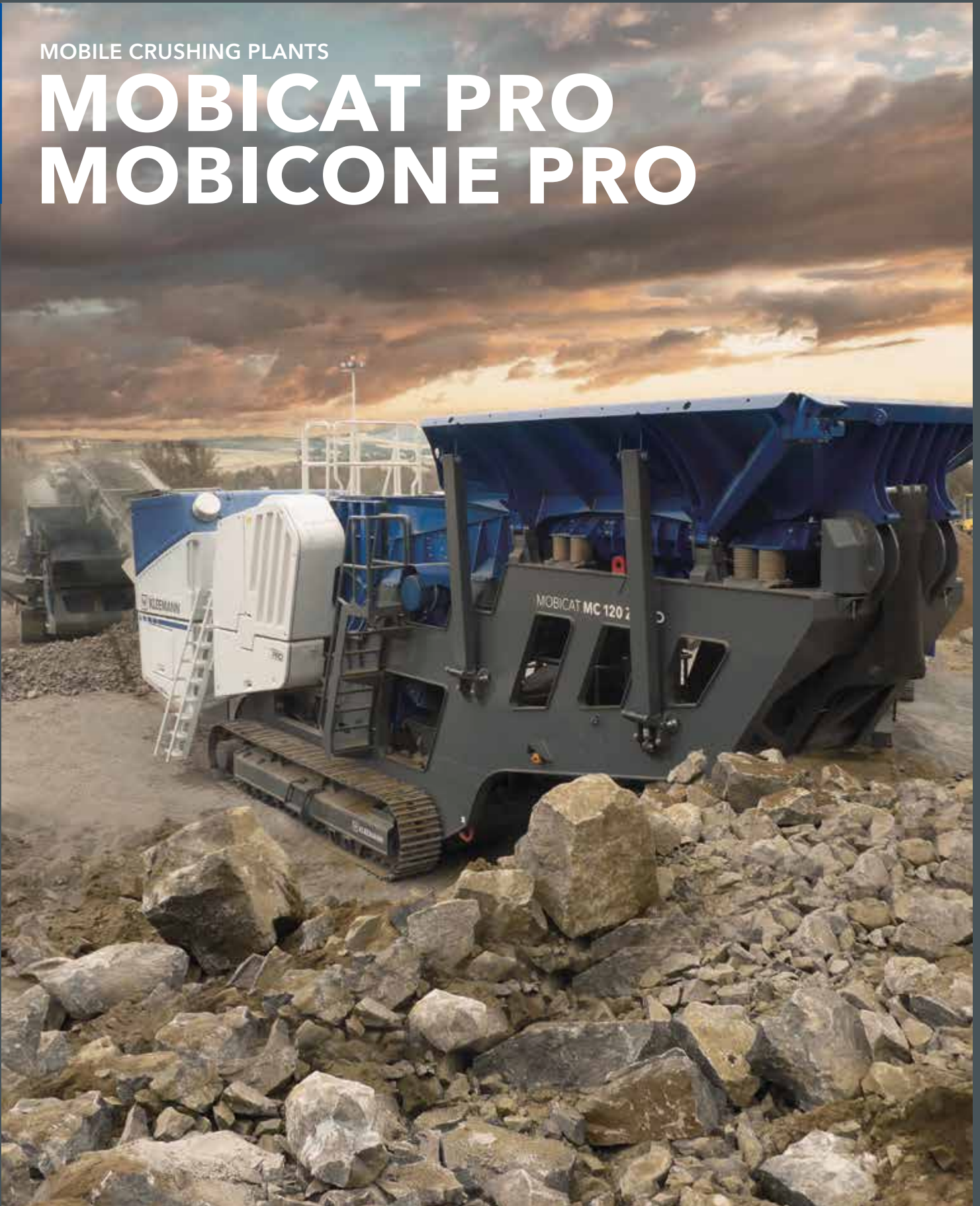


MOBILE CRUSHING PLANTS

MOBICAT PRO MOBICONE PRO





A LONG TRADITION OF EXPERTISE.

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 - this is what KLEEMANN crushing and screening plants stand for.



Over 100 years of
history

A WIRTGEN GROUP Company
an internationally active group of companies



with more than 200
subsidiaries and dealers at home and abroad



MOBILE
JAW CRUSHERS



MOBICAT



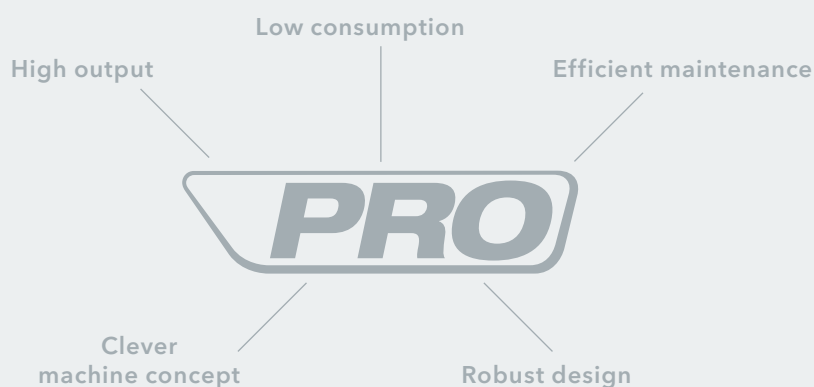
MOBICONE

MOBILE
CONE CRUSHERS

PRO

PRO-LINE

→ For high performance.



