

Cost-efficient and compact professional machine

# COLD MILLING MACHINE W 200 Fi



# COST-EFFICIENT AND COMPACT PROFESSIONAL MACHINE



The easy-to-operate, compact cold milling machine caters to a wide range of applications from surface course rehabilitation via pavement removal at full depth all the way to fine milling operations.

The innovative **MILL ASSIST** machine control system permits efficient operation of the machine in automatic mode paired with high performance and user friendliness.

Milling drum units can be exchanged quickly and easily to realize milling widths of 1.5 m, 2.0 m or 2.2 m as part of the MCS - Multiple Cutting System.

The innovative **MCS BASIC** permits milling drums to be exchanged in an exceptionally short period of time to increase both flexibility in operation and machine utilization.

A host of innovative features significantly reduce fuel consumption and pick wear, thereby boosting sustainability and minimizing CO<sub>2</sub> emissions.

# WIRTGEN COLD MILLING MACHINES



**SMALL MILLING MACHINES**

- > Milling width up to 1,300 mm
- > Milling depth to 300 mm

**COMPACT MILLING MACHINES**

- > Milling width up to 1,900 mm
- > Milling depth to 330 mm

**LARGE MILLING MACHINES**

- > Milling width up to 4,400 mm
- > Milling depth to 350 mm



# OVERVIEW OF HIGHLIGHTS

Perfectly Equipped

## OPERATION

- 01 Fully Equipped Operator's Platform**
  - > Perfect view of important areas of the operation
  - > Exceptionally powerful LED lighting system
  - > Ample storage space
  - > Flexible, vertically adjustable canopy
- 02 Intuitive MMI - Man-Machine Interface**
  - > Flexible control panel concept for maximum machine control
  - > 5" control panels for leveling
  - > 7" control panel for the convenient display of important parameters
  - > Robust, high-quality camera system including 10" control panel

## QUALITY

- 03 Versatile, High-Precision LEVEL PRO ACTIVE Leveling System**
  - > New, simple **LEVEL PRO ACTIVE** operating concept
  - > New complementary and automated features
  - > Optimized 3D and laser leveling
  - > Leveling boom, right, or leveling boom, right and left, including Sonic Ski sensor
  - > Optimized Multiplex system
- 04 High Reliability**
  - > Pioneering diagnostic concept
  - > Redundant machine control system
  - > Dual CAN network
  - > Reliable protection against vandalism
  - > Efficient servicing and maintenance concept



## MILLING

**05 Unmatched Cutting Technology**

- > Easy exchange of milling drums in record time
- > Quick exchange of milling drum units
- > Optimized wear protection for the milling drum unit
- > Extremely hard-wearing quick-change toolholder system **HT22**
- > New upper toolholder part **HT22 PLUS** with extended lifespan

**06 Innovative MILL ASSIST** 

- > **MILL ASSIST** automatic mode
- > Additional pre-selection of operating strategy in automatic mode
- > Clear pre-selection of consistent milling pattern quality
- > Innovative efficiency display

## PERFORMANCE

**07 Maximum Milling Performance**

- > High-powered diesel engine
- > Increased ballasting flexibility
- > Large scraper lift
- > Flexible and efficient material loading
- > "Boost" feature to increase the discharge trajectory

**08 Informative WPT -**

- > Tried-and-tested WITOS FleetView telematics system with optional WITOS Fleet **WPT** Milling feature
- > Clear documentation of milling performance
- > Automatically generated measurement reports
- > Assignment to site by means of satellite map display
- > Direct display of actual milling width



## ECONOMY AND SUSTAINABILITY

**09 Reduced Diesel Consumption - Active Minimization of CO<sub>2</sub>** 

- > Extended range of usable milling drum speeds
- > Maximum use of engine power in the low engine speed range
- > Start-stop engine feature via exterior control panel
- > Intelligent dual fan concept

**10 Environmentally Sustainable Machine Technology** 

- > Maximum exhaust gas purification for low exhaust emissions
- > Reduced noise emissions during repositioning
- > Optimized VCS extraction system
- > ECO operating strategy for minimal consumption
- > Efficient water management



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

# CONNECTED MILLING

An efficient flow of information is essential, since it makes processes easier, faster and more economical. WIRTGEN has been working on this principle for many years and, to define it for the milling technology, has coined the term **CONNECTED MILLING**.

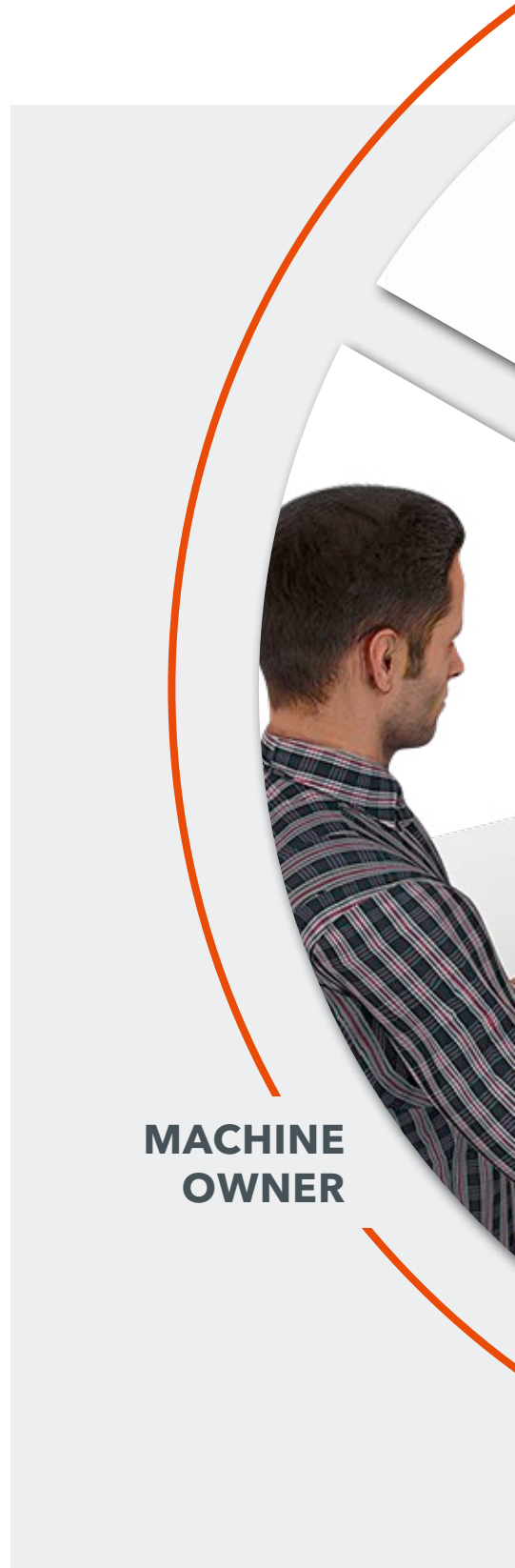
**CONNECTED MILLING** is synonymous with the innovative, multi-faceted flow of information between the machine and its numerous different machine components, the machine operator, the service workshop and the dispatch offices. The information and data provided by the system increase both machine reliability and the efficiency of milling operations.

The new, innovative building blocks of **CONNECTED MILLING** implemented in the new generation of large milling machines include the intelligent **MILL ASSIST** assistance system and the WIRTGEN GROUP Performance Tracker Milling, which precisely tracks the machine's milling performance.

**MILL ASSIST** evaluates relevant information such as engine load, type of milling drum used, milling depth or operating pressure in order to adjust, for example, the optimum milling drum speed. In addition, the machine operator can pre-select an operating strategy in terms of cost, performance or quality.

The WIRTGEN GROUP Performance Tracker Milling detects the cross section to be milled by means of a laser scanner. Area performance levels and milling volumes are precisely determined via GPS positioning and additional sensors. The production rate achieved during the day inclusive of all consumables, a precise site plan and comprehensive additional information is then provided in an automatically generated report addressed to, for example, the dispatch office. The machine operator is provided with relevant information immediately via the control screen.

With the new generation of WIRTGEN large milling machines, **CONNECTED MILLING** will play an even more important role for machine users.



**MACHINE  
OWNER**

**COLD MILLING  
MACHINE**



**CONNECTED  
MILLING**



**OPERATOR**

# FULLY EQUIPPED OPERATOR'S PLATFORM

## Perfect View of Important Areas of the Operation

The intelligent visibility concept of the large milling machine significantly increases operator comfort and leads to precise milling results. The operator's platform has been designed to extend to the outer edge of the machine on the left, while the railing on the right can be simply adjusted outwards in order to ensure optimum visibility of the surface to be milled and of the material loading process. In addition, the slender design of the machine offers a wasp waist at the front left and right, and at the rear right. This gives the operator an unobstructed view of the track unit and milling edge.

## Exceptionally Powerful Led Lighting System

The W 200 Fi is equipped with exceptionally powerful LED working lights installed in different positions on the machine, operator's platform lighting, and a "Welcome" and "Go home" lights feature for convenient access. Additional on-board features include control panel illumination, lighting of the milling drum unit including auxiliary lights for pick replacement, as well as optional lighting balloons. These ensure optimum lighting even in poor lighting conditions.

### Excellent Visibility

Clear view of operations

### Room for Essentials

Plenty of stowage space



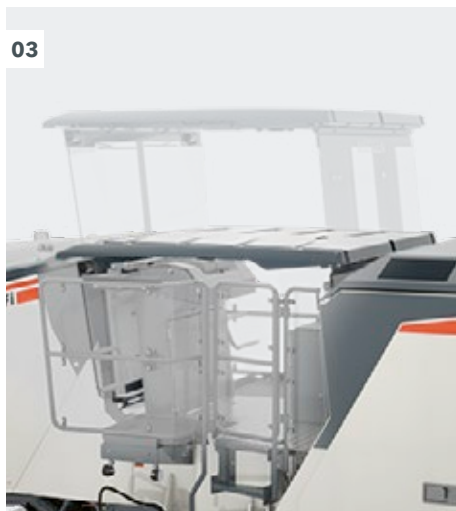


**01** Ergonomically designed operator's platform.

**02** The canopy offers flexible vertical height adjustment.

**03** Canopy in transport position.

**04** The extra-large, optional storage compartment at the rear of the machine offers ample space for pick containers and tools.



### Ample Storage Space

The W 200 Fi offers ample storage space for leveling sensors, pick extractors and pick containers. An optional additional 1,380-litre XXL-size storage compartment at the rear of the machine can accommodate up to 69 pick containers; another 85-litre storage compartment on the operator's platform can be installed as an optional feature.

### Flexible, Vertically Adjustable Canopy

The hydraulically height-adjustable canopy can be individually adjusted in height to cater to different operating and weather conditions. The height can be adjusted at the mere push of a button even during the milling operation in order to avoid, for example, low-hanging branches in a tree-lined avenue. The outer roof shells can be moved independently to offer additional protection against rain.

# INTUITIVE MMI - MAN MACHINE INTERFACE

## Flexible Control Panel Concept for Maximum Machine Control

The new control panel concept allows different control panels to be compiled in accordance with customer specifications. An important requirement for the WIRTGEN design engineers was to provide the machine operator with a comprehensive and clear-cut status, diagnostic and information display. The new intuitive, easy-to-understand control panel concept fully meets these requirements.

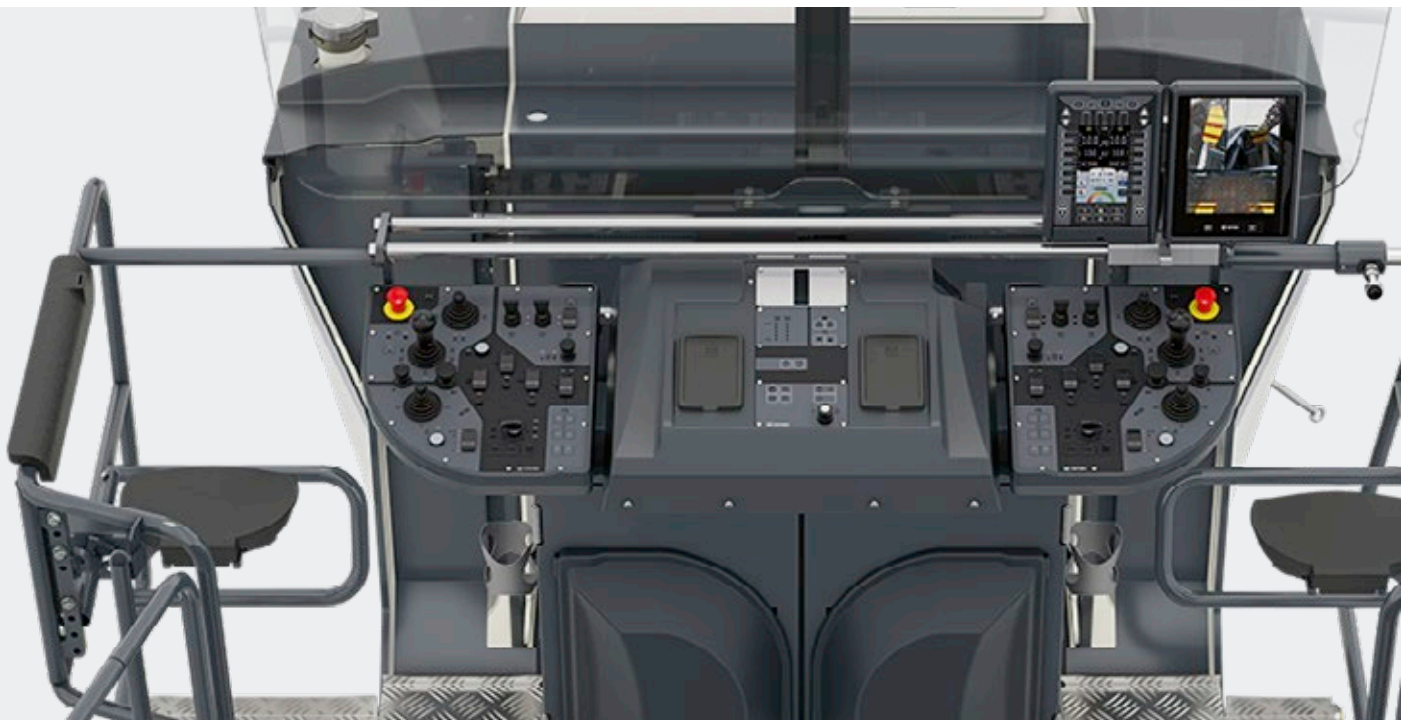
## 5" Control Panels for Leveling

When leveling with the **LEVEL PRO ACTIVE** leveling system, up to two additional 5" control panels can optionally be attached on the left and right side of the machine for use by the ground crew.

