A WIRTGEN GROUP COMPANY

WIRTGEN

Innovative Professional Machine for Optimal Milling Performance

# COLD MILLING MACHINE W 210 XF

# INNOVATIVE PROFESSIONAL MACHINE FOR OPTIMAL MILLING PERFORMANCE

The high-performance cold milling machine with compact dimensions is the ideal choice for a broad spectrum of applications ranging from surface layer rehabilitation and complete pavement removal to fine milling operations.

The machine's already wide range of applications is further expanded by MCS – the Multiple Cutting System – which enables quick exchange of the milling drum assembly and particularly fast exchange of the milling drum for milling widths of 2.0 m, 2.2 m, or 2.5 m.

In automatic mode, the innovative **MILL ASSIST** machine control system always sets the most favorable balance between performance and costs, and also makes it possible to select an operating strategy to toptimize costs, performance, or quality.

Thanks to the unique **DUAL SHIFT** powershift transmission with an extended range of milling drum speeds, the W 210 XF is the ideal choice for particularly challenging milling tasks.

A large number of our innovative features significantly reduce fuel and pick consumption, and thus effectively contribute to increased sustainability and the minimization of $CO_2$ 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 up to 330 mm

### LARGE MILLING MACHINES
> Milling width up to 4,400 mm
> Milling depth up to 350 mm

WIRTGEN

# OVERVIEW OF HIGHLIGHTS

## Perfectly Equipped

### OPERATING

**01 Outstanding Comfort on the Operator's Platform**

> Ideal overview of all critical working areas
> High-performance LED lighting
> Generously sized storage space
> Powerful heater for operator's platform
> Flexible, vertically adjustable weather canopy
> SMART KEY for storable user-specific machine parameters

**02 Intuitive MMI - Man-Machine Interface**

> Flexible control panel concept for maximum machine control
> 2" control panel with favorites buttons
> 5" control panel for leveling
> 7" control panel for convenient display of important information
> Robust high-quality camera/monitor system with 10" control panel

### QUALITY

**03 Precise and Versatile LEVEL PRO *ACTIVE* Leveling System**

> New and simple **LEVEL PRO *ACTIVE*** operating concept
> New additional and automated functions
> Optimized 3D and laser leveling
> Leveling boom with Sonic-Ski sensor on the right or both sides
> Optimized Multiplex system

**04 Outstanding Reliability**

> Pioneering diagnostic concept
> Machine control system with multi-level redundancy
> Robust and reliable controller area network (CAN bus)
> Reliable protection against vandalism
> Time-saving service and maintenance concept

MILLING

## 05 Unparalleled Cutting Technology

> Very fast milling drum changes thanks to **MCS *BASIC***
> Easy milling drum assembly changes
> Optimized protection against milling drum assembly wear
> Extremely wear-resistant **HT22** quick-change toolholder system
> New **HT22 *PLUS*** toolholder upper part with longer service life

## 06 Innovative MILL ASSIST

> **MILL ASSIST** automatic mode
> New **DUAL SHIFT** powershift transmission
> Additional pre-selection of an operating strategy in automatic mode
> Clear pre-selection of constant milling pattern quality
> Innovative efficiency indicator
> Direct display of momentary $CO_2$ emissions


PERFORMANCE

## 07 Maximum Milling Performance

> Extremely powerful and efficient John Deere engine with torque curve specifically optimized for cold milling machines
> Increased ballasting flexibility
> Large scraper lift
> Flexible and efficient offloading of milled material
> "Booster" function for extending discharge parabola
> **ACTIVE CONVEYOR** for steering angle-dependent slewing of the discharge conveyor

## 08 WPT Milling

> Telematics system with add-on WPT option
> Direct display of truck loading
> Clearly structured site documentation
> Fast and precise project accounting

COST-EFFICIENCY AND SUSTAINABILITY

## 09 Reduced Fuel Consumption – Active Minimization of $CO_2$ Emissions

> 2-speed powershift transmission for a wide range of usable milling drum speeds
> Automatic stop function for the diesel engine
> Maximum utilization of engine power in the low speed range
> Automatic start-stop function for the milling drum
> Smart dual fan concept

## 10 Environmentally Compatible Machine Technology

> Maximum exhaust gas purification for low exhaust emissions
> Reduced noise emissions during relocation
> Optimized VCS extraction system
> ECO operating strategy for minimal consumption
> Engine start-stop function via external control panel
> Efficient water management

**WIRTGEN**
SUSTAINABILITY

WIRTGEN SUSTAINABILITY signifies technologies and solutions that make a positive contribution to the sustainability goals of the WIRTGEN GROUP.

# CONNECTED MILLING

An efficient and effective flow of information is important for enabling easier, faster, and more cost-efficient processes and workflows. WIRTGEN has been committed to assuring this for many years, and refers to it in the field of milling technology as **CONNECTED MILLING**.

**CONNECTED MILLING** stands for the innovative flow of diverse information between the machine and its various components, the machine operator, the service workshop, and the resource planning office. The data and information available can be used to make milling operations even more efficient and further increase machine reliability.

The latest, innovative components of **CONNECTED MILLING** in the new generation of large milling machines include the **MILL ASSIST** smart assistance system and the **WIRTGEN GROUP PERFORMANCE TRACKER** Milling high-precision milling performance measurement system.

**MILL ASSIST** can be used to evaluate relevant information such as engine load, milling drum type, milling depth, or advance drive pressure, for example, to determine the best setting for the milling drum speed. In addition, the machine operator can preset an operating strategy that optimizes the milling process with regard to costs, performance, or quality.

**WIRTGEN GROUP PERFORMANCE TRACKER** Milling uses a laser scanner to determine the cross-sectional profile to be milled. Area performance levels and milling volumes are precisely determined via GPS positioning and additional sensors. Afterwards, an automatically generated report documenting the daily milling performance and including all consumables, a precise location map, and a wealth of other information is sent, for example, to the fleet manager's office. The control panel display provides the machine operator with a real-time overview of all important information.

**CONNECTED MILLING** plays an even more important role for machine owners using WIRTGEN's latest generation of large milling machines.


COLD MILLING MACHINE
WIRTGEN
CONNECTED MILLING
OPERATOR

# OUTSTANDING COMFORT ON THE OPERATOR'S PLATFORM

**Ideal Overview of All Critical Working Areas**
The large milling machine's intelligently designed visibility concept makes the operator's work much easier and leads to precise milling results. For example, the operator's platform can be extended to the right by more than 20 cm beyond the edge of the machine to guarantee that the operator has an unobstructed view of the area to be milled and the loading of the milled material. In addition, the narrow chassis is designed with a wasp waist at the front left and right as well as at the rear right. This means that the operator always has an ideal view of the crawler unit and milled edge.

