can drive a stockpile conveyor via an optional hydraulic port.



1,200 / 1,400 / 1,600 mm
 main discharge conveyor
 MSS 502 / MSS 802 EVO / MSS 1102 PRO

Conversion
 from 3 to 2 final grain sizes

infinitely adjustable
 conveyor speed and
 discharge height

SAFETY & 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 machines are equipped with ergonomic 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 plants can be moved into a horizontal position.

Cleaning the hopper discharge conveyor undersize is quick and simple thanks to a removable chute. In addition, an integrated cleaning brush on the optional apron feeder ensures the continuous removal of adhering parts, thereby contributing to clean and trouble-free operation.

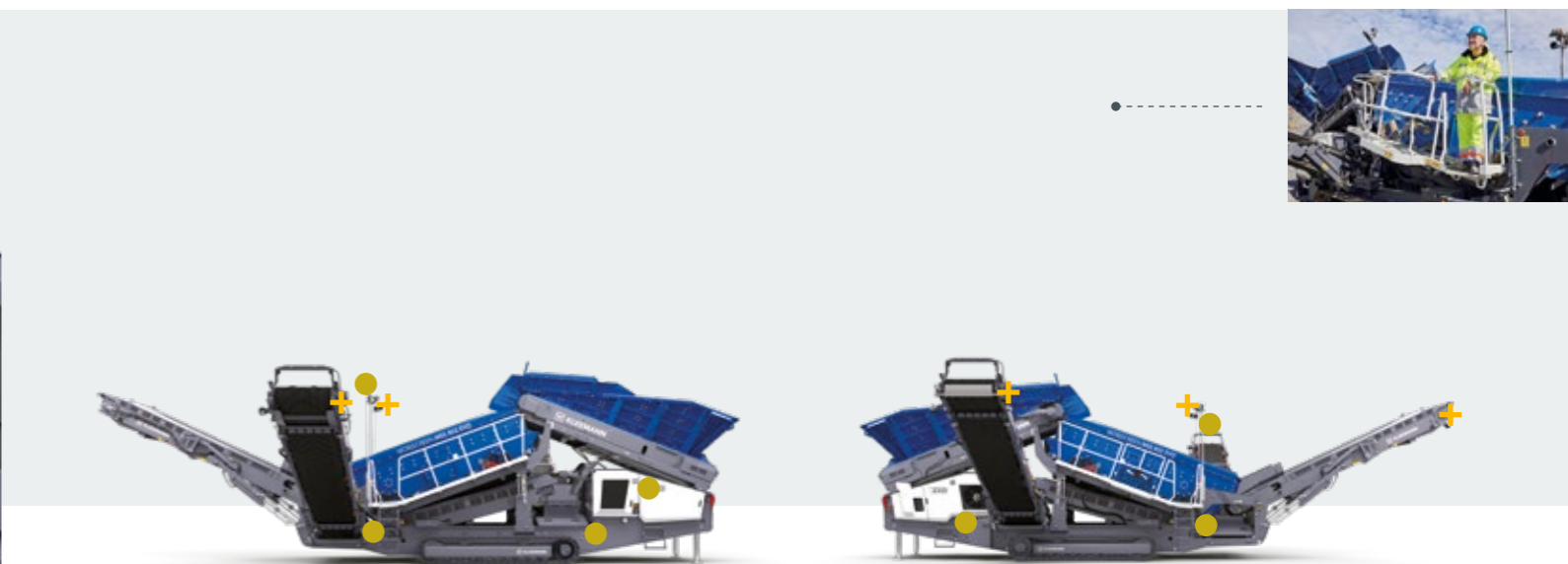


Additional options increase operating comfort

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 MOBISCREEN MSS 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 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.



MSS 802 EVO



MSS 1102 PRO



INNOVATIONS THAT MAKE THE DIFFERENCE

For higher efficiency and fewer emissions.

The screening plants for coarse material operate more quietly, efficiently and cleanly.

The MSS 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.