## 7" Control Panel for the Convenient Display of Important Parameters

Whether working on the operator's platform or the lower operating positions: the new control panel concept provides comprehensive and clear-cut information. The 7" control panel provides the following readouts, for example, to each machine operator: machine load, temperatures, hydraulic pressures, diesel and water filling levels, leveling control, status and diagnostic reports, as well as general information such as the current time.

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### Maximum Control

Individual control panel concept

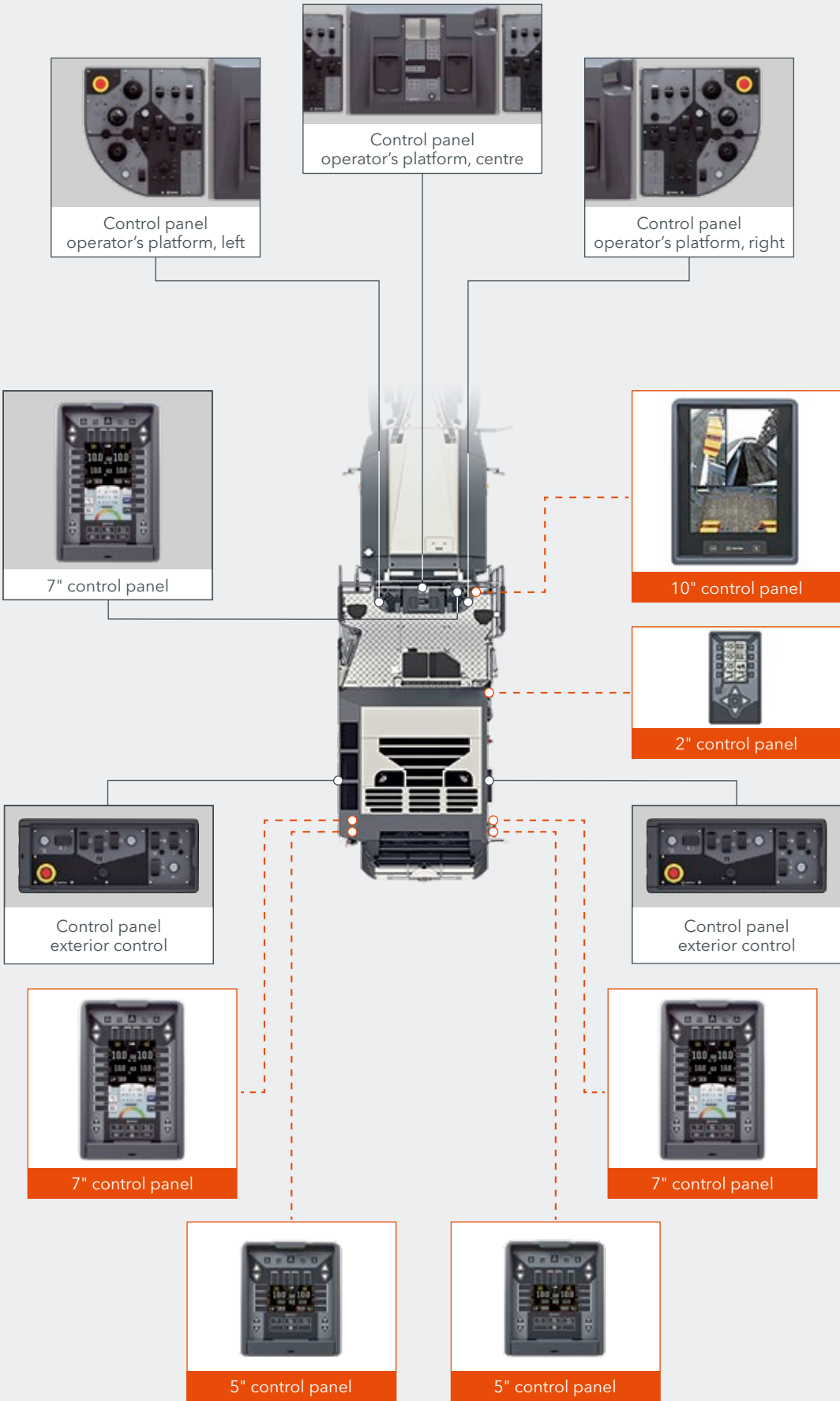
### Always Fully Informed

Comprehensive overview at all operating positions

01 Customized user-friendly panel arrangement.

02 Overview of the different control panels and their positions.

02



□ = Standard control panels  
 □ = Optional control panels



# INTUITIVE MMI - MAN MACHINE INTERFACE

## Robust, High-Quality Camera System Including 10" Control Panel

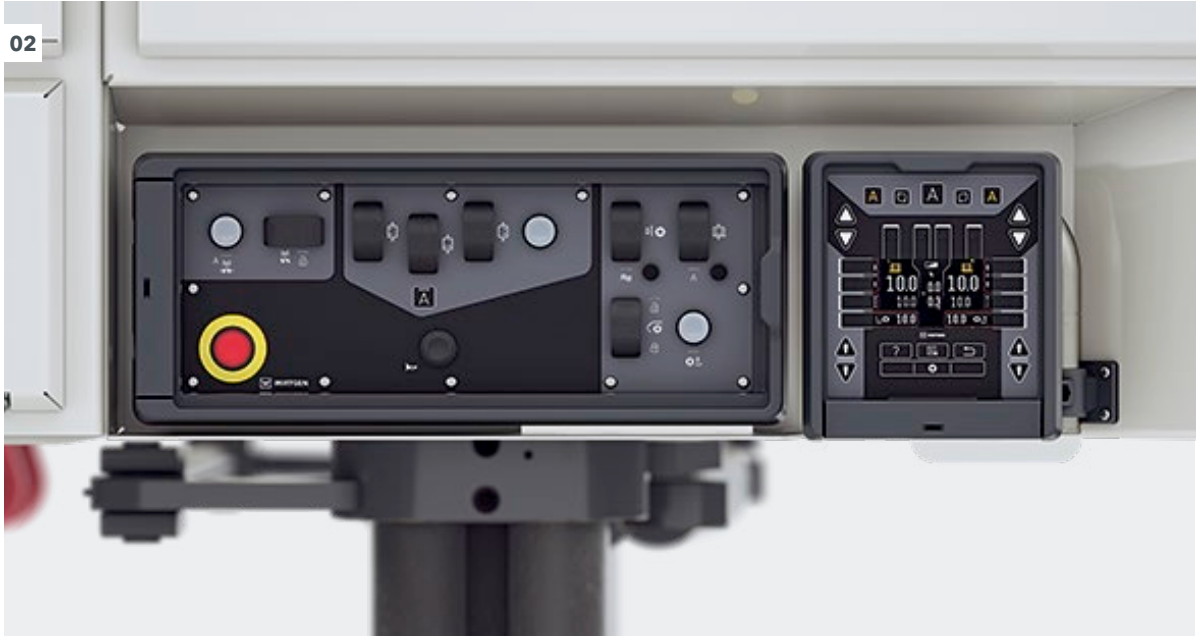
A camera system comprising two, four or eight cameras is available as an optional equipment feature. When using the twofold camera system, the camera images are displayed on the 7" control panel installed on the operator's platform. The

fourfold and eightfold camera systems come with an additional 10" control panel which can display multiple camera images simultaneously using a split screen feature. The robust camera systems provide the machine operator with a direct view of important areas of the operation, such as the material loading process or the milled surface behind the scraper.

01



- 01 10" control panel with split screen feature for the simultaneous display of multiple camera images.
- 02 Optional 5" control panel providing leveling details to the ground crew.
- 03 Different camera systems for a good view of important areas of the operation.



03

**Twofold camera system:** Camera at the rear / camera displaying the loading situation

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**Fourfold camera system:** Twofold camera system, additional cameras on the left and right side of the machine towards the front

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**Eightfold camera system:** Fourfold camera system, additional cameras on the left and right side of the machine towards the rear / camera at the scraper / camera in front of the milling drum

# VERSATILE, HIGH-PRECISION LEVELING USING LEVEL PRO **ACTIVE**

## **New, Simple LEVEL PRO **ACTIVE** Operating Concept**

The new **LEVEL PRO **ACTIVE**** leveling system developed specifically for cold milling machines uses innovative control panels and offers easy, intuitive operation. Fully integrated into the machine's control system, it permits a high level of automation as important features of the machine are directly interlinked, guaranteeing highly precise milling results. With the 3D kit, **LEVEL PRO **ACTIVE**** additionally offers a simple 3D system interface designed in line with field requirements.

## **New Complementary and Automated Features**

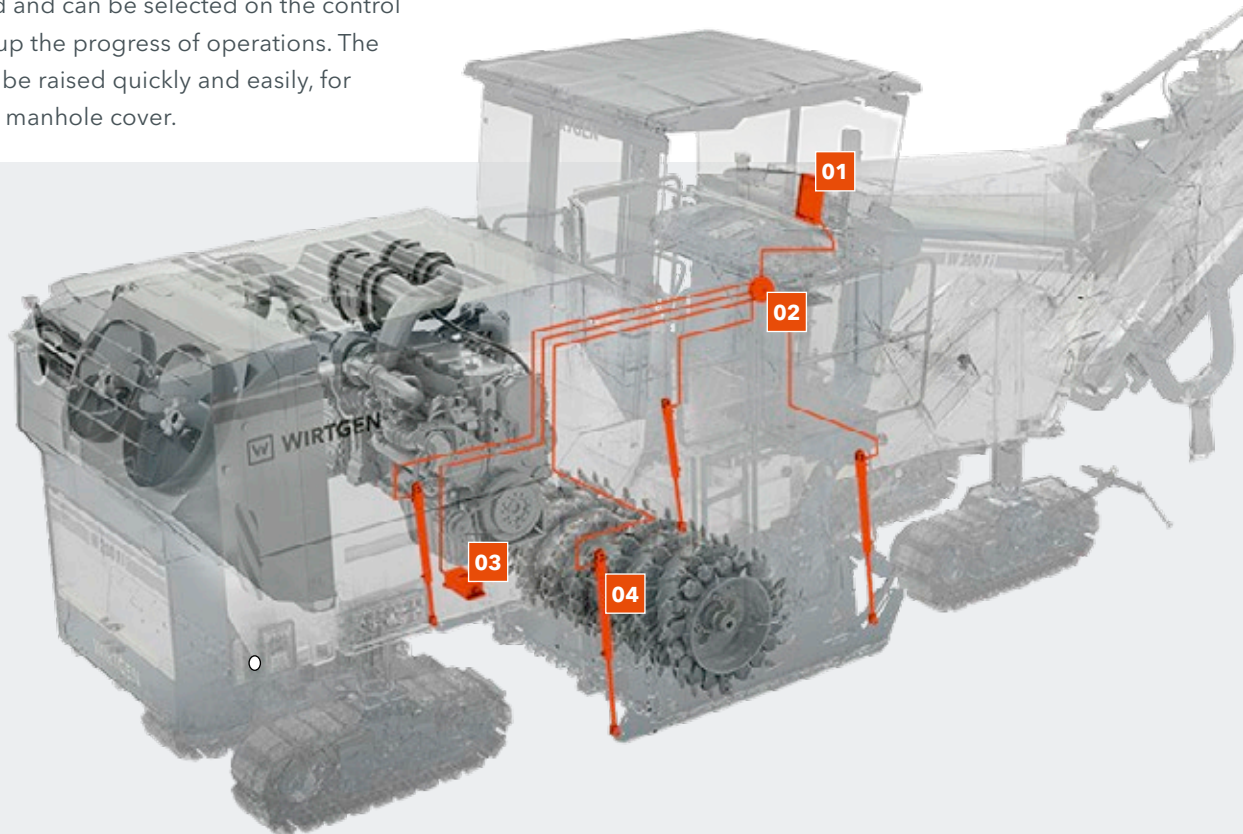
The **LEVEL PRO **ACTIVE**** leveling system offers numerous complementary and automated features relieving the machine operator of a part of his workload. All sensors connected to the system are displayed and can be selected on the control panel. This also speeds up the progress of operations. The entire machine can thus be raised quickly and easily, for example, to drive over a manhole cover.

## **Optimized 3D and Laser Leveling**

Laser sensors can be mounted on the canopy of the cold milling machine quickly and easily to facilitate the use of 3D systems.

## **Leveling Boom, Right, or Leveling Boom, Right And Left, Including Sonic Ski Sensor**

The new leveling booms with Sonic Ski sensors allow non-contact scanning of a wire or reference surface on both sides of the machine at a distance of up to 1,900 mm from the milling edge. The leveling boom including Sonic Ski sensor can be telescoped hydraulically by up to 840 mm from the operator's platform even during the milling operation; mechanical adjustment allows an additional 880 mm of telescopic travel.



### Optimized Multiplex System

The Multiplex system comprises two ultrasonic sensors per machine side which are attached to adjustable swivel arms. Advantages of the system include the large adjustment range for a variety of leveling applications, as well as the low weight of the individual units. The swivel arms are simply folded in for machine transport.