**Particularly Powerful LED Lighting System**
The W 210 XF is equipped with particularly powerful LED working lights installed at various locations on the machine, operator platform lighting, and a "Welcome-and-Go-Home" light to assure safe and convenient access to the machine. The machine also features control panel lighting, lighting for the milling drum assembly, including additional working lights for pick changes, and optional LED lighting balloons. These provide optimum lighting in darkness, low light, and poor visibility.

**Everything in View**
Smart all-round visibility concept

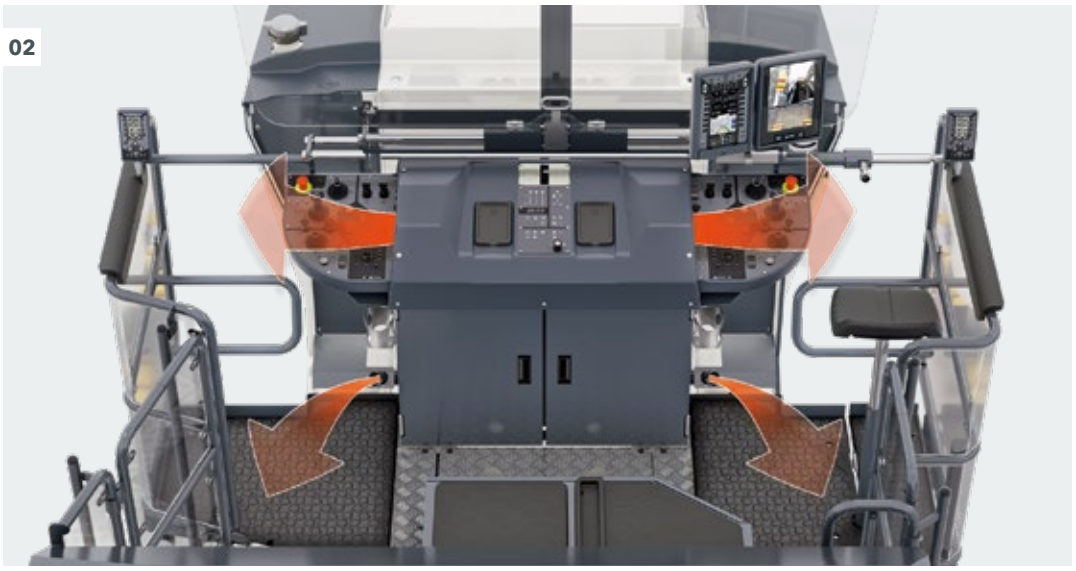
**Warm at Work**
Effective platform heating

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

**02** Optimum warming for hands and feet.

**03** Individually, vertically height-adjustable weather canopy.

**04** Weather canopy in transport position.






**Generously Dimensioned Storage Space**
The W 210 XF offers ample storage space for leveling sensors, pick ejectors and pick containers. An optional additional 1,380-liter XXL-size storage compartment at the rear of the machine has room for up to 69 pick containers; another 265-liter storage compartment on the operator's platform can be installed as an optional extra.

**High-Performance Heating System on the Operator's Platform**
The operator's platform of the cold milling machine is equipped with a powerful heating system. Intelligently positioned air vents near the operator's hands and feet ensure that the operator remains warm at all times. In addition, the generated heat is effectively kept close to the operator by side-mounted wind and weather protection elements and the retractable weather canopy.

**Variable, Vertically Adjustable Weather Canopy**
The hydraulically height-adjustable weather canopy can be individually adjusted depending on the respective operating and weather conditions. The height of the canopy can be adjusted at the touch of a button during milling operations, e.g. to avoid low-hanging branches on tree-lined streets. In addition, the heavy-duty windshields are equipped with window wipers. The outer roof shells can be moved separately to offer additional protection in rainy weather. The handrails on the operator's platform are fitted with wind deflectors.

**SMART KEY**
The SMART KEY key fob can be used to save individually adjustable machine parameters such as the display configuration or the assignment of favorites buttons. The user-specific data can be saved on five different key rings and easily transferred to other cold milling machines.

# INTUITIVE MMI – MAN-MACHINE INTERFACE

**Flexible Control Panel Concept for Maximum Machine Control**
The new control panel concept enables the positioning of the various control panels according to customer requirements. The comprehensive and clear display of machine status, diagnostics, and information to the machine operator was an essential requirement for WIRTGEN's development engineers. The new, logical and intuitive control panel concept ideally fulfills these requirements.

**2" Control Panel with Favorites Buttons**
Up to two additional 2" control panels can be integrated on the operator's platform. The optional positioning of the panel on the left or right outer railing of the operator's platform makes operating the machine easier and more effective. It can be programmed with up to 21 individualized favorite functions, e.g. slewing the discharge conveyor.

**5" Control Panel for Leveling**
For leveling with the **LEVEL PRO *ACTIVE*** leveling system, up to two additional 5" control panels for use by ground crews can be optionally mounted on the right and left sides of the machine.

**7" Control Panel for the Convenient Display of Important Information**
The new control panel concept provides clear and comprehensive information, whether positioned at the top on the operator's platform or at a lower operating position. The 7" control panel, for example, provides all machine operators with the following information: Machine load conditions, temperatures, hydraulic pressures, diesel fuel and water levels, leveling control, machine status and diagnostic messages, and general information such as the current time.