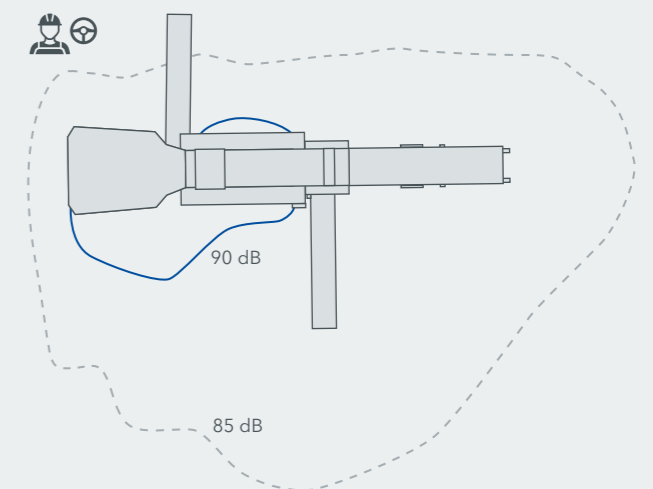
MSS 502 EVO

MSS 802 EVO



KLEEMANN > GOOD TO KNOW

Thanks to the temperature-controlled fan, the screening plants for coarse material 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 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. The Operations Center* - the digital platform for process, machine and service optimisation - enables you to not only simplify maintenance planning for your machines, but also to increase your productivity and cost-effectiveness.

> www.wirtgen-group.com/telematics

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

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 screen 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 screen 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 FingerMesh FM-GRADE

- > Combined screen media consisting of finger screen and square mesh of punched plate
- > Suitable for screening excavated earth and for the processing of limestone-containing intermediate materials, where limestone must be reliably separated from the earth
- > Breaking up and/or knocking off sticky and clayey components of the rock using a finger screen
- > A cross-tensioned mesh or punched plate underneath prevents damage to the screen media of the lower deck caused by flaky materials such as paving slabs and ensures a clean cut in medium-grain material

03 SG-GRADE slotted grates

- > Preferred application in natural rock processing for loamy, cohesive and wet feed material
- > Separation of flaky and bulky screen material

04 PP-GRADE punched plate

- > Frequent use in gravel processing, recycling and natural rock processing mainly in coarse and/or abrasive material for precise separation

05 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)

06 Harp screen

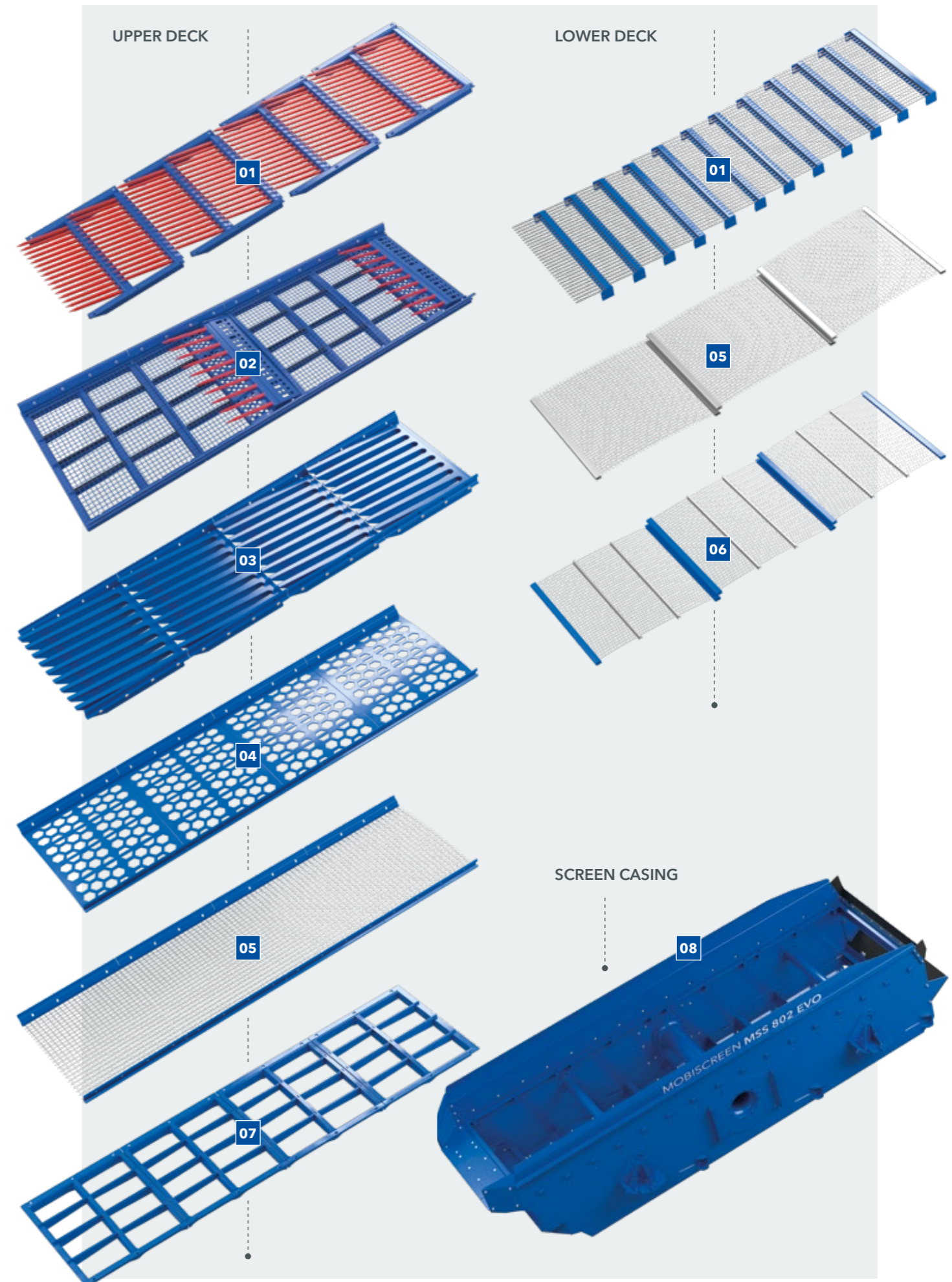
- > Available in different versions: PM-GRADE G-Harp/Piano Wire, DM-GRADE S-Harp, RM-GRADE W-Harp/Long Slot
- > Recommended for particularly damp and sticky material that is difficult to screen
- > DM-GRADE: With self-cleaning effect through the natural vibration of the longitudinal wires