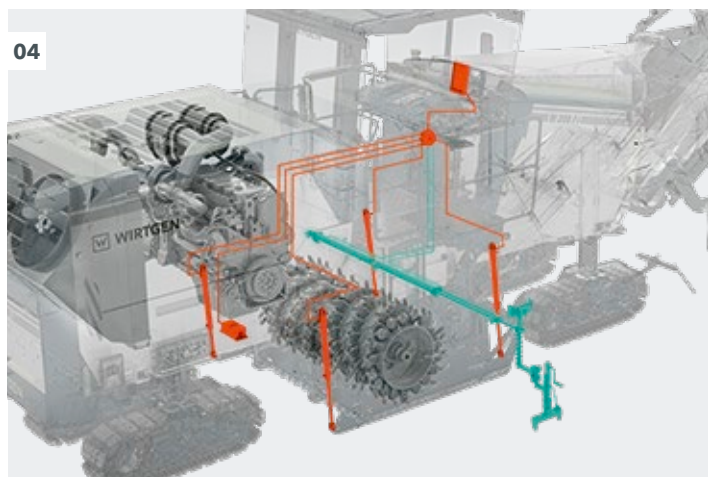
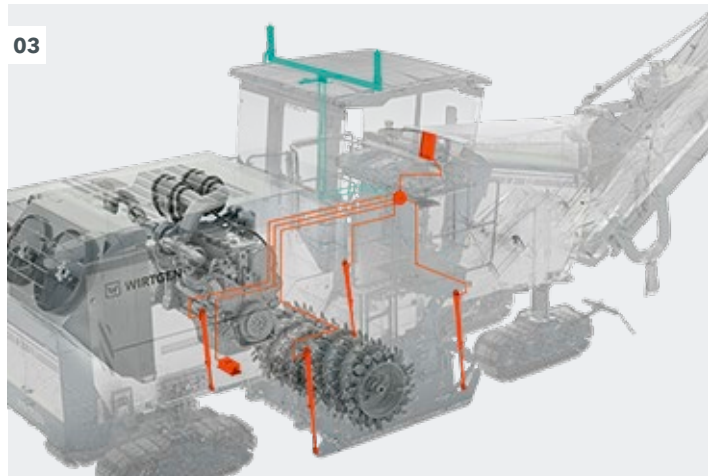
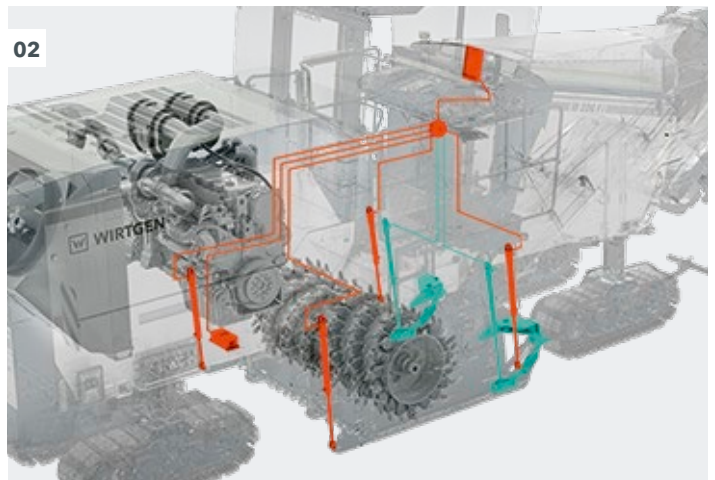
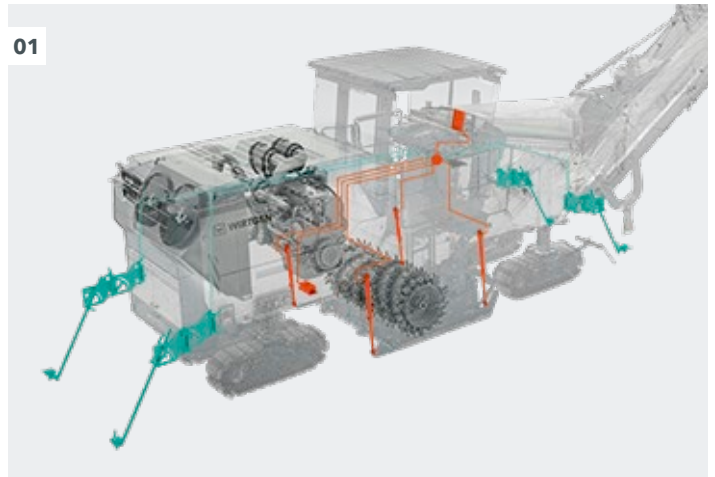


- 01** Multiplex system comprising up to four ultrasonic sensors.
- 02** Scanning in front of the milling drum.
- 03** 3D leveling / laser leveling.
- 04** Telescoping leveling boom, right or left.

— = Standard Equipment  
 — = Optional Equipment

### W 200 Fi with Standard Leveling Sensors

- 01** 7" control panel **LEVEL PRO ACTIVE**
- 02** Machine control system
- 03** Cross-slope sensor
- 04** Hydraulic side plate cylinder with integrated displacement sensor



# HIGH RELIABILITY

## Pioneering Diagnostic Concept

The new diagnostic concept guides the machine operator through the troubleshooting process in a few simple and intuitive steps. Any malfunction is indicated to the operator on the screen together with a clear description of the fault, enabling him to locate the fault by means of optimized, easy-to-understand color graphs. Finally, comprehensive textual support enables the operator to begin remedying the fault.

## Redundant Machine Control System

Three control computers integrated in the control system can be interchanged to ensure the machine's operational readiness if one of the three computers should fail. In addition, the two 7" control panels installed on the operator's platform and on the side of the machine for operation by the ground crew can be readily interchanged while fully maintaining all machine functions.



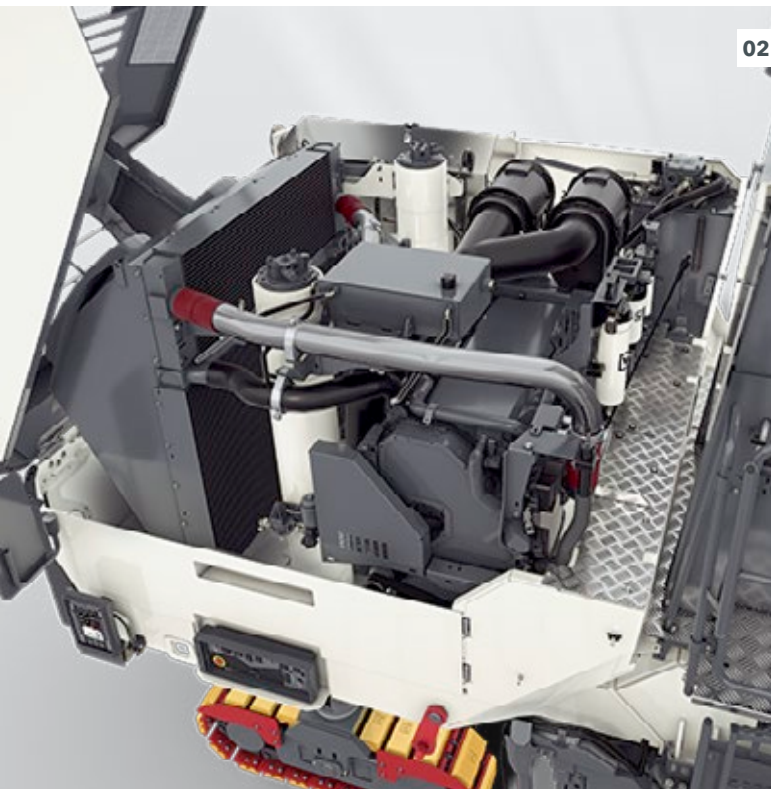
**Simple Fault Remediation**

Detailed diagnostics info

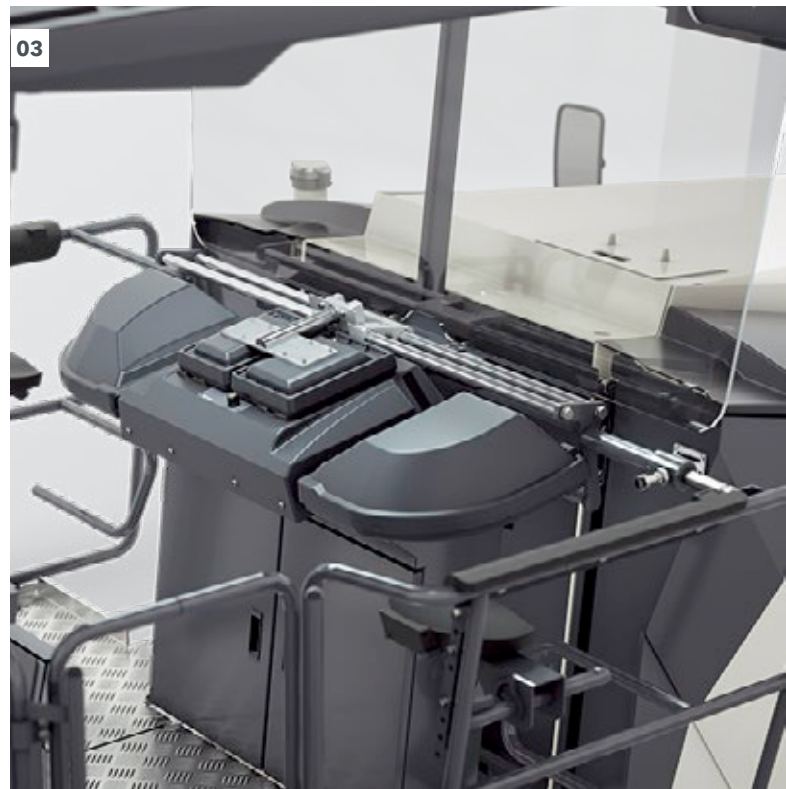
**Reliable Operation**

CAN bus with backup circuits





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### Dual CAN Network

The CAN bus is duplicated in important sections and can be readily reconnected as and when required. The main controls feature dual-channel signal transmission to ensure that functions are executed even if one signal should fail. The failure of a signal is additionally displayed on the control panel.

### Reliable Protection Against Vandalism

The innovative vandalism protection feature protects the control panels against the use of force or theft. The linear control panels arranged on the operator's platform, for example, are folded over the central control panel and secured. Securing the control panels in a few simple steps additionally speeds up the preparations for machine transport.

- 01 Direct forwarding of the image from the error message to the diagnostic system including clear location of the fault.
- 02 Optimum access to the servicing points.
- 03 Quick and reliable protection of the control panels.

### Efficient Servicing and Maintenance Concept

The W 200 Fi offers exceptionally easy access to all servicing and maintenance points. The air, hydraulic fluid, engine oil and diesel filters can be reached quite easily from the walkway when the engine cowling is open. In addition, all relevant machine components provide quick and ready access.

# UNMATCHED CUTTING TECHNOLOGY

## Easy Exchange of Milling Drums in Record Time

Milling drums are now exchanged even more quickly thanks to the new generation of MCS milling drums. A single central bolt needs to be loosened, which can be performed by the milling drum rotation device at the mere push of a button. All that remains to be done for the operator is to pull out the milling drum. The side door on the right is opened quickly and effortlessly as it features a hydraulic cylinder drive. The simplified process offers numerous advantages: the rapid exchange of application-specific milling drums with different tool spacings increases machine productivity. The short-term

exchange and use of the milling drum best suited to the job to be performed reduces wear costs. In addition, maximum flexibility is guaranteed in order to cater to the ever-changing requirements in day-to-day business.

## Easy Exchange of Milling Drum Units

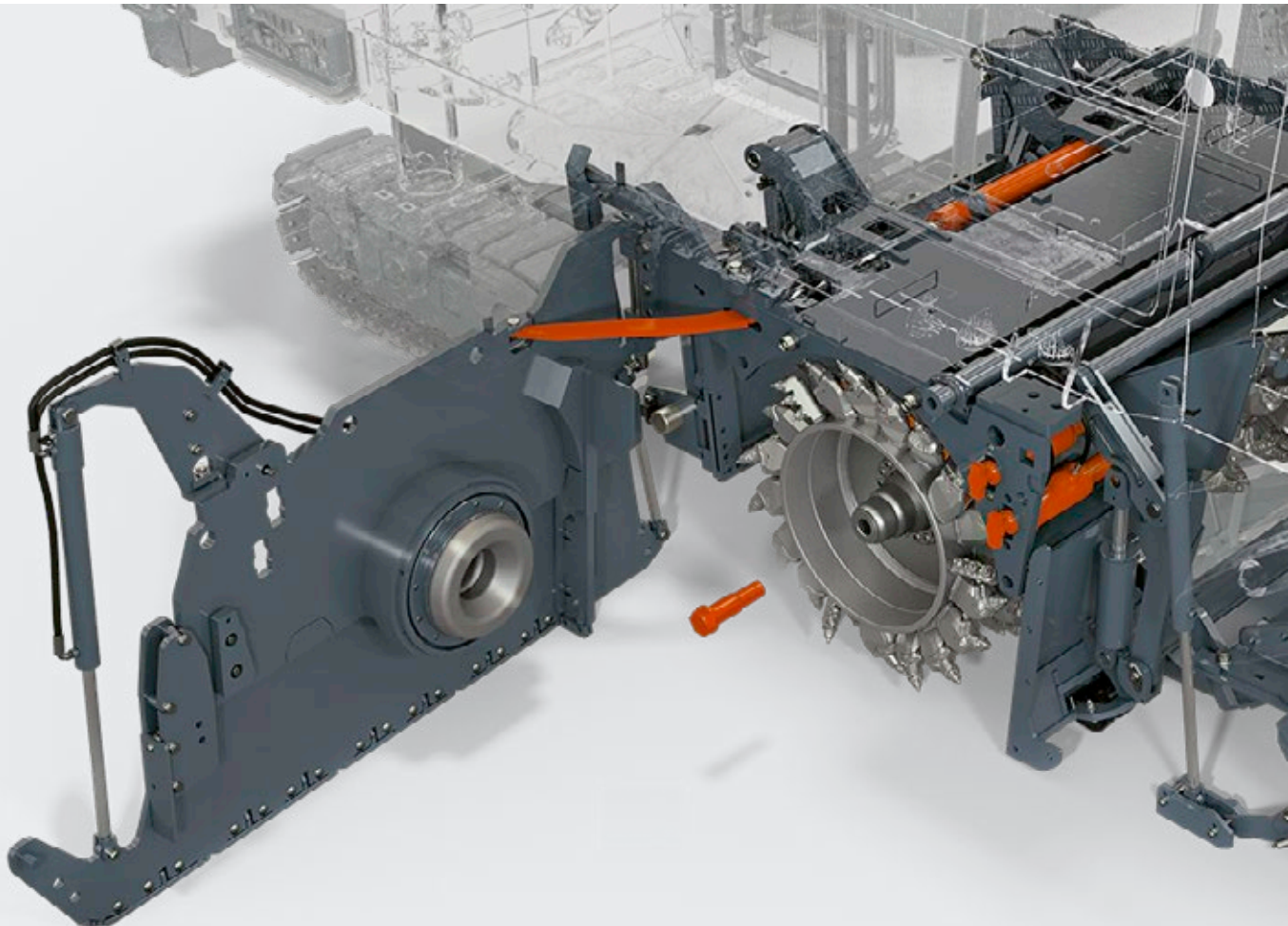
Different milling widths of 1.5 m, 2.0 m or 2,2 m can be realized using the new quick-change milling drum unit. The simplified quick-change system allows milling drum units of different working widths to be exchanged in no more than an hour's time. The operator's job is made even easier by a significant