Crushing large piece of rock, producing precise grain sizes and shapes, efficient utilisation of energy: the KLEEMANN PRO-LINE.

The technology and design of the MOBICAT MC 120 Z PRO jaw crusher and the MCO 11 PRO cone crusher are uncompromisingly robust and therefore suitable for continuous operation in a quarry.

The plants are characterised by low-maintenance operation and high availability. The possibility of operating the machines in a group per line coupling and therefore automating the crushing process makes the plants perfect team players.

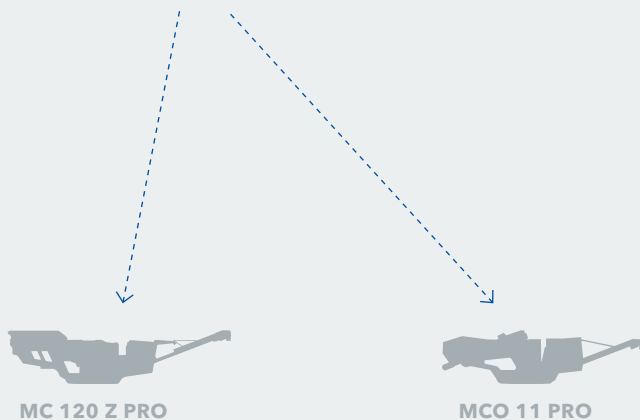




The new PRO-LINE defies the logic that a higher output leads to higher consumption. The diesel-electric drive concept guarantees extremely efficient operation; alternatively, the plants can be operated with an external power supply.

TWO POWER PACKS

For the quarry.

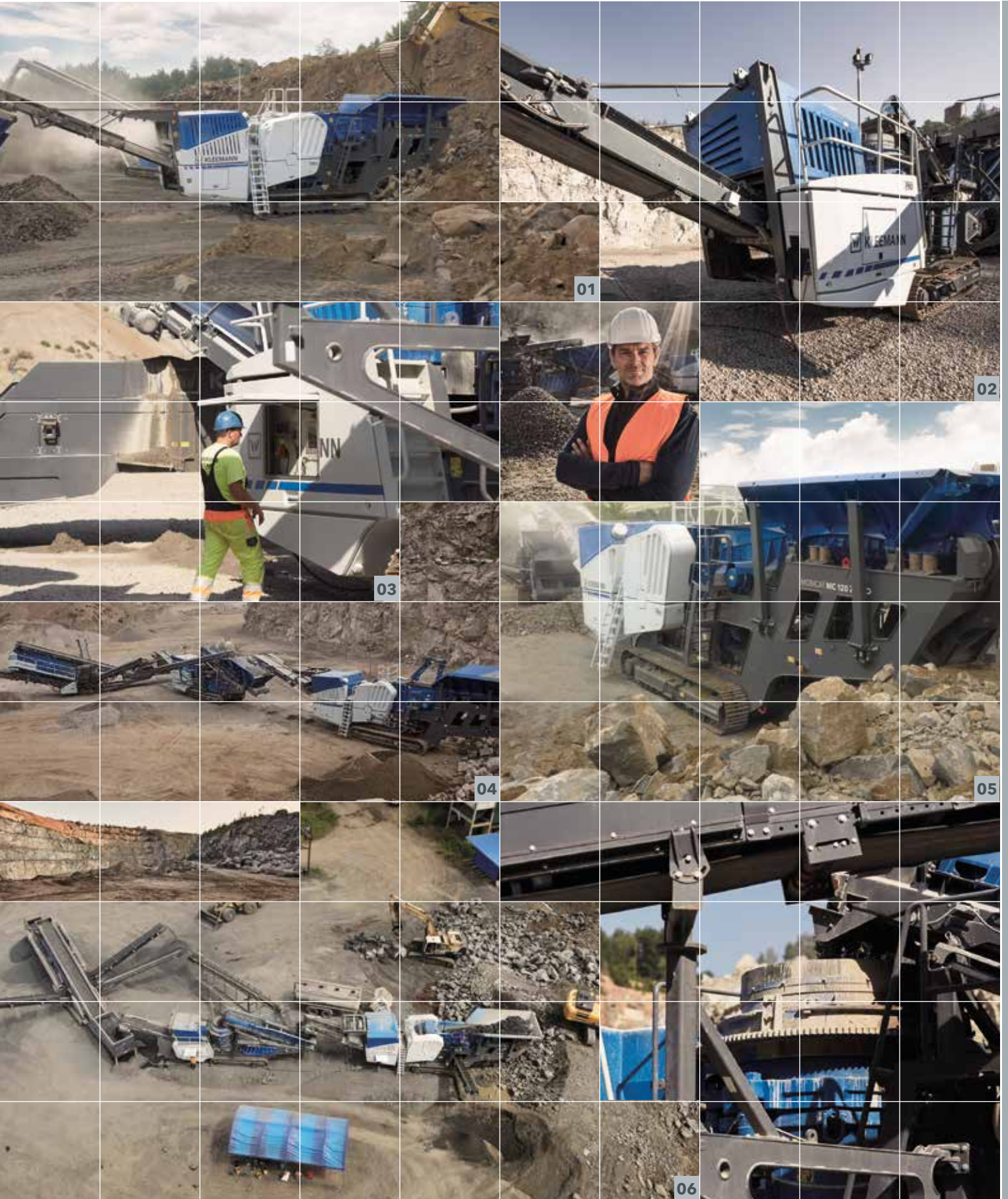


The machines in the PRO-LINE are designed uncompromisingly for tough applications in natural stone. They impress both in individual operation as well as in linked mode.

