

A WIRTGEN GROUP COMPANY



**KLEEMANN**



# MCO 90(i) EVO2

MOBILE CONE CRUSHER MOBICONE



> THE TEAM PLAYER IN HARD STONE



# MOBICONE MCO 90(i) EVO2

The cost-effective use of crushing and screening plants depends on many factors. Thanks to low operating costs, high plant performance and optimum transportability, efficient operation can be guaranteed and, ultimately, a low cost per ton can be achieved. These are the key strengths of the MOBICONE MCO 90(i) EVO2.



A focus on cost-effectiveness



Operability in the foreground



An eye on product quality



# MOBICONE MCO 90(i) EVO2



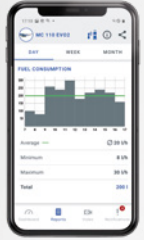
Crusher discharge conveyor  
Discharge height: 3,300 mm,  
extended 3,700 mm,  
with post screening unit up to 3,600 mm

High crusher drive power:  
185 kW constant,  
250 kW maximum

Basic hopper 6.4 m<sup>3</sup>

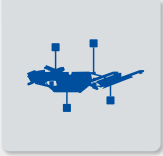
Excellent accessibility  
for crusher lubrication

Optimised ground  
clearance for loading



SPECTIVE  
CONNECT

1 Feeding unit	4 Overload system	7 Post screening unit
2 Continuous Feed System CFS	5 Drive	> Handling and sustainability
3 Crusher unit	6 SPECTIVE operating concept	



## 1 Feeding unit

- > Simple sliding mechanism for fast set-up and transport, easy adaptation of the material discharge pattern into the crusher
- > Impact bars with wear elements that can be individually replaced
- > Hopper filling aid<sup>+</sup> enables a rear-side feeding width of up to 3.7 m, hopper extension<sup>+</sup> (8.3 m<sup>3</sup>) for increased feeding volume
- > Metal detector and magnetic remover<sup>+</sup> for optimal operational reliability



1 Feeding unit

2 Continuous Feed System CFS

3 Crusher unit

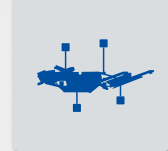
4 Overload system

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> Handling and sustainability



## 2 Continuous Feed System CFS

- > Continuous crusher loading thanks to optimum feed control - for daily outputs that are up to 10% higher
- > Control is achieved by monitoring
  - > the crusher's fill level
  - > the crusher drive's capacity utilisation
  - > the crusher's speed
  - > the stockpile probe at the crusher discharge conveyor
- > Depending on the crusher level, the conveying speed is throttled or increased continuously and automatically - the control range of the feeding conveyor has been extended by just under 40%



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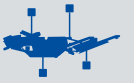
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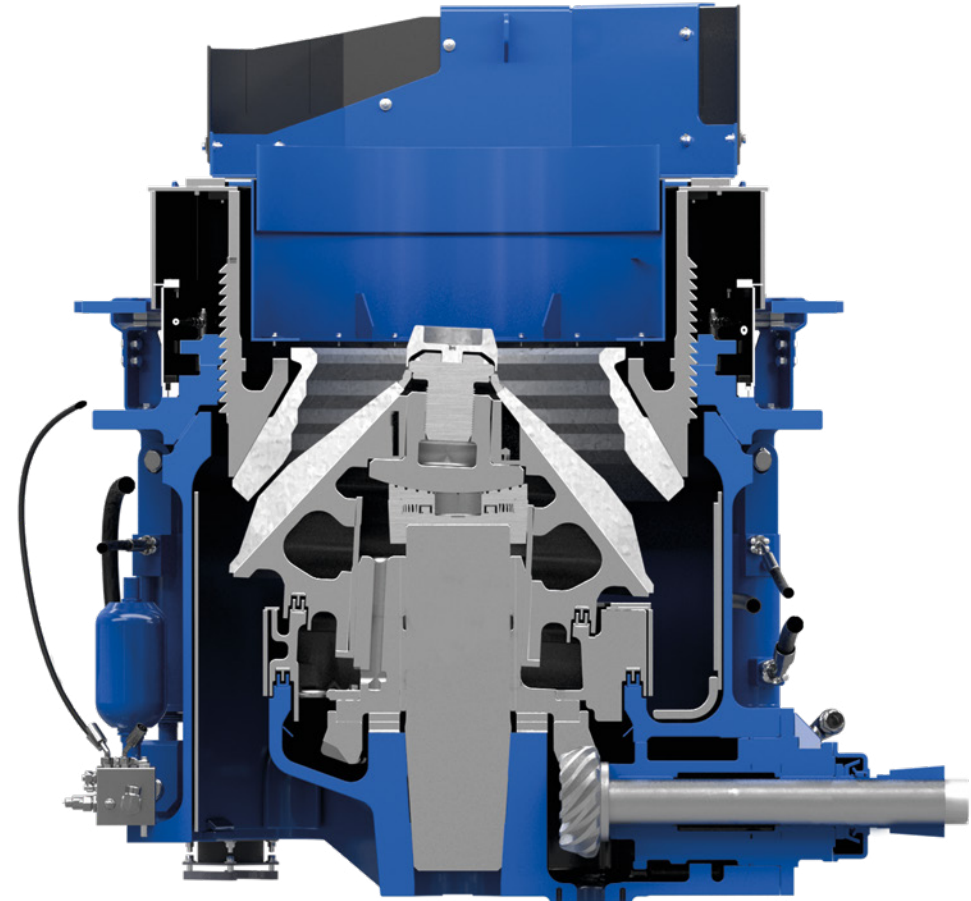
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> Handling and sustainability