### With Ease

Easy-to-swap milling drums

### Wider Working

Additional milling units for greater width



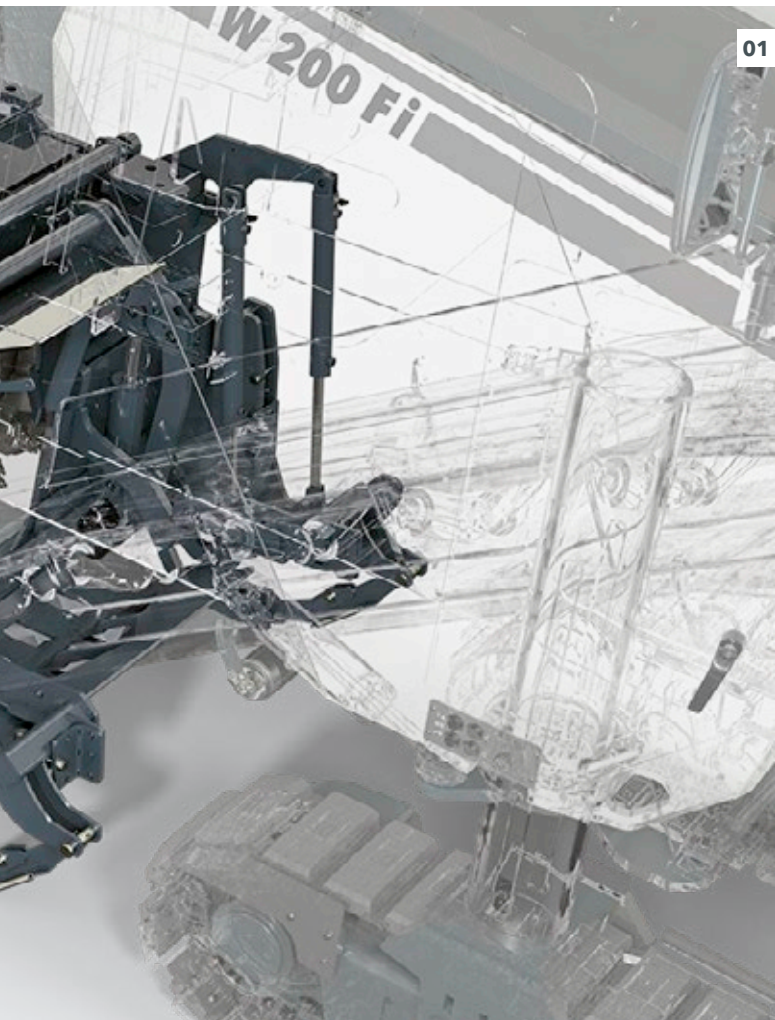
- 01 Extra-quick exchange of milling drums using the new **MCS BASIC** milling drum system.
- 02 Large choice of different MCS milling drums.

increase in the stroke of the machine's height adjustment feature. The process is completed by simply connecting one electrical plug-in connector, two hydraulic quick-release couplings and one water line.

**WIRTGEN > GOOD TO KNOW**



Easy retrofit of ECO-Cutter milling drum results in reduced cutting resistance and therefore a drop in diesel consumption and CO<sub>2</sub> emissions.



01



02

**ECO-Cutter**

Milling width: 2,000 mm, Milling depth: 0 - 330 mm, Pick spacing: 25 mm



**Standard Milling Drum**

Milling width: 2,000 mm, Milling depth: 0 - 330 mm, Pick spacing: 18 mm



**Standard Milling Drum**

Milling width: 2,000 mm, Milling depth: 0 - 330 mm, Pick spacing: 15 mm



**Fine Milling Drum**

Milling width: 2,000 mm, Milling depth: 0 - 100 mm, Pick spacing: 8 mm



**Micro-Fine Milling Drum**

Milling width: 2,000 mm, Milling depth: 0 - 30 mm, Pick spacing: 6 x 2 mm

# UNMATCHED CUTTING TECHNOLOGY

## Optimized Wear Protection for the Milling Drum Unit

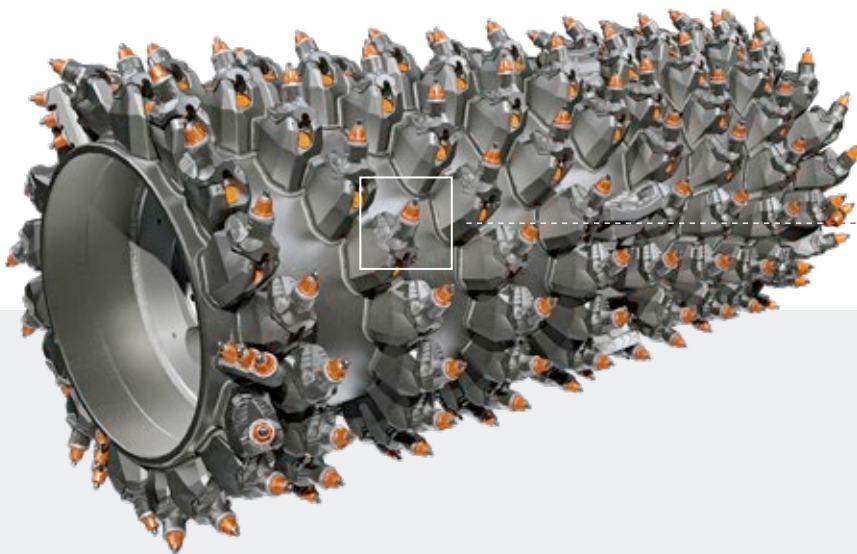
The side plates are equipped with extremely wear-resistant protective skids on both sides. Optional rollers fitted to the side plates prevent scratch marks on the asphalt pavement. In addition, the material depressor also moves on the pavement on rollers to minimize wear and tear.

## Extremely Hard-Wearing HT22 Quick-Change Toolholder System

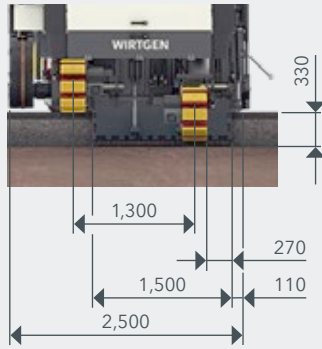
Fitted with the **HT22** quick-change toolholder system, the milling drums on offer for the W 200 Fi are the ideal candidates for complex, challenging milling applications. In addition, the robust milling drum design permits the upper toolholder parts to be replaced quickly and as needed right on the construction site.

## New Upper Toolholder Part HT22 **PLUS** with Extended Lifespan

The new upper toolholder part **HT22 PLUS** features an innovative centring embossment in the pick contact surface. In combination with the new X<sup>2</sup> generation of picks, toolholder wear is reduced by up to 25%, and pick rotation is optimized as a result. Salient features of the new upper part include improved quality of the milled surface and extended replacement intervals.



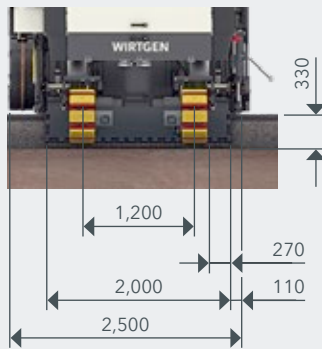
W 200 Fi  
with 1.5-m wide drum  
unit



**Standard Milling Drum**

Milling width: 1,500 mm, Milling depth: 0 - 330 mm,  
Pick spacing: 15 mm

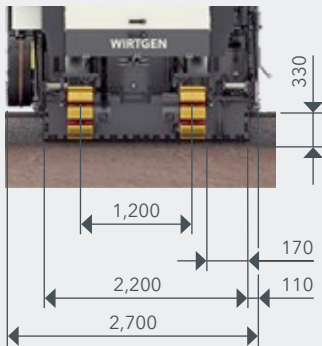
W 200 Fi  
with 2.0-m wide drum  
unit



**Standard Milling Drum**

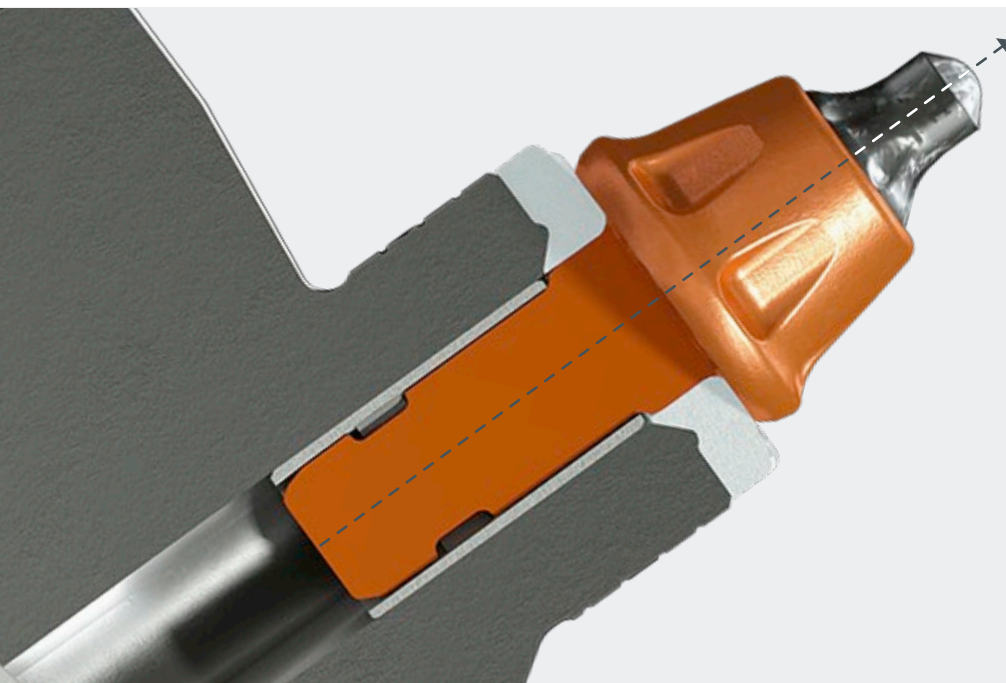
Milling width: 2,000 mm, Milling depth: 0 - 330 mm,  
Pick spacing: 15 mm

W 200 Fi  
with 2.2-m wide drum  
unit



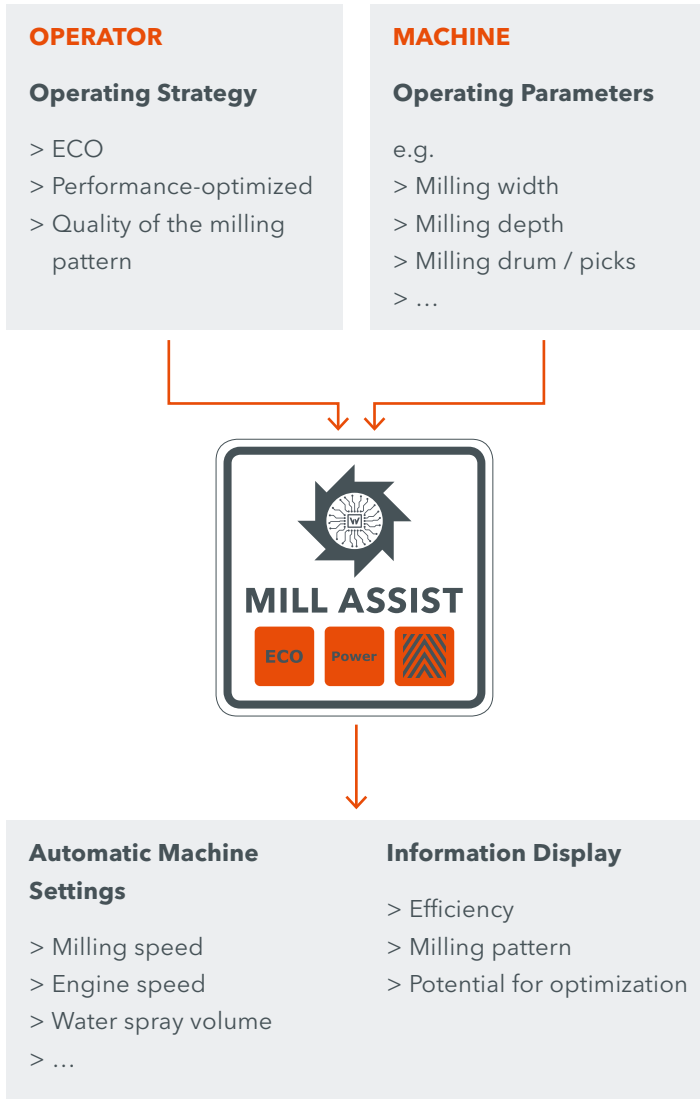
**Standard Milling Drum**

Milling width: 2,200 mm, Milling depth: 0 - 330 mm,  
Pick spacing: 15 mm



- 01 Extremely hard-wearing HT22. quick-change toolholder system.
- 02 Milling drum units 1.5 m, 2.0 m and 2.2 m.
- 03 In combination with the new pick, the centring embossment on the new toolholder optimizes rotation to reduce wear and tear.

# INNOVATIVE MILL ASSIST



## MILL ASSIST Automatic Mode

The innovative **MILL ASSIST** machine control system always adjusts the most favourable relationship between performance and cost when operating in automatic mode. The process is optimized by automatically adjusting the speed of the diesel engine and milling drum, the traction drive, the water system and the machine's advance rate.



This relieves the machine operator of a tremendous part of his workload while at the same time improving machine performance and minimizing diesel consumption, CO<sub>2</sub> emissions, pick consumption and noise emissions.