Applications in hard stone are typical for cone crushers such as the MCO 11 PRO. Jaw crushers such as the MC 120 Z PRO, on the other hand, can be used as primary crushers in almost all types of stone.

➤ USE IN NATURAL STONE

➤ USE IN MINING APPLICATIONS



01 MC 120 Z PRO in natural stone

03 Simple operation through intuitive control

05 MC 120 Z PRO: processing of large pieces of rock

02 MCO 11 PRO in natural stone

04 Line linking: MC 120 Z PRO / MCO 11 PRO / MS 953 EVO

06 Machine combination in basalt application

EFFICIENT DRIVE CONCEPT

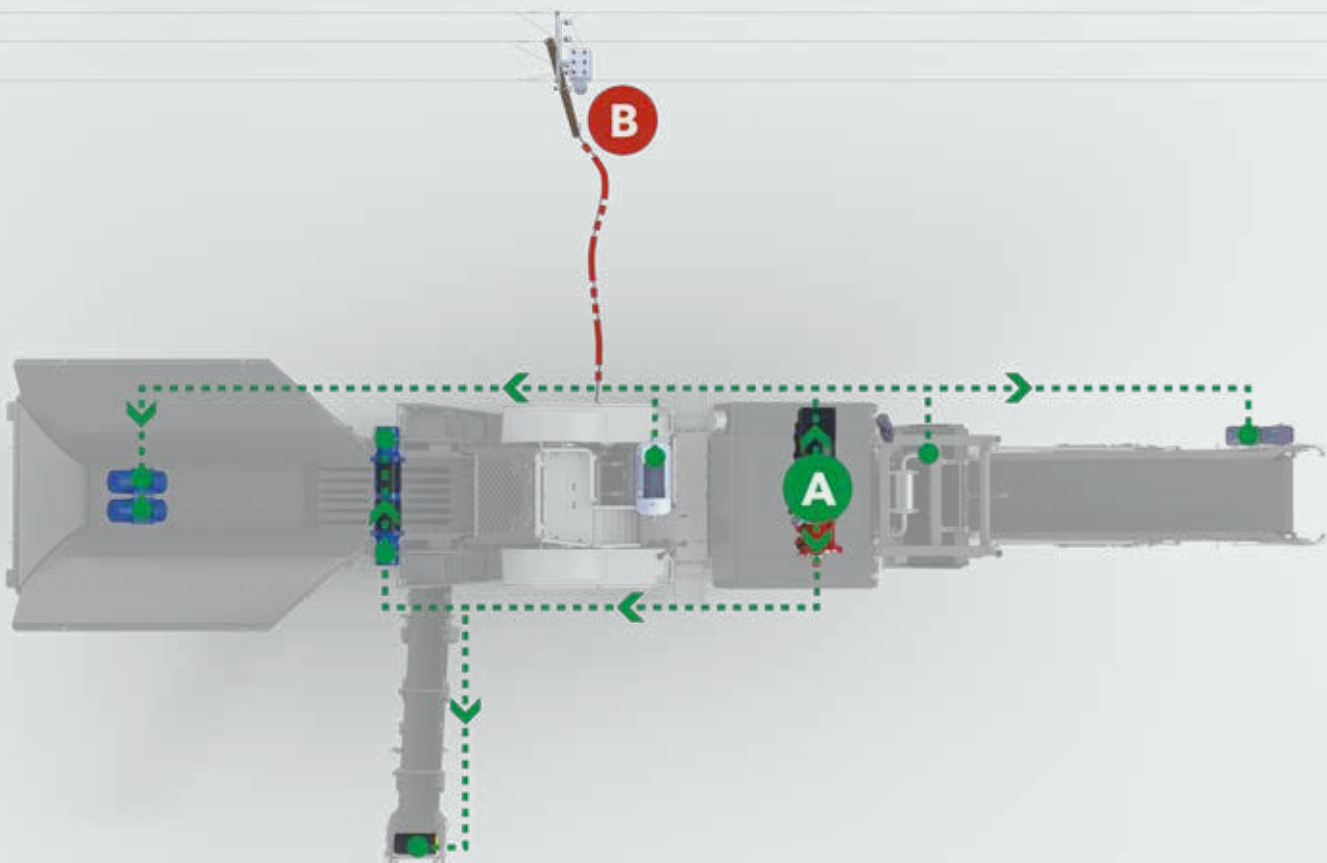
For more power.

Diesel-electric
Drive

up to 410 kW
Output



lower consumption
compared to hydraulic drives





The crushing plants in the PRO-LINE are equipped with efficient, powerful diesel-electric drives. They guarantee environmentally-friendly and low-consumption operation.

They are optimally equipped for the tough demands day after day in the quarry. They can also be fitted with another electrical connection to supply power to downstream machines such as a stockpile conveyor or screening plant (only MC 120 Z PRO).