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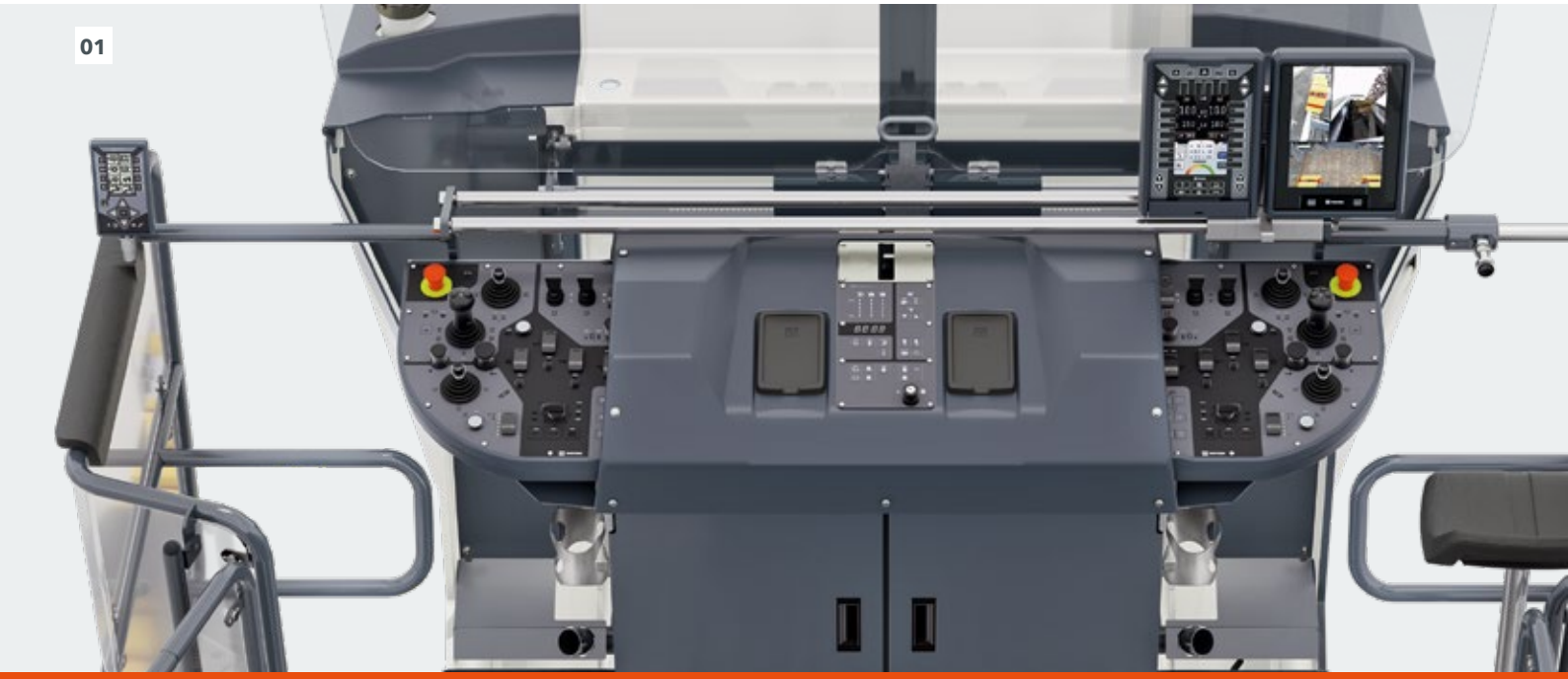


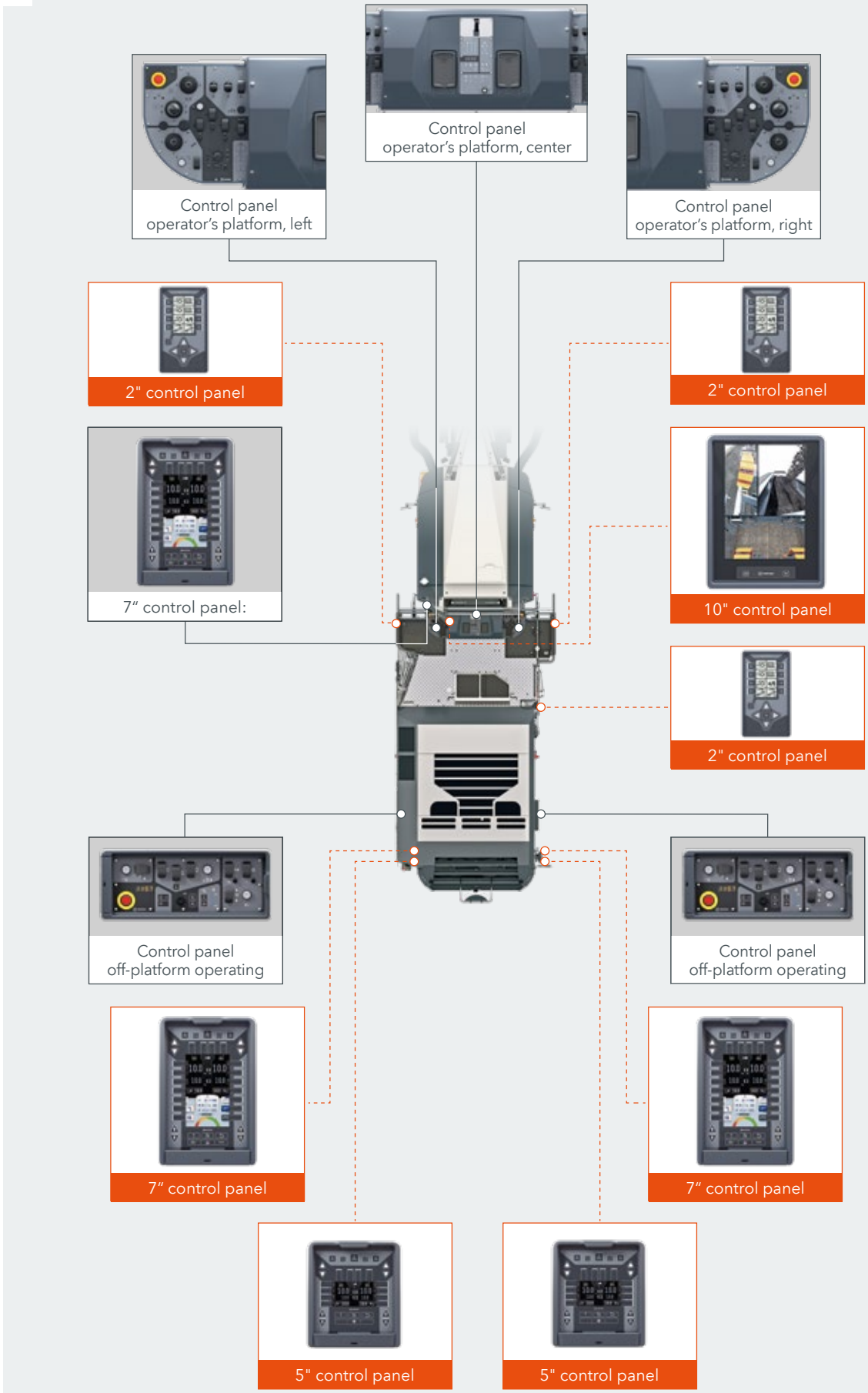
**Maximum Control**
Individual control panel concept

**Always fully informed**
Comprehensive information at all operating positions

**01** Customizable, user-friendly arrangement of the panels.

**02** Overview of the various control panels and their positions.

**02**



# INTUITIVE MMI – MAN-MACHINE INTERFACE

**Ruggedized High-Quality Camera/Monitor System with 10" Control Panel**

A camera/monitor system with two, four or eight cameras can be chosen as an additional option. The camera/monitor system with two cameras displays the camera images on the 7" control panel on the operator's platform. The camera/monitor systems with four and eight cameras come with an additional 10" control panel that can display several camera images simultaneously on a split screen. The ruggedized camera/monitor systems provide the machine operator with a direct view of all important working areas, such as the loading of material onto trucks or the milled surface behind the scraper.