## Additional Pre-Selection of the Operating Strategy in Automatic Mode

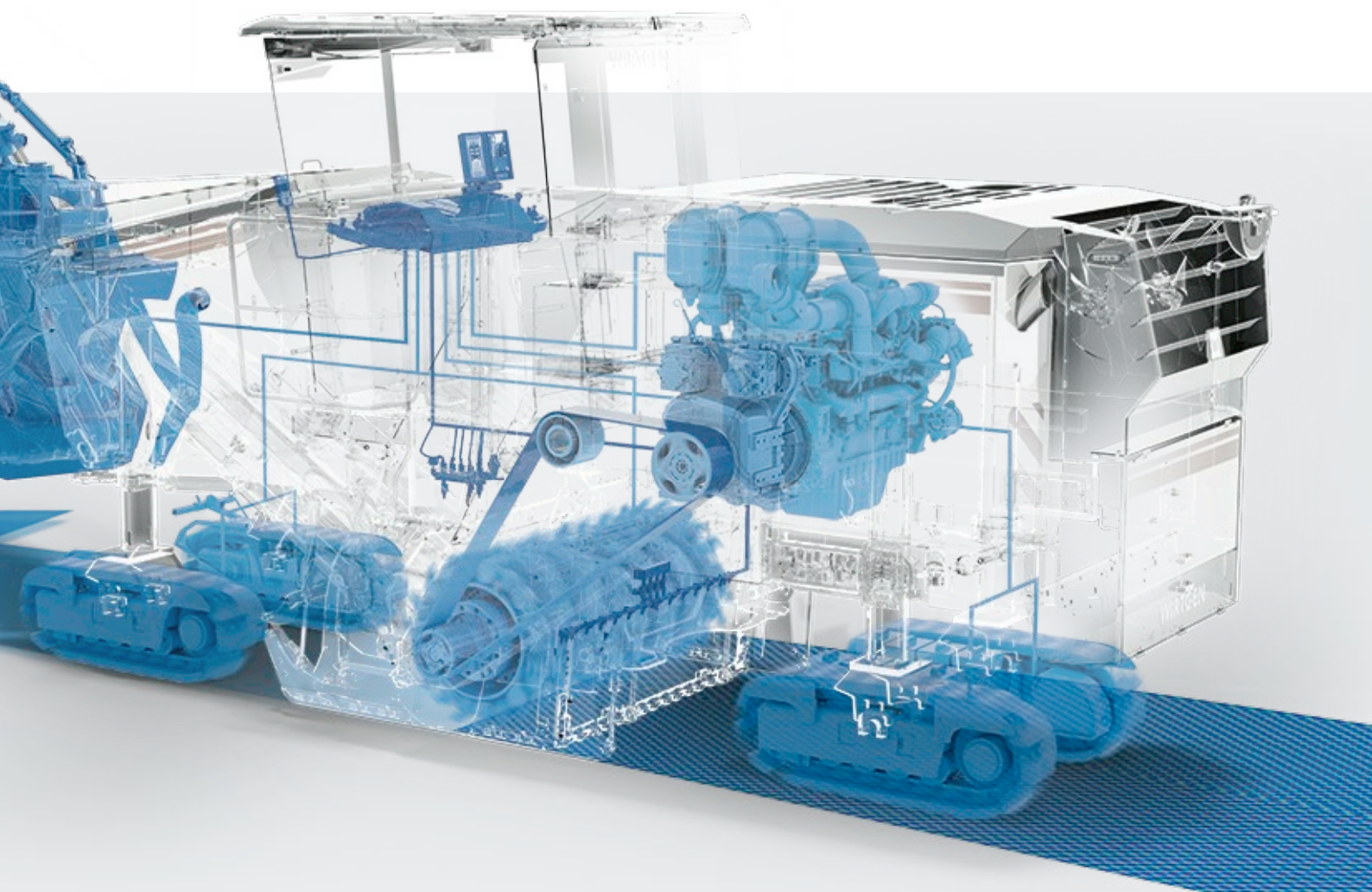
The operator can additionally pre-select one of three operating strategies for each milling job: ECO, performance-optimized, or quality of the milling pattern. The machine then automatically controls the main parameter settings in accordance with the strategy chosen.

**MILL ASSIST**

Efficient automatic milling

**Three Strategy Presets**

Optimal machine adjustment

**Clear Pre-Selection of Consistent Milling Pattern Quality**

The specified quality of the milled surface can be preset by simple pre-selection from a scale ranging from 1 to 10. The milling drum speed and milling rate are then adjusted automatically taking into account the type of milling drum used.

**Innovative Efficiency Display**

The machine operator is continuously provided with information on the job status by means of an efficiency display. Possibilities to optimize the milling parameter settings are additionally displayed on the control panel.

**WIRTGEN > GOOD TO KNOW**

The **MILL ASSIST** machine control system in the W 200 Fi enables efficient engine speeds while also boosting productivity. In particular, this results in a significant reduction in CO<sub>2</sub> emissions per cubic meter of milled material.

# MAXIMUM MILLING PERFORMANCE



## More Power

High-performance diesel engine

## Optimized Transport

Removable additional weight



### High-Powered Diesel Engine

Featuring low engine speeds at high torque, the high-powered diesel engine makes the W 200 Fi the ideal candidate for the whole range of milling jobs typically performed by a large milling machine.

### Increased Ballasting Flexibility

The additional weight of 1,600 kg can be mounted on or removed from the back of the machine quickly and easily in two steps. This feature permits the machine's transport weight to be precisely adjusted to requirements.

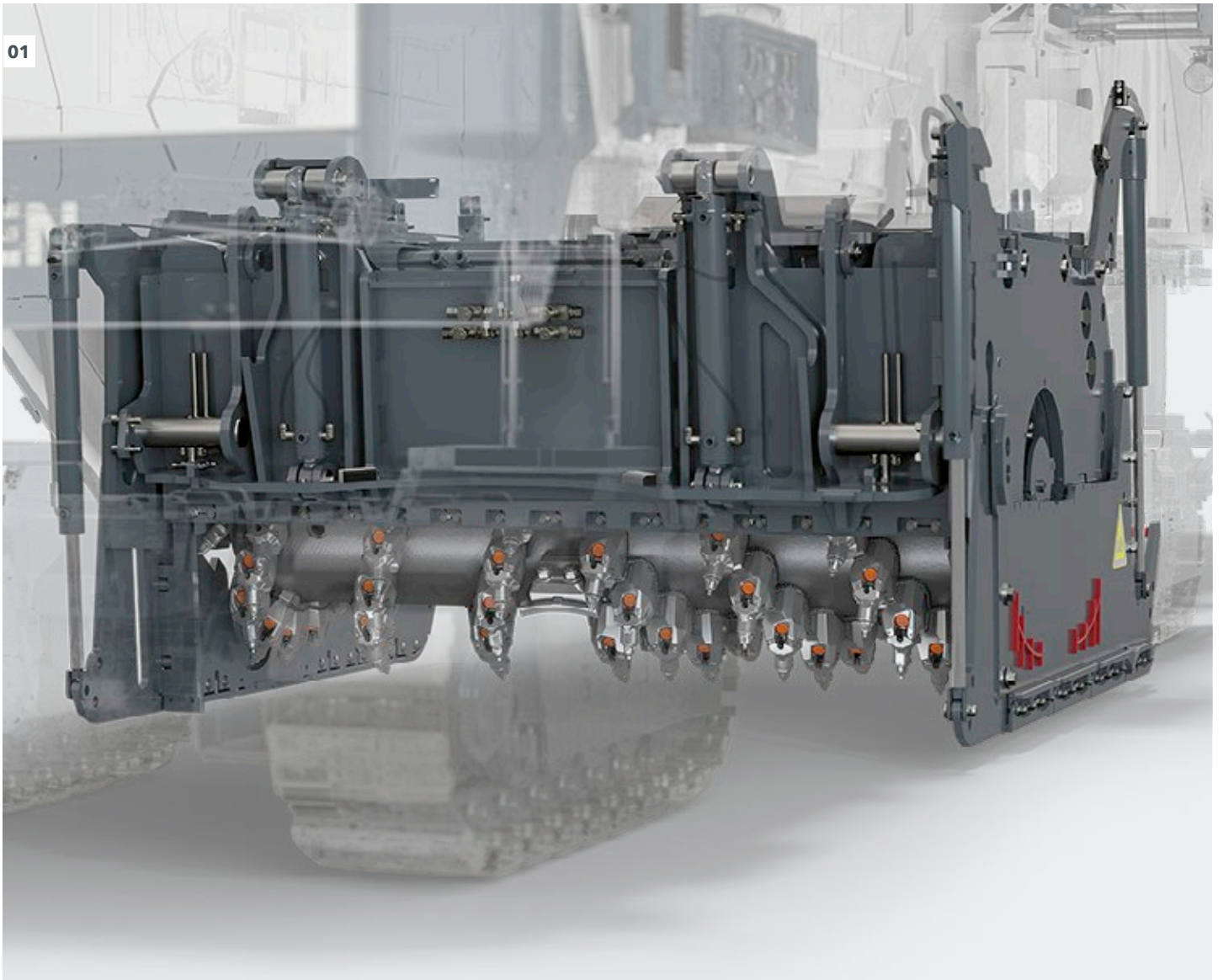


# MAXIMUM MILLING PERFORMANCE

## Large Scraper Lift

The increased scraper lift permits increased milling depths, thus expanding the range of applications when milling without loading the milled material. At the same time, less material accumulates in the milling drum housing, which reduces wear

and tear of the housing and milling drum. Different contact pressure stages of the scraper can additionally be adjusted quickly and conveniently in accordance with specific applications or requirements by simply pressing a button on the 7" control panel.



**Precise and Flexible Loading**

Two swing speeds plus large slewing angle

**Handling Peak Operating Loads**

New booster function

02



01 Increased scraper lift for a wider range of milling applications and reduced wear. 02 Large slewing range of the discharge conveyor.

### Flexible and Efficient Material Loading

Tremendous conveyor slewing angles of 65° each to the left and right enable the milled material to be loaded even in difficult situations, for example, in road junctions or turning bays. The belt speed of the discharge conveyor can be adjusted at the simple push of a button to meet specific site and loading conditions. In addition, the hydraulically folding discharge conveyor is folded quickly for easy transport and quick adjustment to site conditions.

### “Boost” Feature to Increase the Discharge Trajectory

Pressing the “Boost” button on one of the two main control panels results in a temporary increase of the belt speed and conveying performance of the discharge conveyor by 20%, thus allowing the milled material to be discharged onto a truck bed at an exceptionally high or wide discharge trajectory.

# WPT MILLING - INFORMATIVE WIRTGEN GROUP PERFORMANCE TRACKER MILLING

## Tried-And-Tested WITOS FleetView Telematics System with Optional WPT Milling Feature

The WITOS FleetView telematics system comprises a control unit (TCU) with GPS receiver and the rights of use for the web-based WITOS FleetView application. The web application provides a compact overview of the machine status including

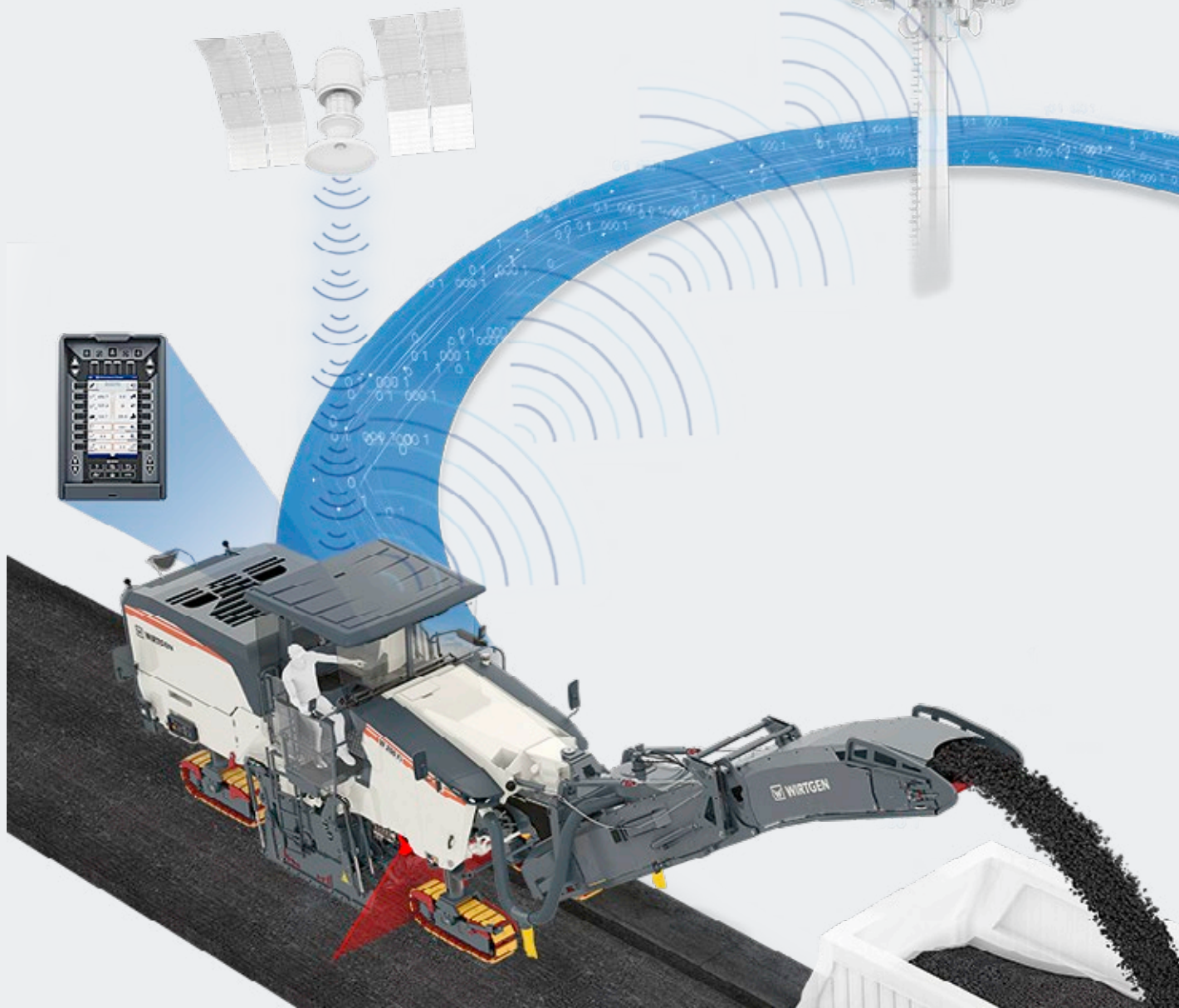
consumption details, operating hours, position data, error messages and service intervals. The optional **WPT** Milling feature is additionally used to record the actual milling performance and present consumption and position data in a concise, automatically generated report.