- > Efficient and powerful diesel-electric drive **A** for low fuel consumption (crusher and all conveyor belts are driven electrically)
- > External power supply **B** for even more efficient use in quarries

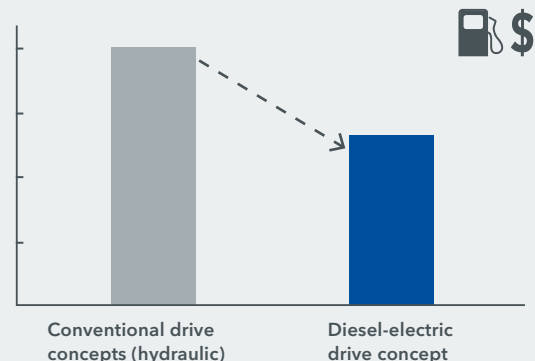
The external power supply option is an even more economic and environmentally friendly solution. In this manner, the plants can be operated purely electrically without the use of diesel - which lowers energy costs and exhaust emissions.

KLEEMANN PROCESS KNOWLEDGE ≡

Protects the environment and easy on your bottom line

With the diesel-electric drive concept, the crusher and all conveyor belts are driven electrically. This means that the oil lines typically found in hydraulic drives whose hoses are prone to leaks can be avoided. Lower oil quantities and longer change intervals reduce costs and time, while protecting the environment.

Energy costs, exhaust emissions and noise emissions are also lowered with the option of fully electric operation.



THE SPECTIVE INTUITIVE CONTROL CONCEPT

For simple operation.

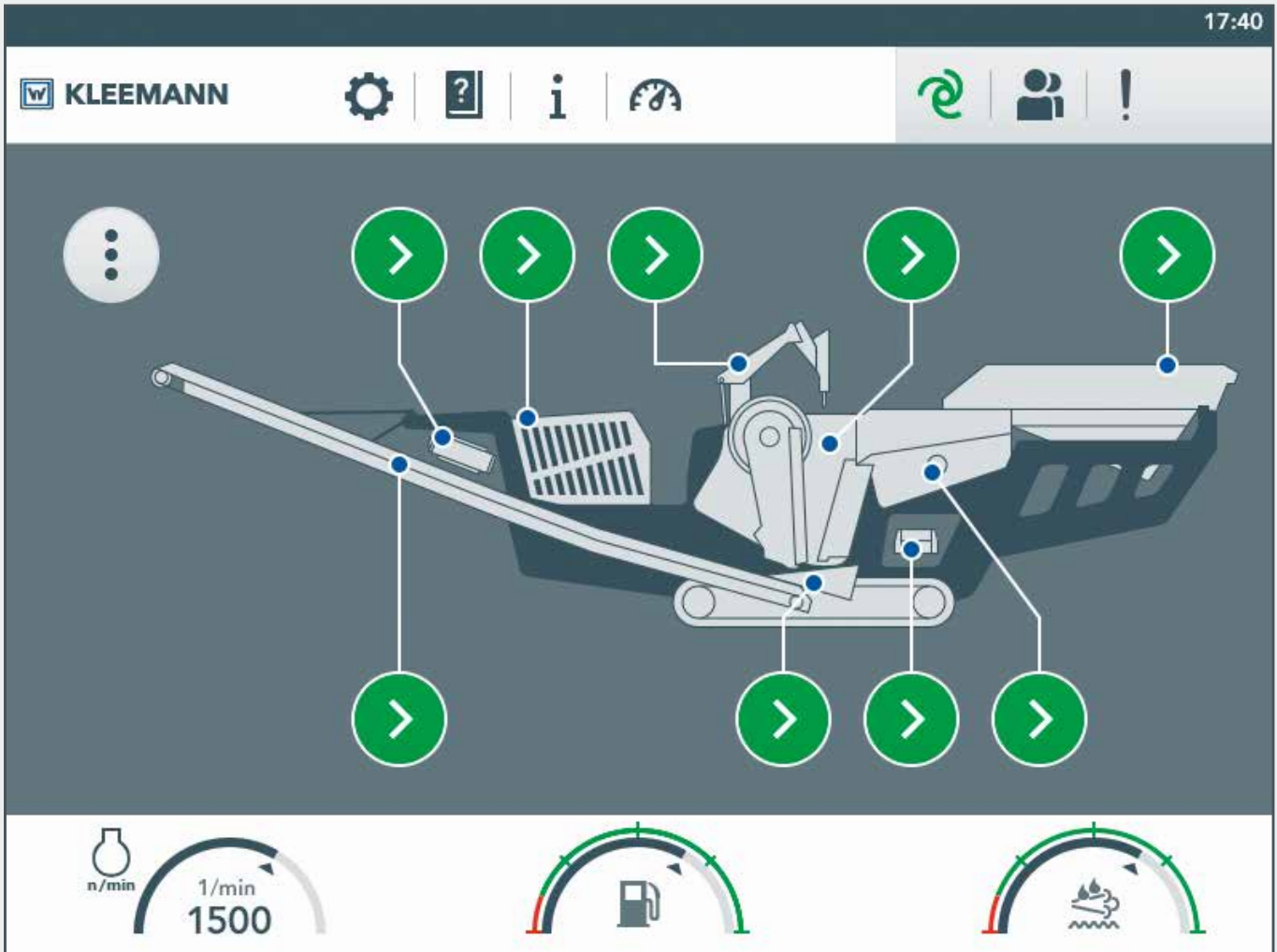
The machines in the PRO-LINE can be operated with the simple SPECTIVE operating concept via a touch panel. All components and functions can be controlled conveniently from the ground.