01

**01** 10'' control panel with split screen for the simultaneous display of multiple camera images.

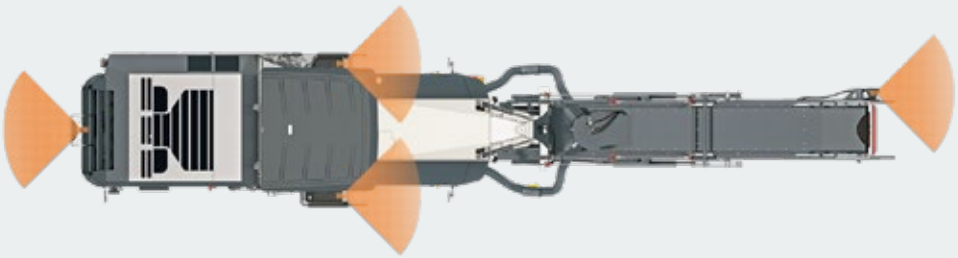
**02** Optional 5" control panel for displaying leveling information to the ground crew.

**03** Various camera/ monitor systems for a clear overview of critical areas.

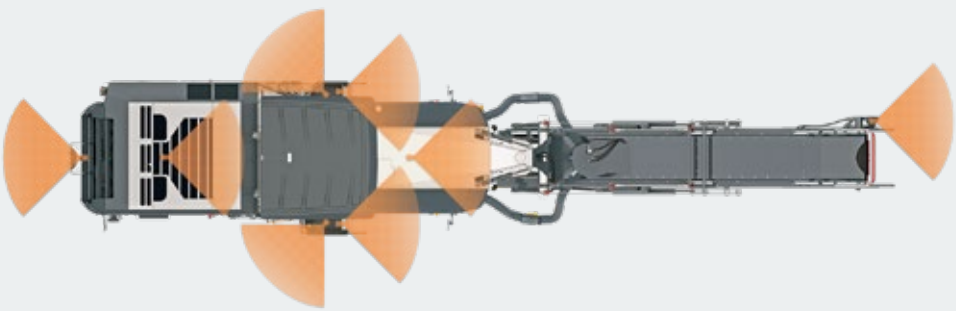
**02**

**03**

**Two-Camera System:** Rear-view camera / material loading camera



**Four-Camera System:** Two-camera system plus additional forward-facing cameras on the right and left sides of the machine



**Eight-Camera System:** Four-camera system plus additional rear-facing cameras on the right and left sides of the machine / scraper camera / camera in front of milling drum