07 Intermediary frame

- > Used for supporting the screen media with punched plate and wire cloth

08 Screen casing

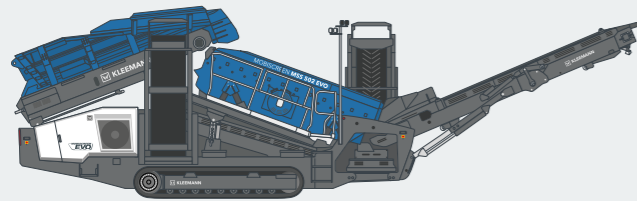
- > Double-deck screen casing



TECHNICAL DATA AT A GLANCE

MOBISCREEN MSS

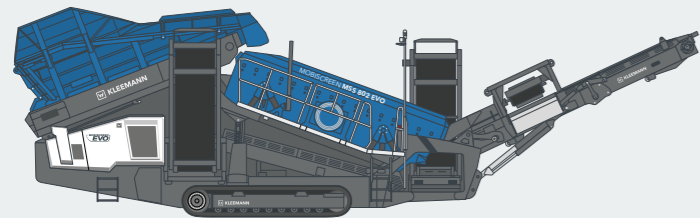
TECHNICAL DATA



MSS 502 EVO

- > Screen size (W x L): 1,350 x 4,000 mm
-
- > Feed capacity: 350 t/h
-
- > Feed size: 640 x 400 x 240 mm
-
- > Weight: 26,500 - 33,500 kg

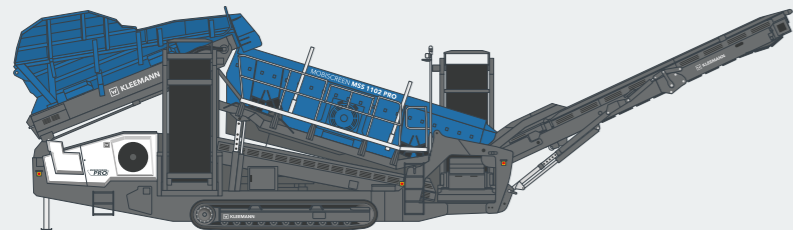
TECHNICAL DATA



MSS 802 EVO

- > Screen size (W x L): 1,550 x 4,880 mm
-
- > Feed capacity: 500 t/h
-
- > Feed size: 800 x 500 x 300 mm
-
- > Weight: 32,000 - 38,500 kg

TECHNICAL DATA



MSS 1102 PRO

- > Screen size (W x L): 1,830 x 6,100 mm
-
- > Feed capacity: 750 t/h
-
- > Feed size: 880 x 550 x 330 mm
-
- > Weight: 41,500 - 46,000 kg





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