An overview of SPECTIVE

- The operator is guided step by step through the starting procedure.
- The start screen provides a graphic view of the plant with all adjustable functions at a glance.
- When the desired function is selected, clear instructions guide users through all operating steps.
- If a fault occurs, a fault diagnosis appears on the display. Downtimes are reduced thanks to the fault localisation, description and tips for correction.

The 12-inch touch panel is insensitive to dust and is always easy to read thanks to high light intensity and contrast. It reacts to touching with fingers, pen or glove. The touch panel is integrated in a lockable control cabinet that is protected against dust and vibrations. Radio remote control makes ergonomic operation from the excavator possible.





 SPECTIVE



EVERYTHING AT A GLANCE WITH WITOS®

Efficient fleet and service management -
with the WITOS® FleetView telematics system.

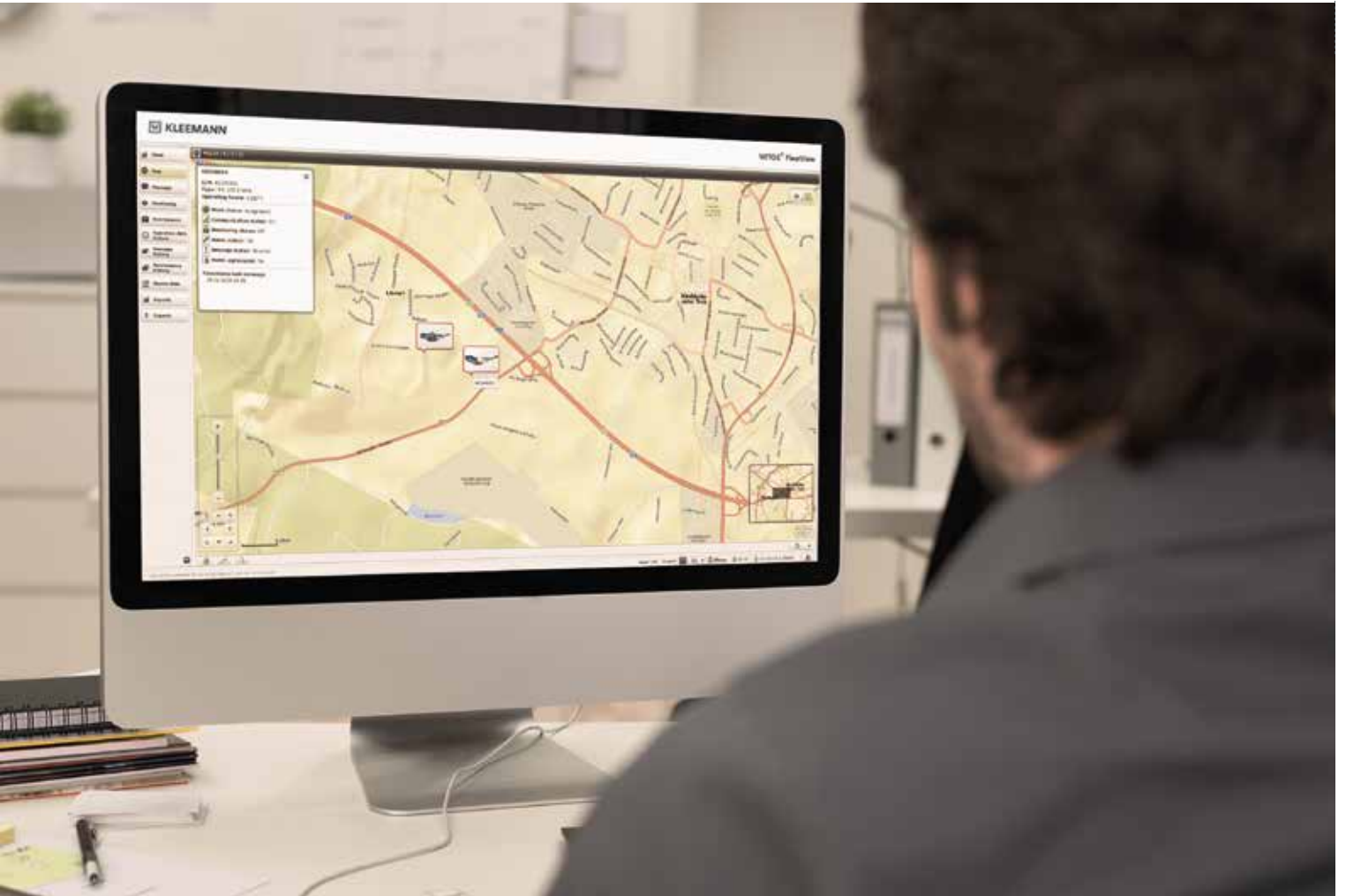
The advantage of WITOS FleetView:

- Location and time-dependent information indicating the whereabouts and operating status of the KLEEMANN plants and other WIRTGEN GROUP machines
- The operational scheduling and planning processes are simplified and unnecessary machine transport operations are avoided
- Intuitive user interface for efficient form of operation scheduling
- Simplification of overall maintenance process and lower burden on daily business
- Efficient and early processing of service appointments minimise downtimes
- Accelerated response in in the event of malfunctions
- Detailed and targeted analyses of the operational and utilisation behaviour of machines facilitate maintenance and service and guarantee the long-term value retention of the machines

The telematics solution from WIRTGEN GROUP helps you you keep the technology in a good condition over time. After all, WITOS FleetView provides customers and users with a cross-location overview of all plants almost in real-time.