### Comprehensive Job Data

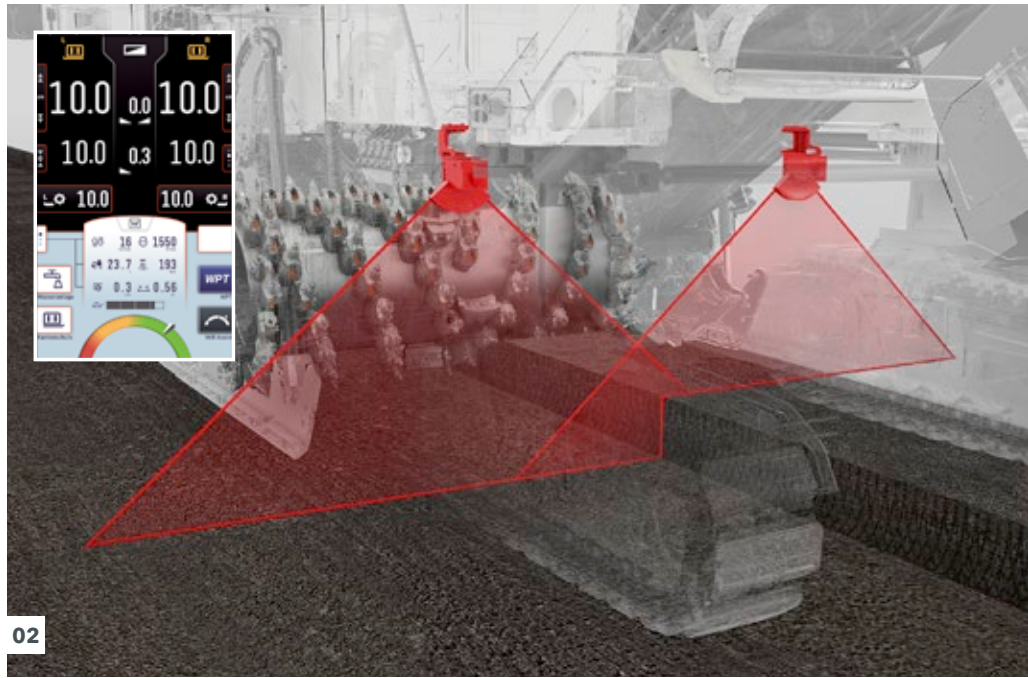
Site reports via email

### Simple Accounting

No extra costs for surveying



- 01** The operator is provided with continuous information on the current machine and job parameters - at the end of work, the data are transmitted to the machine user.
- 02** The current actual milling width is detected by means of a laser scanner and indicated clearly on the control panel.



### Clear Documentation of Milling Performance

The milled cross sections are detected by means of a laser scanner and converted to determine the milling volume.



The current milling volume and truck tonnage are continuously displayed to the machine operator on the 7" control panel during the milling process.

### Automatically Generated Measurement Reports

Milling performance data are continuously transmitted to a database server via a mobile radio connection. After completion of the milling operation, a measurement report is automatically generated in both Excel and PDF format and forwarded via e-mail, for example, to the order management department of the machine user. The measurement report provides accurate information on milling volume, area milled and milling depth including the relevant GPS positions. The scope of information listed also includes consumables such as diesel, water and picks. Useful details such as the number of trucks loaded are also indicated if acknowledged by the machine operator.

### Assignment to Site by Means of Satellite Map Display

In the measurement reports, easy-to-understand satellite maps are displayed showing the completed milling operation. The milled surfaces are shown in different colours based on the milling depth.

### Direct Display of Actual Milling Width

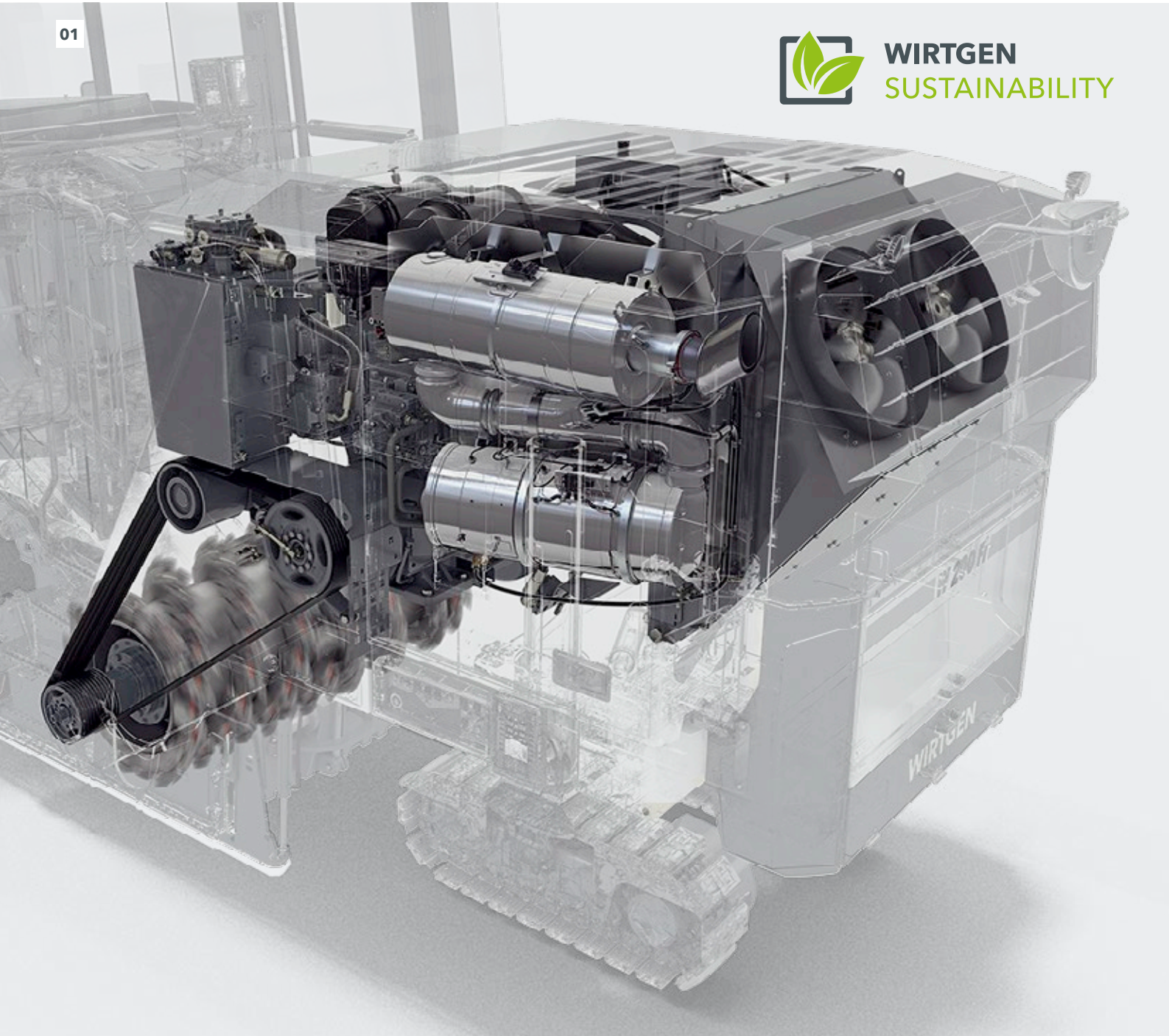
The current actual milling width is indicated on the control panel. This information enables the machine operator to determine the width of adjacent milling cuts without prior marking of the road pavement.

# REDUCED DIESEL CONSUMPTION - ACTIVE MINIMIZATION OF CO<sub>2</sub>

01



**WIRTGEN**  
SUSTAINABILITY



**High Performance with Low Diesel Fuel Consumption**

Extended low speed range

**Fuel-Efficient Cooling**

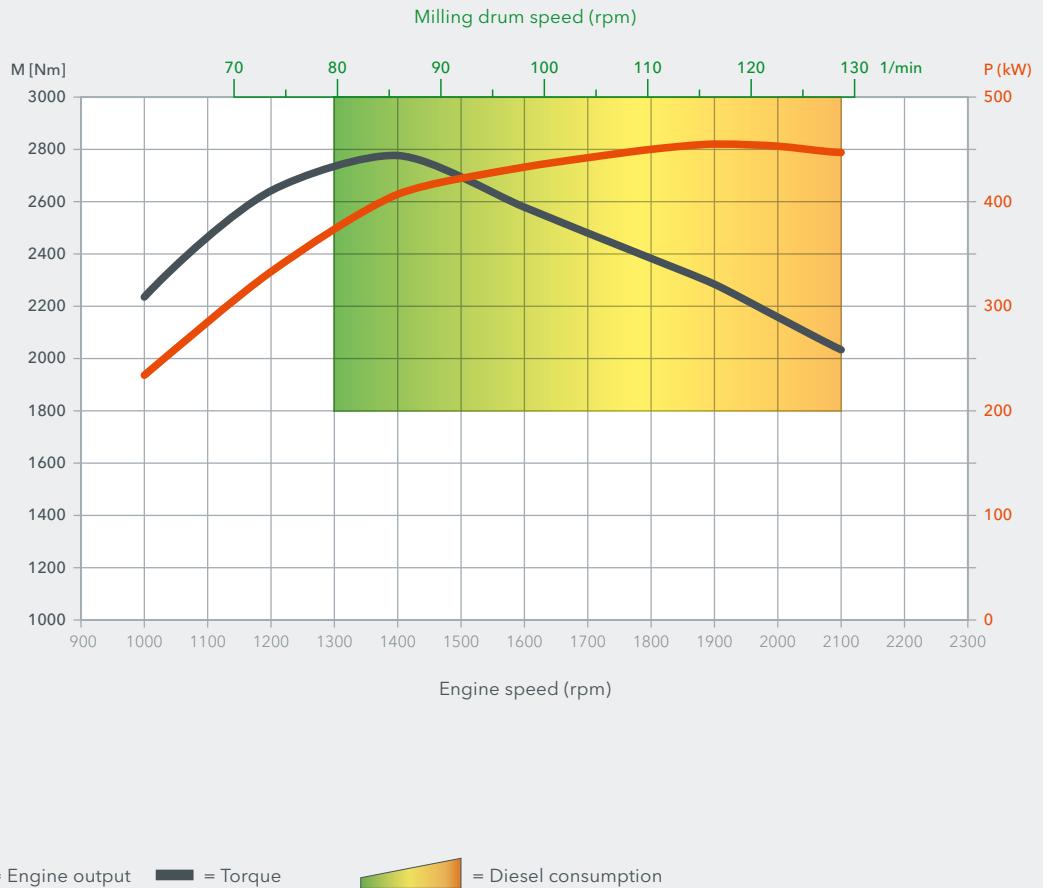
Dual fan controlled by engine speed

**01** Compact engine station.

**02** Extended range of milling drum speeds to reduce diesel consumption and pick wear.

**02**

### Engine Characteristics of Cold Milling Machine W 200 Fi



#### Extended Range of Usable Milling Drum Speeds

State-of-the-art engine control enables the W 200 Fi to offer an exceptionally broad range of usable milling drum speeds. Especially the new, lower engine speed range permits significant diesel savings while at the same time offering tremendous milling performance.

#### Maximum Use of Engine Power in the Low Engine Speed Range

The integrated **MILL ASSIST** machine control system prompts the diesel engine of the W 200 Fi to run mainly in the lower speed range while at the same time ensuring high performance and low diesel consumption.

#### Start-Stop Engine Feature via Exterior Control Panel

The diesel engine can be easily switched on and off by the ground crew via the exterior control panel. This feature promotes lower diesel consumption and reduced noise emissions.

#### Intelligent Dual Fan Concept

Two speed-controlled and intelligently arranged fans supply cooling power to the diesel engine and hydraulic system in accordance with requirements. In this way, the cooling system also makes an efficient contribution to reducing diesel consumption.

#### WIRTGEN > GOOD TO KNOW

All of the cutting-edge features of the W 200 Fi listed above lead to a significant increase in sustainability.

# ENVIRONMENTALLY SUSTAINABLE MACHINE TECHNOLOGY

## Environmental Focus

Low CO<sub>2</sub> emissions

## Minimal Water Usage

Efficient water metering







## WIRTGEN SUSTAINABILITY



05

### 01 Maximum Exhaust Gas Purification for Low Exhaust Emissions

The state-of-the-art, fuel-efficient diesel engine installed in the W 200 Fi offers maximum engine performance at an exceptionally high maximum torque. The engine technology complies with the requirements of the currently highest emission standards EU Stage 5 / US EPA Tier 4f to minimize exhaust emissions.

### 02 Reduced Noise Emissions During Repositioning

The cold milling machine offers a maximum travel speed of up to 100 m/min, which requires only low engine speeds – resulting in reduced diesel consumption and noise emissions.

### 03 ECO Operating Strategy for Minimal Consumption

Following selection of the ECO operating strategy, the **MILL ASSIST** machine control system reduces fuel consumption and pick wear and lowers noise emissions.

### 04 Efficient Water Management

Four separately electrically switchable segments of the water spray bar allow the optimum quantity of water to be added from the operator's platform, for example, when milling at half-lane width. Water consumption is reduced significantly as the water system is switched on and off automatically and water is metered in accordance with the milling performance.

### 05 Optimized VCS Extraction System

VCS improves the air quality and visibility in the working environment of the machine operator and ground crew. The VCS suction channel has been optimized in design, offering improved access to reduce the cleaning effort.