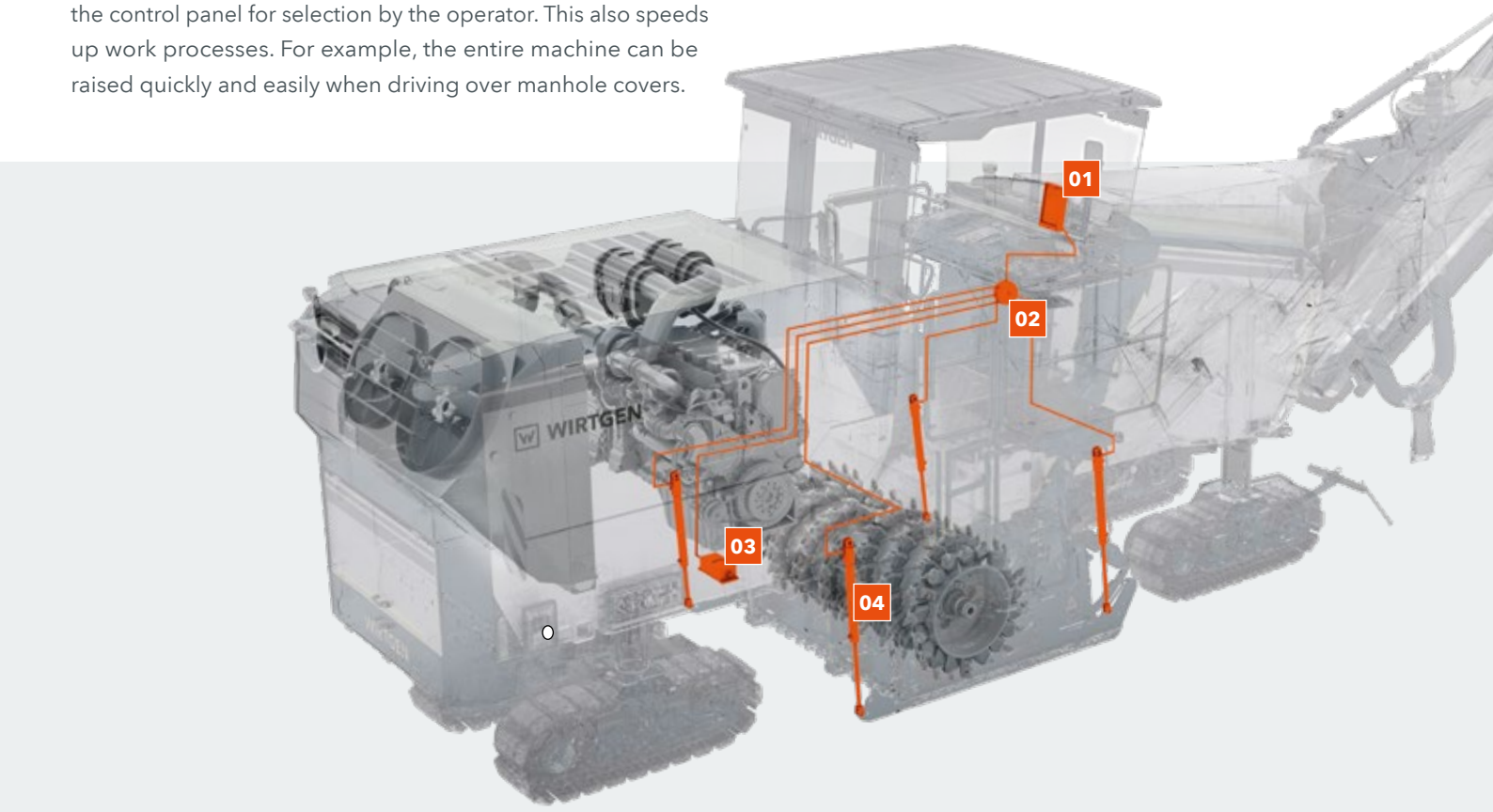
# VERSATILE, HIGH-PRECISION LEVELING SYSTEM LEVEL PRO *ACTIVE*

**New, Easy-To-Use** LEVEL PRO ***ACTIVE*** Operating Concept
Developed especially for cold milling machines, the new **LEVEL PRO *ACTIVE*** leveling system with innovative control panels offers an easy and intuitive operating concept. Fully integrated into the machine control system, it enables a high degree of automation and guarantees precise milling results by direct interlinking of important machine functions. In addition, **LEVEL PRO *ACTIVE*** with the 3D Kit provides a simple and field-proven 3D system interface.

**New Additional and Automated Functions**
The **LEVEL PRO *ACTIVE*** leveling system offers numerous additional and automated functions that help to make the operator's job much easier. All currently connected sensors are displayed on the control panel for selection by the operator. This also speeds up work processes. For example, the entire machine can be raised quickly and easily when driving over manhole covers.

**Optimized 3D and Laser Leveling**
The significantly simplified option for mounting laser sensors on the cold milling machine's weather canopy makes it easier to use 3D systems.

**Leveling Booms with Sonic-Ski Sensors on the Right Side or Right and Left Sides of the Machine**
The new leveling booms with Sonic-Ski sensors enable contactless scanning of a wire or a reference surface on both sides at a distance of up to 1,900 mm from the milled edge. During milling,




**The Height of Precision**
LEVEL PRO ***ACTIVE***

**Precise Height Compensation**
The Multiplex System

the leveling boom with the Sonic-Ski sensor can be hydraulically extended outwards from the operator's platform by up to 840 mm, and a mechanical adjustment enables an additional telescopic extension of 880 mm.

**Optimized Multiplex System**

The Multiplex system consists of two ultrasonic sensors mounted on flexibly adjustable swing arms on each side of the machine. 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 swing arms can be easily folded onto the machine for machine transport.

**01** Multiplex system with up to four ultrasonic sensors.

**02** Scanning in front of the milling drum.

**03** 3D Leveling / laser leveling.

**04** Telescoping leveling boom on the right or left.

= Standard equipment
= Optional equipment

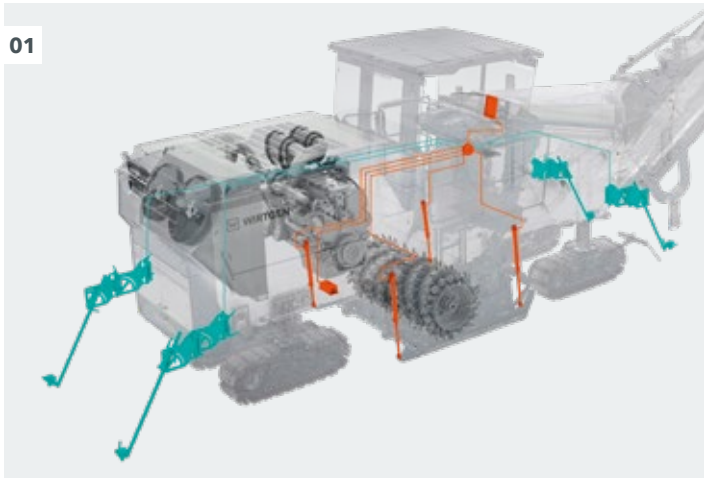
## W 210 XF with Standard Leveling Sensors

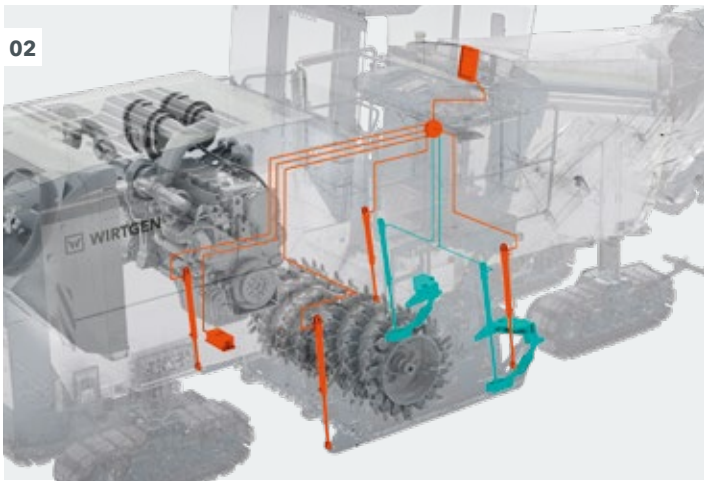
**01** 7" control panel for **LEVEL PRO *ACTIVE***