The system-supported preparation, transmission, visualisation and evaluation of machine and position data makes 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 diagnostics processes to the targeted control of plants - the range of services is very diversified.





WITOS FleetView

ACCESSIBILITY AND SAFETY

For high operating comfort. -----

Simple in operation and convenient for maintenance.

All machine components are especially easy to access to guarantee trouble-free production, simple operation and fast service.

The useful additional options of the plants also increase operating comfort - a spray system at different transfer points and LED lighting of the plant are already included in the basic plant configuration. Optionally available Premium lighting provides even better illumination of all important operating positions. Simple refuelling of the machine is possible from the ground - on the MC 120 Z PRO with the help of a refuelling pump.

The plants in the PRO-LINE are also equipped with the best possible safety equipment.

All function- and safety-related cylinders are equipped with safety valves (lowering/brake holding valves). Each cylinder stays in its current position - to protect the machine operator and machine in the event of deactivation or failure.





> MC 120 Z PRO - easiest possible access to the engine compartment



> MCO 11 PRO - convenient access to the engine compartment, refuelling possible from the ground



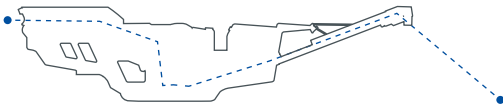
> MCO 11 PRO/MC 120 Z PRO - improved illumination with Premium lighting



> MC 120 Z PRO - convenient screen media change thanks to ease of access

MOBICAT MC 120 Z PRO

High performance in the primary crushing stage.



up to 650 t/h
Feed capacity

1,080 x 680 mm
Feed size

1,200 x 800 mm
Crusher inlet





**Designed for high outputs in quarry operation:
the MOBICAT MC 120 Z PRO is impressive in natural
stone applications with an output of up to 650 t/h.**



HIGHLIGHTS

Perfectly equipped.

Powerful performance and robustness combined with intuitive operation and low-maintenance operation.

The MC 120 Z PRO has a generously dimensioned feeding unit. Large volumes of material can therefore be loaded with by an excavator or wheel loader with no problems.

The high performance of the jaw crushing plants is also a result of the dimensions of the crusher inlet of 1,200 x 800 mm and the extra long design of the articulated crusher jaw. Even large stones can be loaded without any problems.

Despite its impressive size and power, the machine can still be transported in one piece. Components such as the foldable side discharge conveyor, feeding unit and rock chisel have hydraulic functions and can remain on the machine for transport.



- Large feeding unit designed for loading with large excavators, with hydraulic folding and self-locking

- Effective primary screening by means of an independent double-deck prescreen with an extra large screening surface

- Continuous crusher load thanks to Continuous Feed System (CFS)

- Easy-to-operate rock chisel

- Powerful jaw crusher - with optional vibrating extractor to protect the crusher discharge conveyor

- Powerful and efficient diesel-electric drive, external power supply possible

- Simple and intuitive SPECTIVE control concept

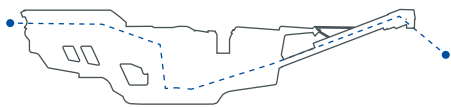
- Wide and robust crusher discharge conveyor with reliable magnet

- Best possible access to all operation-related components

- Can be transported quickly and easily



POWERFUL JAW CRUSHER



The heart of the machine.

With its long crusher jaw, the MC 120 Z PRO is designed perfectly for high throughputs combined with top reliability. This is also ensured by the powerful 200 kW crusher drive. To adjust the crusher to the material and the desired grain size, the gap setting can be made conveniently by the push of a button.

Well utilised - for maximum plant performance

The plant is equipped with the continuous feed system CFS, which adapts the conveying speed to the fill level of the crusher. Plant performance is therefore automatically optimised for a high throughput. If material blockages occur in spite of this, the optional crusher unblocking system can remedy this.

The electric crusher drive is then reversed and the blockage breaks up within a short time. Furthermore, thanks to frequency converters, this system makes it possible to operate at different speeds and therefore guarantees optimum tuning of the crusher speed to the material and application.

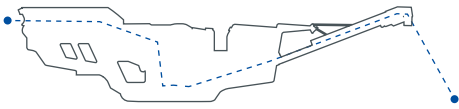
After the material has passed through the crushing unit, it is transferred onto the crusher discharge conveyor with a deflector plate that protects the conveyor. In the case of very coarse-grained or sharp-edged material, a machine version with a vibrating extractor is available as an option.



Top crushing capacity and high throughput thanks to a powerful crushing unit.



PRESCREENING INCREASES PRODUCTIVITY



Generously dimensioned and extremely robust.





The less fine material is introduced to the crushing process, the better the productivity and final product quality.

The MC 120 Z PRO is equipped with an independent double-deck prescreen with an extra large screening surface of 3.5 m².

The medium grain can also be routed via the crusher bypass past the jaw crusher, which additionally reduces the wear on the crusher. Fines can be discharged via the foldable or rigid side discharge conveyor. For maximum flexibility on the construction site, this can be installed on the right or left.

A further positive side effect of prescreening is that the material flow is levelled uniformly, which also reduces the burden on the crusher and therefore reduces wear.