#### WIRTGEN > GOOD TO KNOW



All of the features of the W 200 Fi listed above help actively protect the environment and conserve natural resources.

# SUSTAINABLE INNOVATIONS FOR A GREEN FUTURE

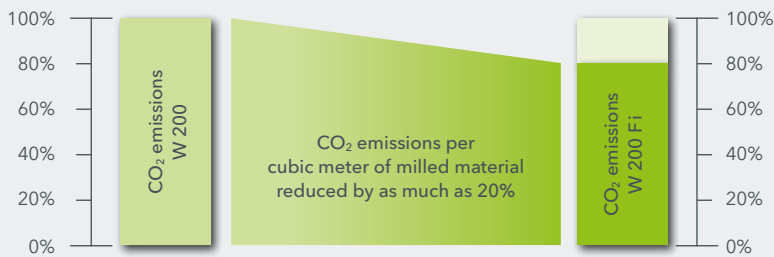
Today, it is more important than ever to minimize harmful CO<sub>2</sub> emissions on road construction sites - while still maintaining high levels of performance and productivity. Innovative WIRTGEN technologies play an active role in protecting the environment and conserving natural resources.

The W 200 Fi from the F-series - the current generation of large milling machines from WIRTGEN - cuts CO<sub>2</sub> emissions during operation by significantly reducing fuel consumption per cubic meter of milled material.

## WIRTGEN > GOOD TO KNOW



Compared to the previous model - the W 200 from 2010 - the W 200 Fi reduces CO<sub>2</sub> emissions by as much as 20% per cubic meter of milled material. WIRTGEN innovations such as **MILL ASSIST** and dual fan cooling all play a vital role here.



WIRTGEN W 200 (2010)



WIRTGEN W 200 Fi (2020)

As an HVO-ready machine, the W 200 Fi offers potential for further reductions in CO<sub>2</sub> emissions when run on the high-quality biofuel HVO.





# WIRTGEN SUSTAINABILITY



The easy-to-operate, compact cold milling machine caters to a wide range of applications from surface course rehabilitation via pavement removal at full depth all the way to fine milling operations. The innovative **MILL ASSIST** machine control system permits efficient operation of the machine in automatic mode paired with high performance and user friendliness. Milling drum units can be exchanged quickly and easily to realize milling widths of 1.5 m, 2.0 m or 2.2 m as part of the MCS - Multiple Cutting System.



### TECHNICAL SPECIFICATIONS W 200 Fi

#### Milling Drum

|                             |            |
|-----------------------------|------------|
| Milling width, standard     | 2,000 mm   |
| Milling width, optional 1   | 1,500 mm   |
| Milling width, optional 2   | 2,200 mm   |
| Milling depth <sup>1)</sup> | 0 - 330 mm |
| Drum diameter with tools    | 1,020 mm   |

#### Engine

|  |                             |
|--|-----------------------------|
| Manufacturer   | CUMMINS                     |
| Type   | QSX 15                      |
| Cooling  | Water                       |
| Number of cylinders  | 6                           |
| Rated power at 2,100 rpm   | 447 kW / 600 HP / 608 PS    |
| Maximum power at 1,900 rpm   | 455 kW / 610 HP / 619 PS    |
| Displacement   | 15 l                        |
| Fuel consumption at rated power   Fuel consumption in field mix            | 119 l/h   47 l/h            |
| Exhaust emission standard  | EU Stage 5 / US EPA Tier 4f |
| Sound power level in accordance with EN 500-2 engine   operator's platform | ≤ 111 dB(A)   ≥ 80 dB(A)    |

#### Electrical System

|                |      |
|----------------|------|
| Voltage supply | 24 V |
|----------------|------|

#### Filling Capacities

|                             |         |
|-----------------------------|---------|
| Fuel                        | 1,200 l |
| AdBlue® / DEF <sup>2)</sup> | 100 l   |
| Hydraulic fluid             | 85 l    |
| Water                       | 3,270 l |

#### Driving Performance

|                               |                        |
|-------------------------------|------------------------|
| Max. travel and milling speed | 0 - 100 m/min (6 km/h) |
|-------------------------------|------------------------|

#### Track Units

|   |                      |
|---|----------------------|
| Track units, front and rear (L x W x H) | 1,565 x 260 x 600 mm |
|---|----------------------|

#### Loading of the Milled Material

|  |                       |
|--|-----------------------|
| Belt width of primary conveyor             | 850 mm                |
| Belt width of discharge conveyor           | 850 mm                |
| Theoretical capacity of discharge conveyor | 375 m <sup>3</sup> /h |

## TECHNICAL SPECIFICATIONS W 200 Fi

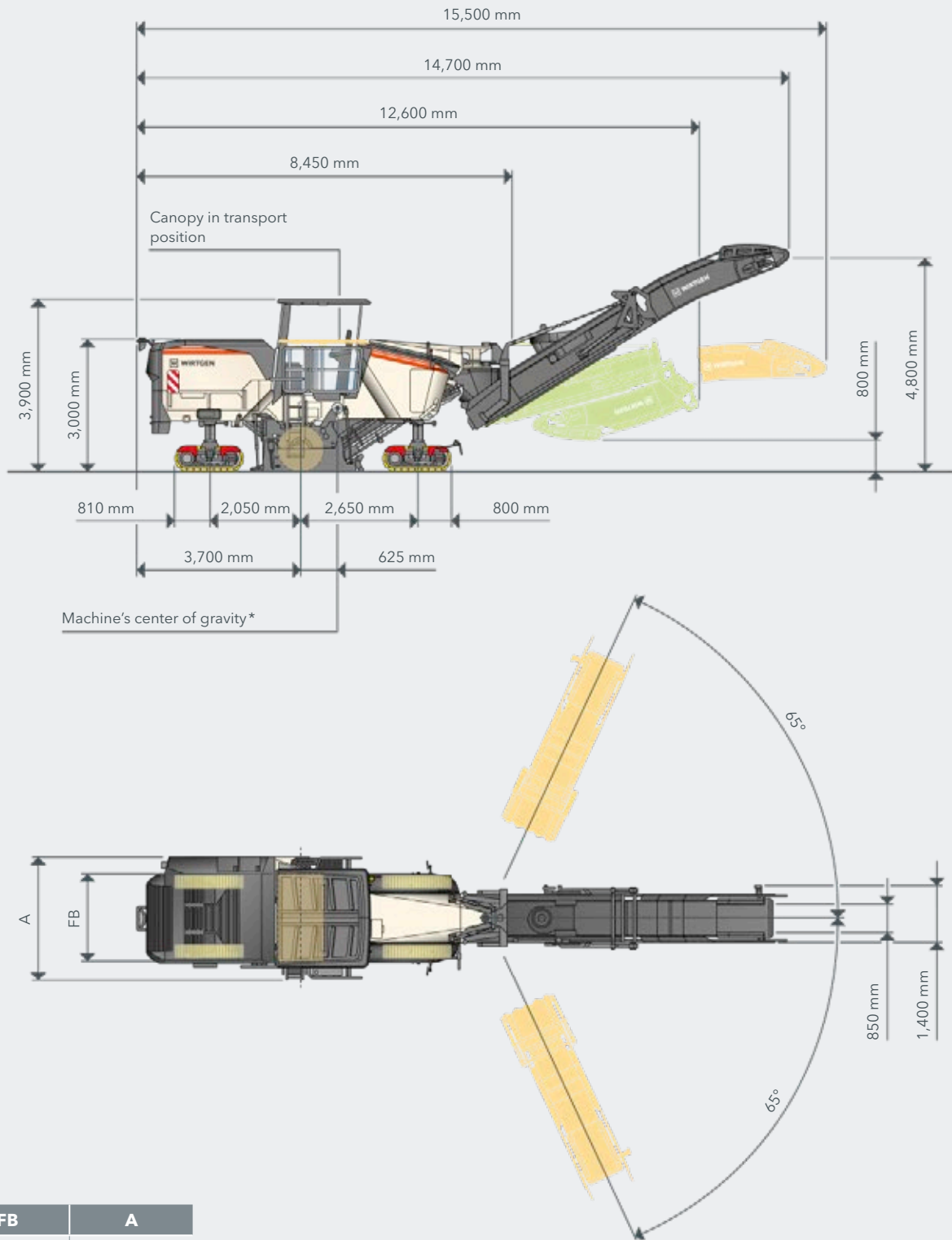
| Weight of Basic Machine   |           |
|---|-----------|
| Empty weight of machine excluding operating fluids  | 25,950 kg |
| Operating weight, CE <sup>3)</sup>  | 28,200 kg |
| Maximum operating weight (full tanks, full range of equipment) in FB2200                        | 34,750 kg |
| Weights of Operating Fluids   |           |
| Water   | 3,270 kg  |
| Fuel (0,83 kg/l)  | 1,000 kg  |
| AdBlue® / DEF <sup>2)</sup> (1.1 kg/l)  | 110 kg    |
| Additional Add-On Weights   |           |
| Operator and tools  |           |
| > Operator  | 75 kg     |
| > 5 pick containers   | 125 kg    |
| > On-board tools  | 30 kg     |
| Optional milling drum units in lieu of standard   |           |
| > Milling drum housing FB2200   | 170 kg    |
| > Quick-change milling drum unit FB2000 <b>MCS BASIC</b>  | 670 kg    |
| > Quick-change milling drum unit FB2200 <b>MCS BASIC</b>  | 920 kg    |
| Optional milling drums in lieu of standard  |           |
| > Milling drum FB2000 <b>HT22 PLUS</b> LA18 with 146 picks                                      | -70 kg    |
| > Milling drum FB2200 <b>HT22 PLUS</b> LA15 with 176 picks                                      | 150 kg    |
| > Milling drum FB2200 <b>HT22 PLUS</b> LA18 with 155 picks                                      | 20 kg     |
| Optional MCS milling drums in lieu of standard  |           |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA15 with 162 picks                     | 250 kg    |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA18 with 146 picks                     | 225 kg    |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA15 with 176 picks                     | 470 kg    |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA18 with 155 picks                     | 340 kg    |
| Optional additional equipment   |           |
| > Operator's platform with simple stand-up seat and weather canopy                              | 600 kg    |
| > Two-piece additional weight with a total weight of 1,600 kg                                   | 1,600 kg  |
| > Large storage compartment at the rear of the machine for 69 pick containers                   | 150 kg    |
| > Extension of <b>MCS BASIC</b> with a hydraulically opening side door for FB2000 or FB2200     | 140 kg    |
| > VCS extraction system   | 140 kg    |
| > Extension of <b>LEVEL PRO ACTIVE</b> with leveling booms and one Sonic Ski sensor             | 50 kg     |
| > Extension of <b>LEVEL PRO ACTIVE</b> with one hydraulic sensor mounted on the right           | 65 kg     |
| > Extension of <b>LEVEL PRO ACTIVE</b> with two hydraulic sensors mounted on the right and left | 110 kg    |

<sup>1)</sup> The maximum milling depth may deviate from the value indicated due to tolerances and wear.

<sup>2)</sup> AdBlue® is a registered trademark of Verband der Automobilindustrie (VDA) e. V. (German Association of the Automotive Industry).

<sup>3)</sup> Weight of machine, half weight of all operating materials, machine operator, on-board tools, no optional equipment features.

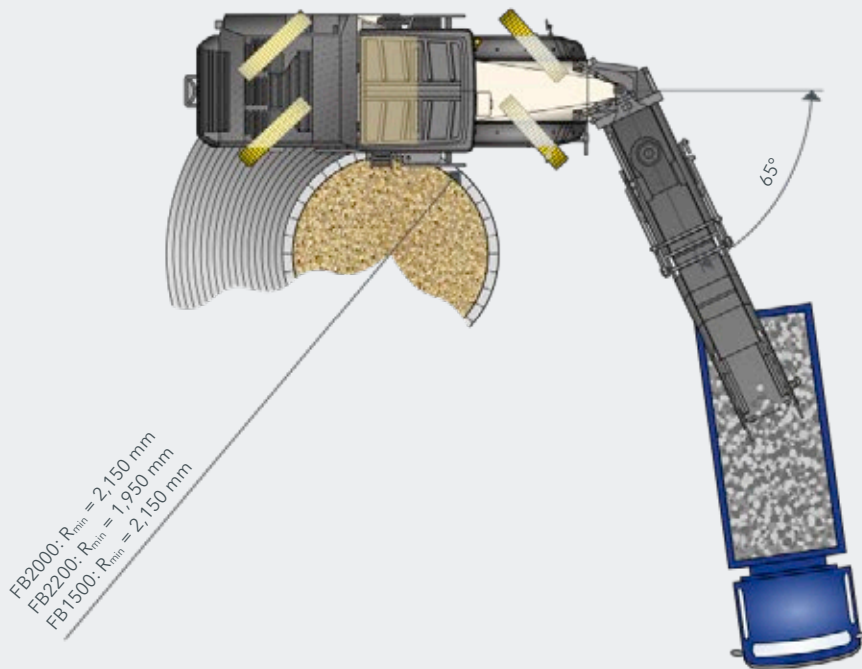
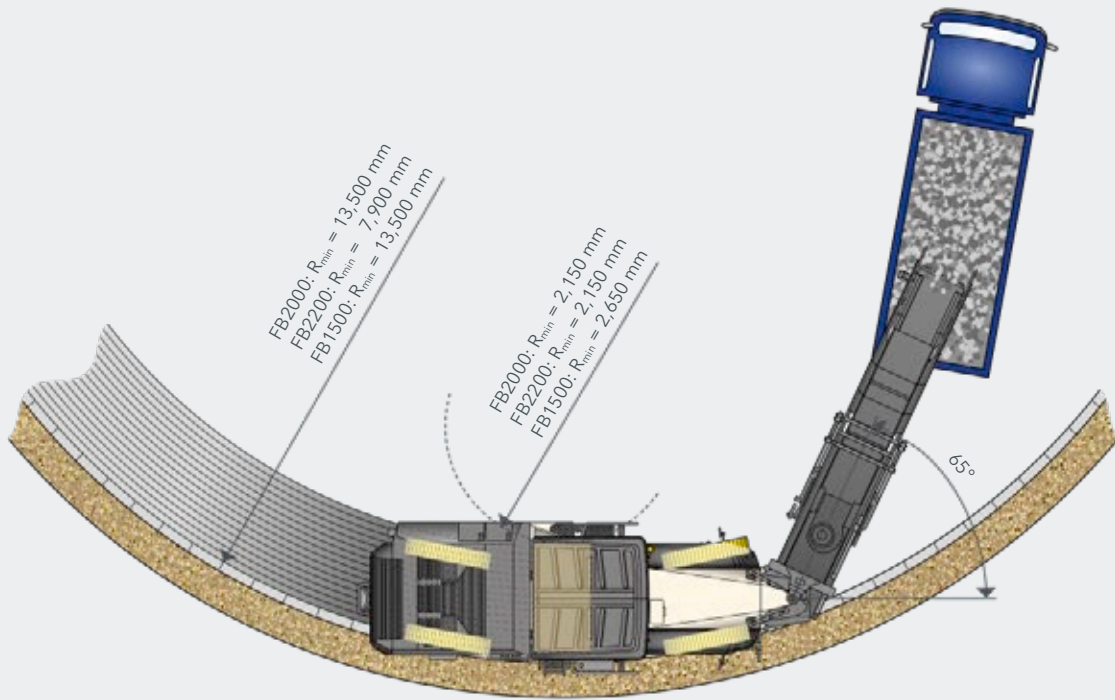
SIDE VIEW / TOP VIEW W 200 Fi



| FB       | A        |
|----------|----------|
| 1,500 mm | 2,500 mm |
| 2,000 mm | 2,500 mm |
| 2,200 mm | 2,700 mm |