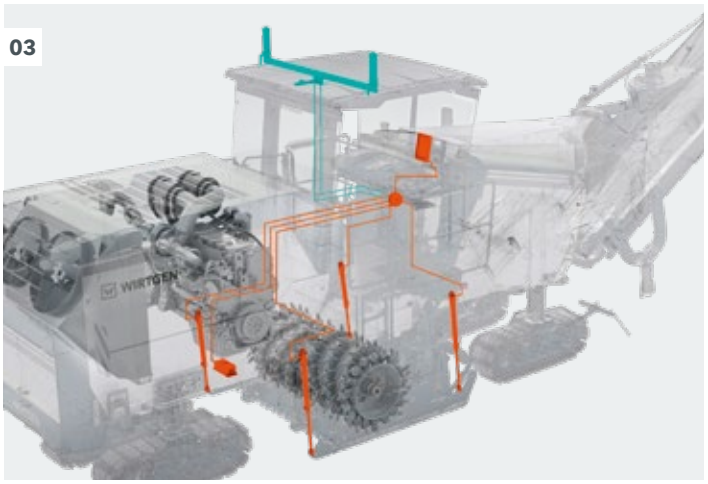
**02** Machine control

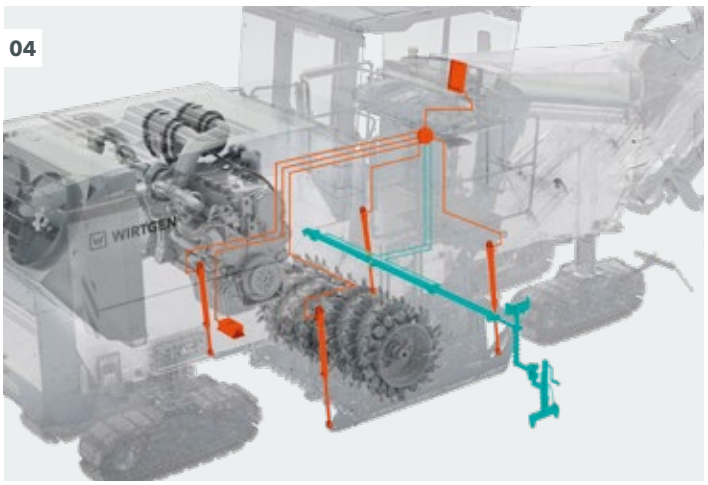
**03** Cross-slope sensor

**04** Hydraulic side plate lifting cylinder with integrated displacement sensor



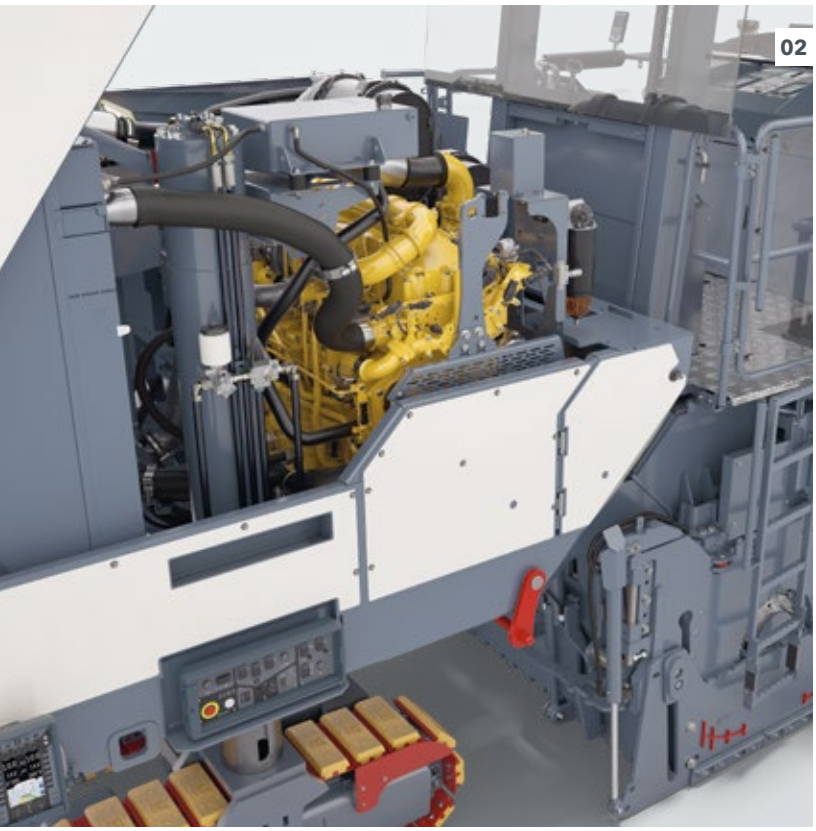
# OUTSTANDING RELIABILITY

**Pioneering Diagnostic Concept**
The new diagnostic concept guides the operator easily and intuitively through the troubleshooting process. Any potential malfunction is clearly indicated to the operator on the display, including a description of the fault. The operator can then locate the malfunction using optimized, easy-to-understand color graphics. Detailed textual support then enables the operator to begin correcting the fault.

**Machine Control System With Multi-Level Redundancy**
Three control computers integrated in the machine are flexibly interchangeable to ensure the machine's operational readiness if one of the three computers should fail. In addition, all machine functions are maintained when switching between the 7" control panels on the operator's platform and on the side of the machine for ground crews.


**Simple Fault Remediation**
Detailed diagnostic information

**Reliable Operation**
CAN bus with multi-level redundancy



02

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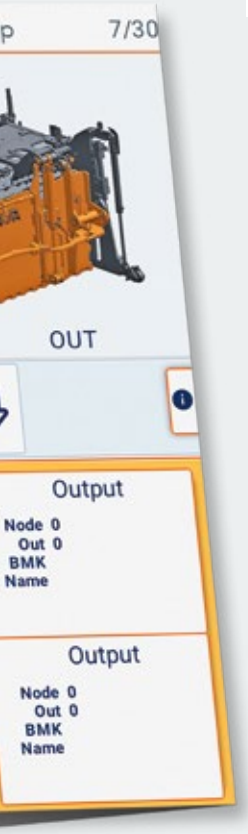



01

**01** Direct export of error messages to the diagnostic system in graphic form together with unambiguous localization.

**02** Easy access to all service points.

**03** Quick and secure protection of the control panel.

**Robust and Reliable Controller Area Network (CAN Bus)**
The CAN bus is duplicated in critical areas and can be switched whenever necessary. The main controls feature dual- channel signal transmission to ensure that functions remain operable even if one signal fails. Information about a signal failure is also displayed to the operator.

**Reliable Protection Against Vandalism**
Thanks to the innovative protection against vandalism, the control panels are protected against acts of force or theft. This means that the control panels on the left and right side of the operator's platform can simply be pushed into the main control panel and locked. The linearly arranged control panels on the operator's platform can be folded in and secured by means of a special mechanism above the centrally positioned control panel. All in all, this simple method of securing the control panels also makes it possible to quicklyprepare the machine for transport.

**Time-Saving Service and Maintenance Concept**
The W 210 XF stands out due to the considerably easier accessibility of all service points. For example, air, hydraulic oil and engine oil filters are all easily accessible from the walkway when the engine cover is open. The diesel fuel filters are mounted on a slide-out bracket that enables easy access and maintenance from the ground. In addition to this, all relevant machine components are quickly and easily accessible.