-----> **Recommended use**

- ✔ Processing natural stone (e.g. limestone, granite, basalt)
- ✔ In mining applications
- ✔ Use in recycling (e.g. mixed rubble, concrete, reinforced concrete)
- ✔ Feed capacity of up to 650 tons per hour
- ✔ For a consistent process: in combination with the MOBICONE MCO 11 cone crusher and a MOBISCREEN screening plant

-----> **Features**

- ✔ Diesel-electric drive concept
- ✔ Option for external power supply
- ✔ Independent double-deck prescreen (3.5 m²)
- ✔ Automatic crushing gap adjustment
- ✔ Continuous crusher loading with CFS
- ✔ Vibrating extractor (option)
- ✔ Crusher unblocking system (option)

-----> **Technical data**

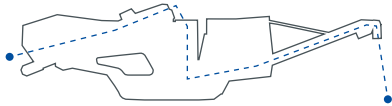
Feed capacity up to approx.	650 t/h
Crusher inlet (W x D)	1,200 x 800 mm
Transport weight of basic plant - max. configuration (kg)	72,500 - 85,500 kg
Engine power	371 kW





MOBICAT
PRO

MOBICONE MCO 11 PRO



Efficiency and top final product quality
in the secondary crushing stage.

up to 470 t/h
Feed capacity

7.5 m³
Hopper volume

1120 mm
Crusher system size (d)





The MOBICONE MCO 11 PRO is ideally tuned to efficient applications in natural stone and the performance of the MC 120 Z PRO mobile jaw crusher.



HIGHLIGHTS

Perfectly equipped

Robust design, high performance and low-maintenance operation.

The MOBICONE MCO 11 PRO cone crusher is the perfect partner for linked operation with the MOBICAT MC 120 Z PRO jaw crusher. The machine was specially designed for the secondary crushing stage to meet the high requirements of natural rock processing in the quarry and therefore to meet to equally high quality and quantity demands.

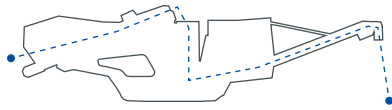
The machine can be transported as a single unit (except for the return conveyor) on a low loader.

The simple sliding of the feeding unit moves the machine into a compact transport position - and allows quick set-up. It also has another advantage: the material discharge pattern into the crusher can be easily adapted. Optimum loading is therefore possible.



- Sturdy feeding unit made of wear-resistant steel or with replaceable wear lining
- Continuous crusher load through the Continuous Feed System (CFS)
- Cone crusher with large stroke for maximum crushing capacity
- Convenient automatic gap setting via touch panel
- Powerful and efficient diesel-electric drive, external power supply possible
- Simple and intuitive SPECTIVE control concept
- Wide and robust crusher discharge conveyor
- Best possible access to all operation-related components and high safety standards
- Simple transport thanks to hydraulically foldable crusher discharge conveyor and sliding mechanism of the feeding unit





Cone crusher with large stroke

The MOBICONE MCO 11 PRO has a cone crusher with a large stroke for maximum crushing capacity. This is guaranteed by the powerful crusher drive with 250 kW and the robust crusher design. Thanks to the three-armed structure and the large passage area, a high throughput is generated.

Since cone crushers can react sensitively to uncrushable material, the reliable „Tramp Release“ overload protection system provides a remedy. The plant detects the overload and raises the bowl of the crusher unit automatically so that foreign bodies such as wood or metal can fall out of the crusher unit without damaging the crusher.

Additional overload protection is provided by the intelligent "Ring Bounce Detection" whereby the crusher overload system is monitored continuously and, if necessary, appropriate action is initiated. Two modes can be set in the software:

➤ **Mode 1 - PRECISE MODE for the production of grit:**
the machine stops feeding as soon as the ring bounce is detected; the operator receives a fault message and can adapt the process. In this mode, no impermissible oversize grain is produced and the machine is protected against crusher damage

➤ **Mode 2 - MIXTURE MODE for the production of mixtures:**
in this mode, the machine adapts the crushing gap automatically - without intervention of the operator - to avoid ring bounce. After a definable time without ring bounce, the gap is closed again to keep the share of oversize grain as low as possible.





Loading of the crusher unit must be optimised to ensure high final product quality. Thanks to the hydraulically movable feeding unit, the best possible discharge parabola can be set. The tried-and-tested Continuous Feed System

(CFS) guarantees an optimum crusher fill level. The gap setting and zero-point determination can be carried out safely and conveniently from the ground using the touch panel.



-----> **Recommended use**

- ✔ Secondary and tertiary crushing
- ✔ From medium hard to hard, abrasive natural stone
- ✔ In mining applications
- ✔ Feed capacity up to 470 tons per hour
- ✔ For a complete process: combinable with the MOBICAT MC 120 Z PRO jaw crushers and a MOBISCREEN screening plant

-----> **Features**

- ✔ Generously dimensioned feeding unit with simple sliding mechanism
- ✔ Continuous crusher loading with CFS
- ✔ Reliable overload systems (tramp release and ring bounce detection)
- ✔ Automatic crushing gap adjustment
- ✔ Diesel-electric drive concept
- ✔ Option for external power supply

-----> **Technical data**

Feed capacity up to approx.	470 t/h
Crusher system size	d = 1,120 mm
Transport weight of basic plant - max. configuration	49,500 - 58,000 kg
Maximum feed size	240 mm

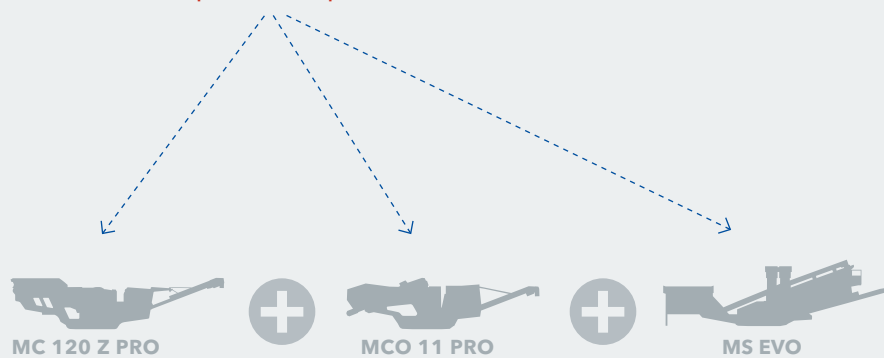




MOBICONE
PRO

WELL COMBINED

For perfect processes.