\*Based on operating weight, CE with conveyor folded out

### MILLING RADIUS W 200 F i AT MILLING DEPTH OF 150 MM



**STANDARD EQUIPMENT W 200 Fi**

**Basic Machine**

|  |   |
|--|---|
| > Base machine with engine   | ■ |
| > Machine frame featuring a single wasp waist at the rear right and a dual wasp waist at the front | ■ |
| > Hydraulically opening, soundproof engine cowling   | ■ |
| > Air compressor system  | ■ |
| > Two cooling fans to minimize power consumption of the cooling system                             | ■ |

**Basic Machine**

|   |   |
|---|---|
| > Adjustment of material depressor contact pressure via the control panel or automatically via the <b>MILL ASSIST</b> feature to reduce chunk formation | ■ |
| > Electrical adjustment of scraper contact pressure via the control panel   | ■ |
| > Automatically controlled locking feature of scraper   | ■ |
| > Single-piece water spray bar in the milling drum unit for reliable pick cooling and to prevent dust development                                       | ■ |
| > Automatic control of the water quantity via the <b>MILL ASSIST</b> feature  | ■ |
| > Height adjustment stroke increased by 150 mm to facilitate pick replacement and the exchange of milling drum units                                    | ■ |
| > Pre-fitting to allow the quick exchange of milling drum units   | ■ |
| > Hydraulically lifting side plates, clearance right 450 mm, clearance left 330 mm  | ■ |
| > Milling drum housing FB2000   | □ |
| > Water spray bar for FB2000  | □ |

**Basic Machine**

|  |   |
|--|---|
| > Milling drum FB2000 <b>HT22 PLUS</b> LA15 with 162 picks | □ |
|--|---|

**Loading of the Milled Material**

|   |   |
|---|---|
| > Increased conveyor swing angles of 65° each to the left and right   | ■ |
| > Discharge conveyor with adjustable conveying speed  | ■ |
| > Boost feature for a temporary increase of the belt speed and conveying performance of the discharge conveyor by 20% | ■ |
| > Water spray system in the primary conveyor  | ■ |
| > Larger conveyor pump for a constant belt speed even at a low engine speed of 1,300 rpm                              | ■ |
| > Discharge conveyor, 7,900 mm long, 850 mm wide  | □ |

**Machine Control and Leveling System**

|  |   |
|--|---|
| > User-friendly control panel including 7" color screen  | ■ |
| > <b>LEVEL PRO ACTIVE</b> leveling system with numerous automated and complementary operator relieving features  | ■ |
| > <b>LEVEL PRO ACTIVE</b> - automatic height control in transport mode   | ■ |
| > <b>LEVEL PRO ACTIVE</b> - ramp milling and auto-start feature for the second milling cut   | ■ |
| > <b>RAPID SLOPE</b> cross-slope sensor for <b>LEVEL PRO ACTIVE</b> leveling system  | ■ |
| > <b>MILL ASSIST</b> assistance system for automatic adjustment of the milling drum speed in accordance with the main area of application and the parameters selected in terms of engine load, advance rate, milling volume and quality of the milling pattern | ■ |
| > Comprehensive machine diagnostics on the control panel including, for example, a diagnostic system for the CAN bus   | ■ |
| > Voltmeter integrated into the control panel for voltage measurement in the event of a malfunction  | ■ |
| > Two control panels for operating functions performed by ground crew  | ■ |



## STANDARD EQUIPMENT W 200 Fi

### Operator's Platform

|   |   |
|---|---|
| > Convenient access to the operator's platform, left and right  | ■ |
| > Anti-vibration mounted operator's platform across the full width of the machine including fold-out railing, right | ■ |
| > Electrical control cabinet on the operator's platform for optimum accessibility and fast troubleshooting          | ■ |
| > Two mirrors at the front, one mirror at the rear of the machine   | ■ |
| > Operator's platform with simple stand-up seat   | □ |

### Track Unit and Height Adjustment

|   |   |
|---|---|
| > PTS - automatic alignment of the machine parallel to the pavement surface   | ■ |
| > ISC - intelligent track speed control including hydraulic four-track drive  | ■ |
| > Fourfold full-floating axle for high machine stability  | ■ |
| > High travel speed of up to 100 m / min at low engine speeds (1,350 rpm), reduced diesel consumption and low noise emissions | ■ |
| > Lifting speed of the height adjustment feature increased by 60%   | ■ |
| > Four track units type B1 with EPS polyurethane track pads   | ■ |

### Miscellaneous

|  |   |
|--|---|
| > "Welcome-and-Go-Home-Light" feature in the area of the operator's platform and access            | ■ |
| > Large storage compartment on the machine for pick containers                                     | ■ |
| > High-pressure water system with automatic on/off function, 18 bar, 67 l/min                      | ■ |
| > Good accessibility to all maintenance points on the engine station                               | ■ |
| > Pneumatic hammer with pick extractor/insertor  | ■ |
| > Large tool kit in lockable tool box  | ■ |
| > A total of six EMERGENCY STOP switches in appropriate positions on the machine                   | ■ |
| > Pre-fitting for installing the WITOS FleetView control unit                                      | ■ |
| > European type certification, EuroTest mark and CE conformity                                     | ■ |
| > Water tank filling from rear of machine  | □ |
| > Standard film coating in RAL 9001 (cream)  | □ |
| > John Deere Operations Center: Digital solutions for optimising processes, machines, and services | □ |
| > Standard LED lighting system with 20,600 lumens  | □ |

■ = Standard equipment

□ = Standard equipment, can be replaced with optional equipment if desired

□ = Optional equipment

## OPTIONAL EQUIPMENT W 200 Fi

## Milling Drum Unit

|   |                          |
|---|--------------------------|
| > Milling drum housing FB2200   | <input type="checkbox"/> |
| > Quick-change milling drum unit FB2000 <b>MCS BASIC</b>                                  | <input type="checkbox"/> |
| > Quick-change milling drum unit FB2200 <b>MCS BASIC</b>                                  | <input type="checkbox"/> |
| > Electrically switchable sectional water spray bar for FB2000                            | <input type="checkbox"/> |
| > Water spray bar for FB2200  | <input type="checkbox"/> |
| > Electrically switchable sectional water spray bar for FB2200                            | <input type="checkbox"/> |
| > Bolted-on right side panel for milling drum unit  | <input type="checkbox"/> |
| > Side panel for milling drum unit with MCS   | <input type="checkbox"/> |
| > Extension of <b>MCS BASIC</b> with a hydraulically opening side door for FB2000         | <input type="checkbox"/> |
| > Extension of <b>MCS BASIC</b> with a hydraulically opening side door for FB2200         | <input type="checkbox"/> |
| > Mounting aid for lifting out the primary conveyor when changing the milling drum unit   | <input type="checkbox"/> |
| > Milling drum rotation device  | <input type="checkbox"/> |
| > Actual milling depth measurement and display on the <b>LEVEL PRO ACTIVE</b> panel       | <input type="checkbox"/> |
| > Overload sensors installed on the scraper   | <input type="checkbox"/> |
| > Active floating position for the side plates, left and right                            | <input type="checkbox"/> |
| > Wear protection rollers for side plates, left or right                                  | <input type="checkbox"/> |
| > Milling drum mounting and transport carriage FB1500 to FB2500                           | <input type="checkbox"/> |
| > Transport roller set for simplified milling drum unit change (FB1500 - FB3800)          | <input type="checkbox"/> |
| > Quick-change milling drum unit FB1500 with milling drum FB1500 <b>HT22 PLUS</b> LA15    | <input type="checkbox"/> |
| > Quick-change milling drum unit FB2000 MCS and milling drum <b>MCS BASIC</b> FB2000 LA15 | <input type="checkbox"/> |
| > Quick-change milling drum unit FB2200 MCS and milling drum <b>MCS BASIC</b> FB2200 LA15 | <input type="checkbox"/> |

## Milling Drums

|   |                          |
|---|--------------------------|
| > Milling drum FB2000 <b>HT22 PLUS</b> LA18 with 146 picks  | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA15 with 162 picks                           | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA18 with 146 picks                           | <input type="checkbox"/> |
| > Milling drum FB2200 <b>HT22 PLUS</b> LA15 with 176 picks  | <input type="checkbox"/> |
| > Milling drum FB2200 <b>HT22 PLUS</b> LA18 with 155 picks  | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA15 with 176 picks                           | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA18 with 155 picks                           | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA8 with 272 picks                            | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA25 with 126 picks                           | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT5</b> LA6X2 with 672 picks                                | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2000 <b>HT22 PLUS</b> LA15 with 18 standard picks and 144 PCD tools | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA8 with 297 picks                            | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA25 with 134 picks                           | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT5</b> LA6X2 with 740 picks                                | <input type="checkbox"/> |
| > Milling drum <b>MCS BASIC</b> FB2200 <b>HT22 PLUS</b> LA15 with 18 standard picks and 158 PCD tools | <input type="checkbox"/> |

## OPTIONAL EQUIPMENT W 200 Fi

### Loading of the Milled Material

|   |                          |
|---|--------------------------|
| > Discharge conveyor, 7,900 mm long, 850 mm wide, with hydraulic folding device | <input type="checkbox"/> |
| > VCS extraction system   | <input type="checkbox"/> |
| > Support device for discharge conveyor   | <input type="checkbox"/> |
| > <b>ACTIVE CONVEYOR</b> swing angle control for discharge conveyor             | <input type="checkbox"/> |

### Machine Control and Leveling System

|  |                          |
|--|--------------------------|
| > Extension of <b>LEVEL PRO ACTIVE</b> with leveling booms and one Sonic Ski sensor  | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with one hydraulic sensor mounted on the right  | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with two hydraulic sensors mounted on the left and the right  | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with two ultrasonic sensors for multiplex scanning  | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with four ultrasonic sensors for multiplex scanning   | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with pre-fitting for 3D leveling for machines without canopy  | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with pre-fitting for 3D leveling for machines with canopy   | <input type="checkbox"/> |
| > Extension of <b>LEVEL PRO ACTIVE</b> with two laser receivers  | <input type="checkbox"/> |
| > 5" control panel for controlling the leveling system   | <input type="checkbox"/> |
| > 7" control panel for displaying the machine control system and for controlling the leveling system   | <input type="checkbox"/> |
| > Qty. 1 - 2" control panel including favorites buttons  | <input type="checkbox"/> |
| > Qty. 2 - 2" control panels including favorites buttons   | <input type="checkbox"/> |
| > Version with lower left and right standard control panels  | <input type="checkbox"/> |
| > Extended functionality of the control panels at the bottom right and left including start-stop engine feature, level indicator for the water tank and time display | <input type="checkbox"/> |
| > User-specific storage of machine settings via SMART KEY key fob  | <input type="checkbox"/> |

### Operator's Platform

|  |                          |
|--|--------------------------|
| > Operator's platform with simple stand-up seat and weather canopy | <input type="checkbox"/> |
|--|--------------------------|

### Miscellaneous

|  |                          |
|--|--------------------------|
| > Hydraulically operated filling pump for water refilling  | <input type="checkbox"/> |
| > Film coating according to the customer's wishes  | <input type="checkbox"/> |
| > WIRTGEN GROUP Performance Tracker Milling including WITOS FleetView - precise tracking of the milling performance for machines without canopy or with operator's cabin | <input type="checkbox"/> |
| > Extended LED lighting system with 37,600 lumens  | <input type="checkbox"/> |
| > Two additional weights with a total weight of 1,600 kg   | <input type="checkbox"/> |
| > Compact storage compartment at the rear of the machine for a pick container  | <input type="checkbox"/> |
| > Large storage compartment at the rear of the machine for 69 pick containers  | <input type="checkbox"/> |
| > Preliminary equipment for hydraulically driven sweeping brush  | <input type="checkbox"/> |
| > Storage compartment close to the rear track units for 8 pick containers  | <input type="checkbox"/> |
| > Hydraulically driven sweeping unit   | <input type="checkbox"/> |
| > Powerful high-pressure water cleaner, 150 bar, 15 l/min  | <input type="checkbox"/> |
| > Hydraulic pick ejector   | <input type="checkbox"/> |
| > 2-fold camera system   | <input type="checkbox"/> |
| > 4-fold camera system with 10" control panel  | <input type="checkbox"/> |
| > 8-fold camera system with 10" control panel  | <input type="checkbox"/> |
| > Electrical fuel filter preheating  | <input type="checkbox"/> |
| > Electrical diesel suction and pressure pump including 7.50 m suction hose  | <input type="checkbox"/> |
| > Licence plate holder with LED lighting   | <input type="checkbox"/> |
| > Additional double air horn at the top end of the discharge conveyor for signalling purposes  | <input type="checkbox"/> |

■ = Standard equipment

▒ = Standard equipment, can be replaced with optional equipment if desired

□ = Optional equipment





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For further information, please scan the code.