# UNPARALLELED CUTTING TECHNOLOGY

**Extremely Fast Exchange of Milling Drums with MCS *BASIC***

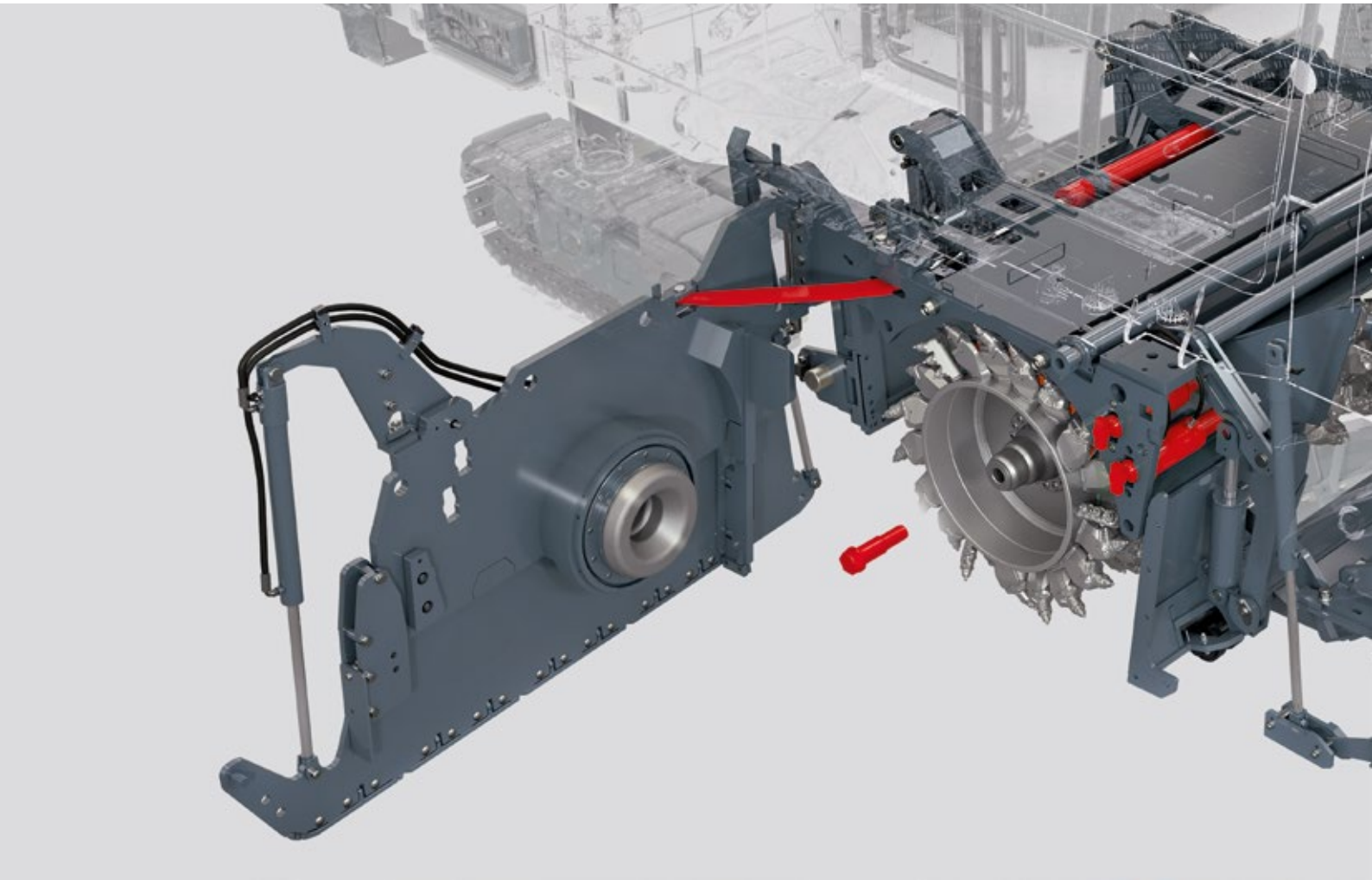
Milling drums can now be exchanged even faster thanks to the new generation of MCS milling drums. The milling drum rotation device can be used to release the one central bolt at the push of a button. The only thing the operator has to do afterwards is simply pull out the milling drum. The side panel can be opened quickly and effortlessly using the hydraulic cylinder drive. This simplified process has many advantages: Rapidly changing milling drums with different tool spacings to meet specific application requirements increases machine productivity. Changing the milling drum at short notice and using the ideal drum for the job reduces wear costs. In addition, maximum flexibility is essential to meet ever-changing requirements in day-to-day operations.

**Easily Exchangeable Milling Drum Assemblies**

The new quick-change milling drum assembly enables the use of milling widths of 2.0 m, 2.2 m, or 2.5 m. With the help of the simplified quick-change system, milling drum assemblies of different working widths can be exchanged in about one hour. The significantly increased stroke of the machine height

**Quick and Easy**
Easily exchangeable milling drums

**Wider working**
Additional milling drum assemblies for greater working widths



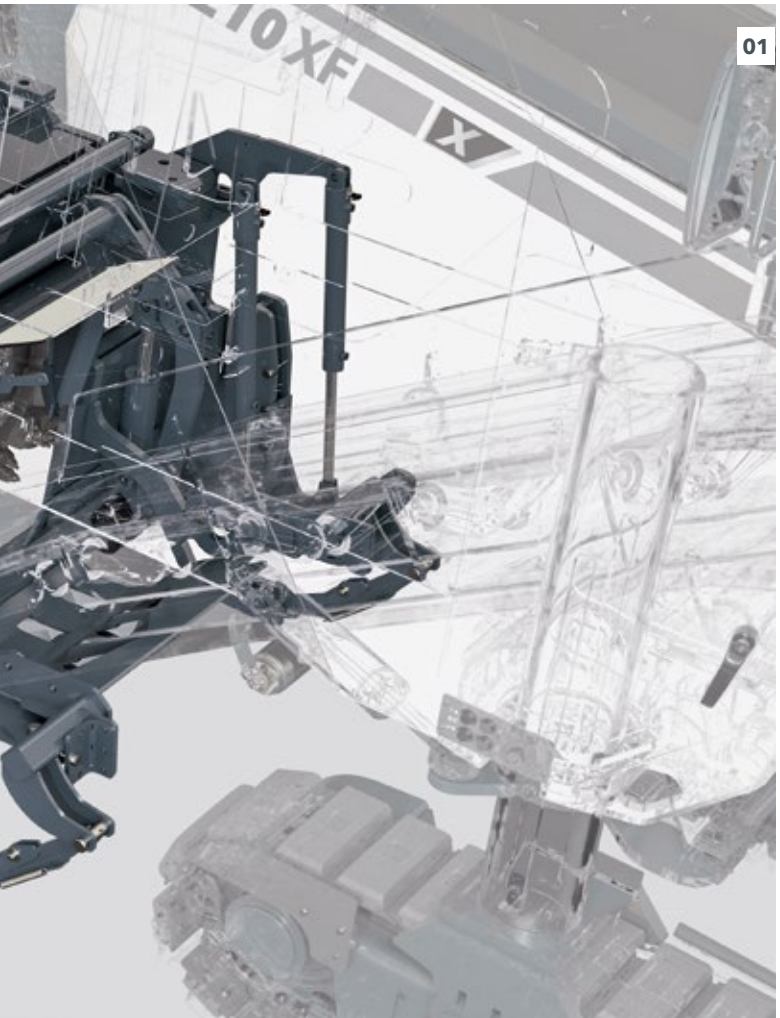
**01** Exchanging milling drums is now even faster with the new **MCS *BASIC*** milling drum system.