### 3 Crusher unit

- > Cone crusher with large stroke for maximum crushing capacity; 3-arm crusher design for a high throughput
- > High crusher drive power for a continuous crushing process and higher production volume in special applications
- > Convenient gap-setting via radio remote control and zero-point determination via touch panel
- > Rapid heating-up phase for fast application following start-up
- > Ease of physical and visual access thanks to a second inspection hatch
- > Simple tool changes without sealing compound



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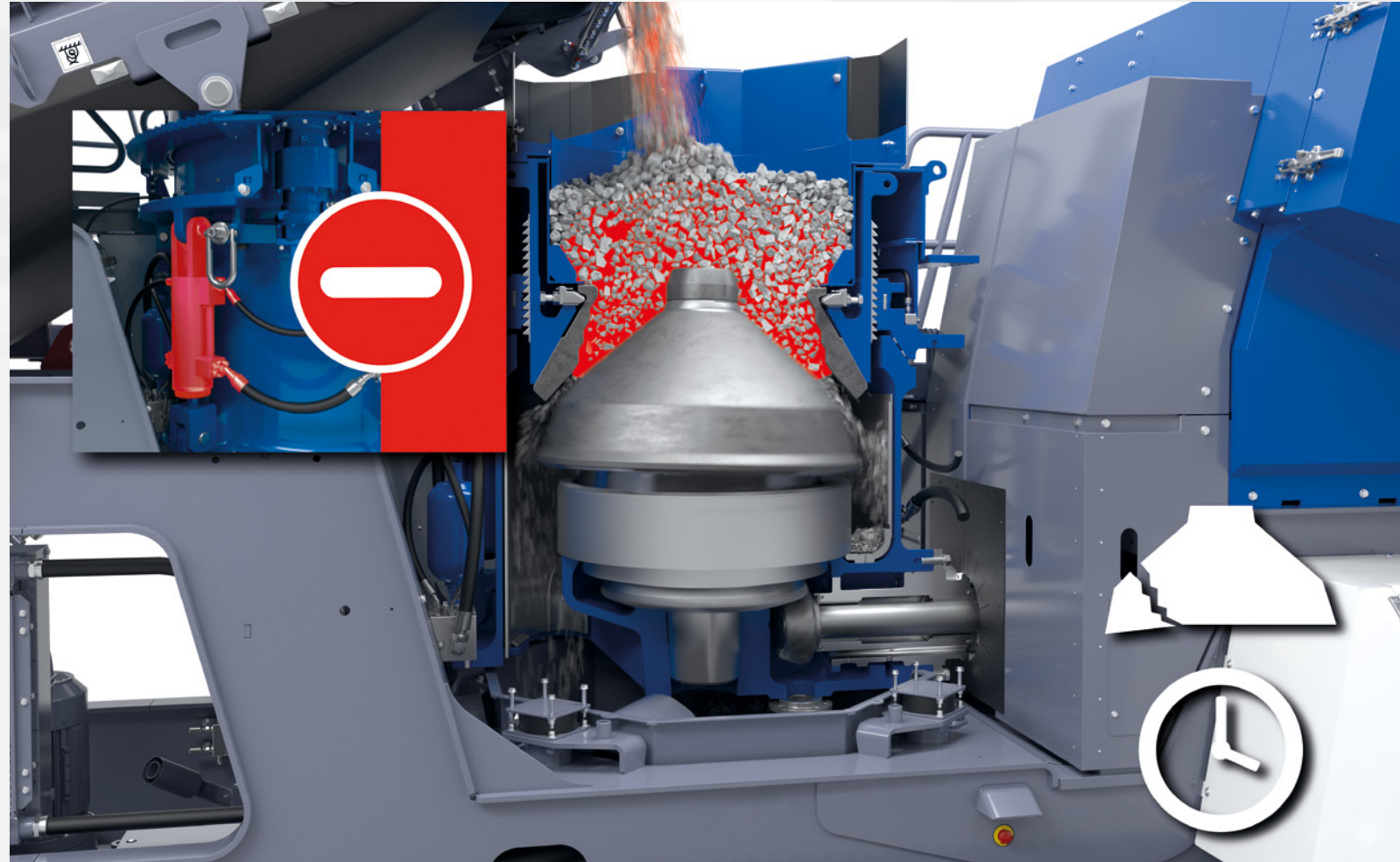
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## 4 Overload system