The machines in the PRO-LINE are perfectly tuned to each other in terms of their output, dimensions and material flow concept.

The line coupling option allows the PRO plants to be coupled with each other. The crushing process between the crushing plants is then optimised automatically so that material is always conveyed with maximum efficiency through the machines.

A probe is installed at the crusher discharge conveyor of the upstream machine, which monitors the filling level of the feeding unit of the downstream machine. When the filling level reaches a defined height, the output of the upstream plant is temporarily reduced, therefore effectively reducing the overfilling of individual machines and ensuring that machine utilisation is always ideal. The Continuous Feed System (CFS) feed control also guarantees optimum utilisation of the crusher.

For safety reasons, the crushing and screening plants are connected to each other by a cable. If an emergency stop button is pressed on the plant train in the event of an emergency, all machines are safely stopped.



IN COMBINATION FOR TOP PERFORMANCE.

In addition to this, a MOBISCREEN MS 953 EVO mobile screening plant can be integrated in the process for the classification of up to four fractions.



MOBILE
JAW CRUSHERS



MC 120 Z PRO



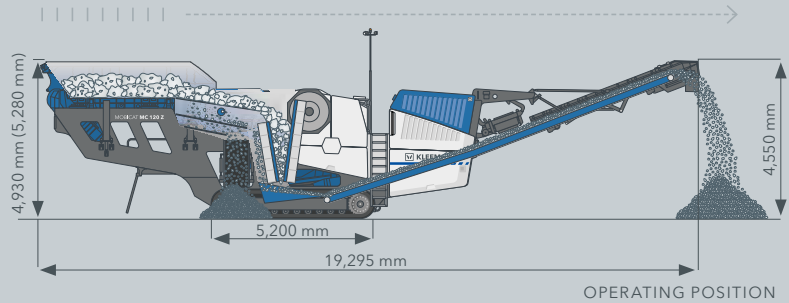
MCO 11 PRO

MOBILE
CONE CRUSHERS

PRO



MOBICAT MC 120 Z PRO



➤ Transport weight of basic plant - max. configuration 72,500 - 85,500 kg

CRUSHER INLET (W X D)

➤ 1,200 x 800 mm



FEED CAPACITY

➤ 650 t/h



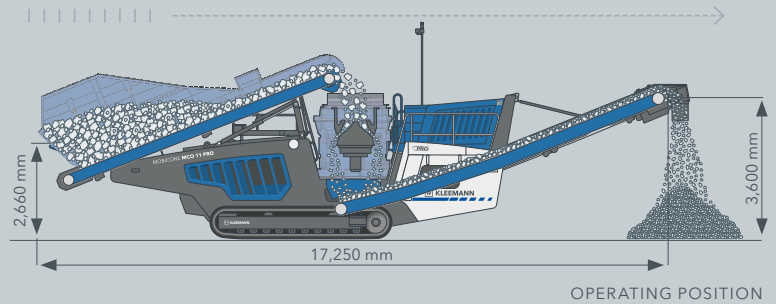
WITH INDEPENDENT DOUBLE-DECK PRESCREEN



RECOMMENDED USE:

- Processing natural stone (e.g. limestone, granite, basalt)
- Use in recycling (e.g. mixed rubble, concrete, reinforced concrete)
- In mining applications
- For varying deployment locations thanks to ease of transportation
- For large batch sizes

MOBICONE MCO 11 PRO



➤ Transport weight of basic plant - max. configuration 49,500 - 58,000 kg

CRUSHER SYSTEM SIZE (W X D)

➤ 1,120 mm



FEED CAPACITY

➤ 470 t/h



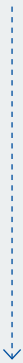
FEEDING UNIT WITH SIMPLE SLIDING MECHANISM

RECOMMENDED USE:

- Secondary and tertiary crushing
- From medium hard to hard, abrasive natural stone
- In mining applications
- For varying deployment locations thanks to ease of transportation
- For large batch sizes

YOUR KLEEMANN SERVICE

From the WIRTGEN GROUP.

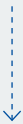


**Reduced downtimes, minimal wear costs,
maximum customer proximity.**



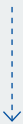
Service network

Our local contact partners provide you with comprehensive support for all applications and questions related to our products. Thanks to our closely-knit, global WIRTGEN GROUP network, we guarantee short response times and quick solutions.



Training courses

An essential element of the successful use of our plants is knowledge of their operation. In order to communicate the necessary technical knowledge to your employees, KLEEMANN offers a wide range of training courses.



Parts and accessories

Original parts and accessories from KLEEMANN can assure the high reliability and availability of the machines in the long term. An overview of all parts is available at www.partsandmore.net







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