- > Integrated "Tramp Release System" overload system for protection in the event of uncrushable materials such as wood or metal
- > Intelligent "Ringbounce Detection" overload detection protects the crusher against damage, 2 modes available:
  - > PRECISE MODE: Production of grit; machine stops feeding with latent overload, process can be adjusted, no production of oversize grain for best quality
  - > MIXTURE MODE: Production of mixtures; crushing gap is adjusted automatically to prevent ringbounce, gap is closed again after a specified time



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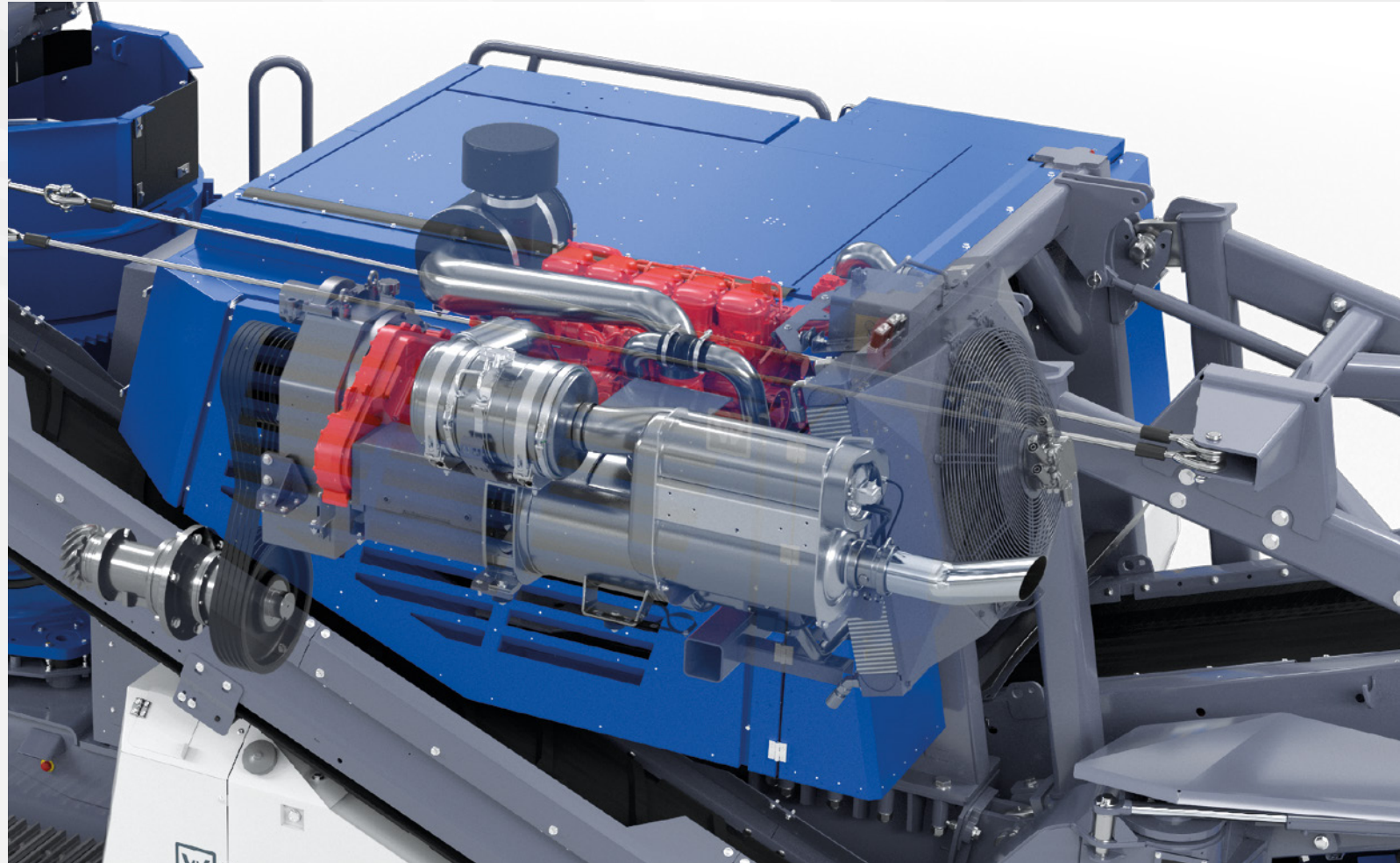
7 Post screening unit

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## 5 Drive

- > Efficient, powerful D-DRIVE crusher direct drive with low fuel consumption, conveyors are driven electrically
- > Output-dependent fan for low-noise and efficient operation
- > Heat package<sup>+</sup> (-15 to +50 °C) or cold package<sup>+</sup> with auxiliary heater (-25 to +40 °C)
- > Double cooling capacity for an extended area of operation



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

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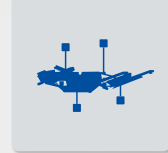
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## 6 SPECTIVE operating concept

- > **SPECTIVE touch panel:** with menu-guided operation, visualisation and support; status display of all components such as speed, temperature, etc., rapid fault localisation and diagnostics
- > **SPECTIVE CONNECT<sup>+</sup>:** for displaying all important information directly on the smartphone
- > **Smart Job Configurator:** configuration tool for simple determination of the optimal machine settings
- > **SPECTIVE radio remote control:** for operation of all important components
- > **SPECTIVE radio remote control, small<sup>+</sup>:** the most important operating functions conveniently combined, minimum space requirements in the operator cabin
- > **Camera system<sup>+</sup>:** for convenient monitoring of crusher and hopper, remote monitor in the excavator also available with radio extension, additional connection to SPECTIVE CONNECT

- > **Operations center:** platform for digital solutions for process and service optimisation as well as easier maintenance planning
- > **Line coupling<sup>+</sup>:** process coupling for controlling the production output; safety coupling for reliable inter-linking of the plants in the plant train
- > **Belt scale<sup>+</sup>:** for all relevant conveyors to determine production data



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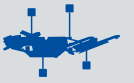
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## 7 Post screening unit

- > Post screening unit<sup>+</sup> available in two versions:
  - > Single-deck vibrating screen for the production of a classified final grain size
  - > Double-deck vibrating screen for producing two classes of final grain
- > Practical discharge height for large stockpile volumes or the optimal transfer to crushing or screening plants
- > Oversize grain returning for closed material loop, with transfer chute integrated in the hopper
- > Oversize grain returning<sup>+</sup> 100° hydraulically swivel-mounted for side discharging
- > Easy and fast assembly and disassembly of the post screening unit within just a few minutes; trouble-free transport thanks to compact container dimensions (width < 3 m)



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## > Accessibility and safety

- > Fast, convenient servicing possible thanks to ease of physical and visual access to all components
- > Simple refuelling from the ground, refuelling pump<sup>+</sup> available
- > Spray system and LED lighting included in the basic plant; premium lighting<sup>+</sup> for extended illumination of working areas
- > Central drain point for fluids enables ergonomic maintenance

## > Transport

- > Transport with and without post screening unit under a transport height of 3,400 mm possible
- > Simple transport and short set-up times thanks to hydraulic folding and swivel functions
- > Convenient and safe set-up via radio remote control possible



## > Environment

- > Noise reduction: thanks to power- and load-dependent fans, it is up to 4 decibels quieter than the predecessor model
- > Dust containment: effective spray system at different material transfer points of the plant, e.g. crusher inlet, crusher discharge conveyor, side discharge conveyor, post screening unit
- > Reduced consumption thanks to ECO mode: all machine components - with the exception of the diesel engine and crusher - can be switched off at the push of a button



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TECHNICAL INFORMATION	MCO 90(i) EVO2
Feed capacity up to approx. (t/h)	270
Crusher system size (mm)	970 mm
Max. feed size (mm)	200 mm
Transport height approx. (mm)	3,400
Transport length approx. (mm)	16,000 <sup>1)</sup>   20,200 <sup>2)</sup>   20,700 <sup>3)</sup>
Transport width approx. (mm)	3,000   3,240 <sup>2) 3)</sup>
Transport weight of basic plant - max. configuration (kg)	33,500 - 49,000

<sup>1)</sup> without options    <sup>2)</sup> with optional single-deck post screening unit  
<sup>3)</sup> with optional double-deck post screening unit



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