**02** Wide range of different MCS milling drums.

adjustment makes working with the machine much easier. In addition, only one plug-in electrical connection, two hydraulic quick-release couplings, and one water supply hose need to be connected.

**WIRTGEN** > GOOD TO KNOW

If required, the simple conversion to the use of an ECO-Cutter milling drum results in reduced cutting resistance, which in turn leads to lower fuel consumption and a reduction of $CO_2$ emissions.

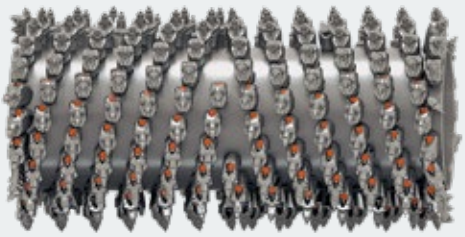



02

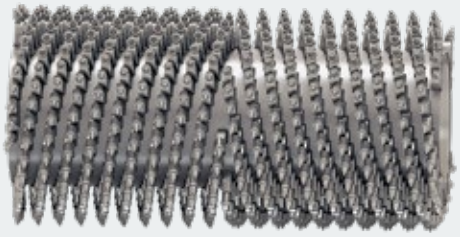
**ECO-Cutter**
Milling width: 2,000 mm, milling depth: 0 – 330 mm, tool spacing: 25 mm

**Standard Milling Drum**
Milling width: 2,000 mm, milling depth: 0 – 330 mm, tool spacing: 18 mm

**Standard Milling Drum**
Milling width: 2,000 mm, milling depth: 0 – 330 mm, tool spacing: 15 mm



**Fine Milling Drum**
Milling width: 2,000 mm, milling depth: 0 – 100 mm, tool spacing: 8 mm



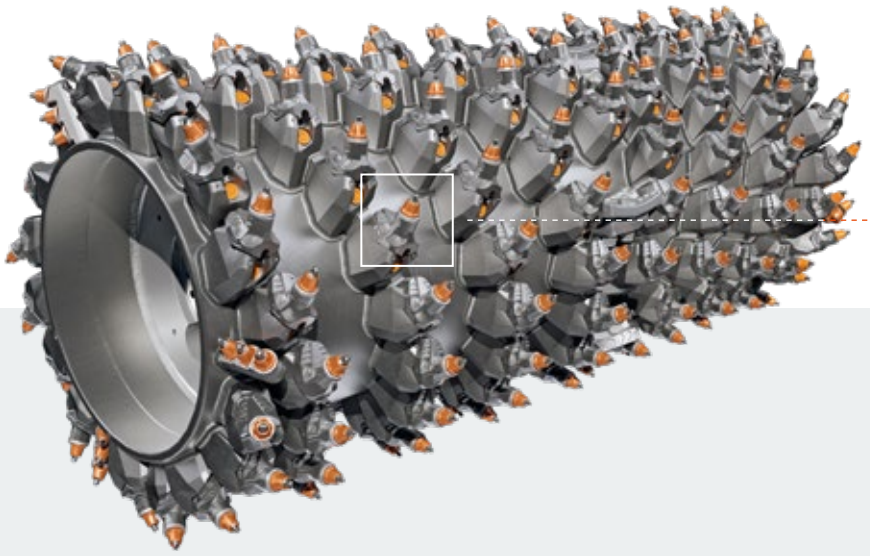
**Micro-Fine Milling Drum**
Milling width: 2,000 mm, milling depth: 0 – 30 mm, tool spacing: 6 x 2 mm

# UNPARALLELED CUTTING TECHNOLOGY

**Improved Wear Protection on the Milling Drum Assembly**
The side plates are equipped with extremely wear-resistant protective skids on both sides. Additional optional rollers attached to the side plates prevent scratches on the asphalt. In addition, the material depressor glides gently over the asphalt surface on rollers to minimize wear.

**Extremely Wear-Resistant Quick-Change Toolholder System** HT22
Milling drums for the W 210 XF fitted with the **HT22** quick-change toolholder system are the ideal choice for challenging milling tasks. In addition, the heavy-duty construction of the milling drums enables the top parts of the quick-change toolholders to be exchanged quickly and easily whenever necessary, including on the construction site.

**New Toolholder Top Part** HT22 ***PLUS*** **with Longer Service Life**
The new toolholder top part **HT22 *PLUS*** is characterized by an innovative embossed centering recess in the pick contact surface that reduces toolholder wear by up to 25% in combination with the new Generation X² round-shank picks. The rotation behavior of the round-shank picks has also been improved. The most significant benefits of the new top part are higher quality of the milled surfaces and longer replacement intervals.



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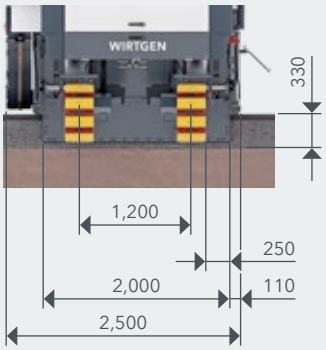
**Less Wear for Longer Service Life**
HT22 and HT22 ***PLUS***

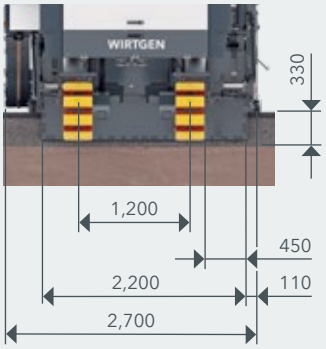
02

**W 210 XF**
**with 2.0 m assembly**



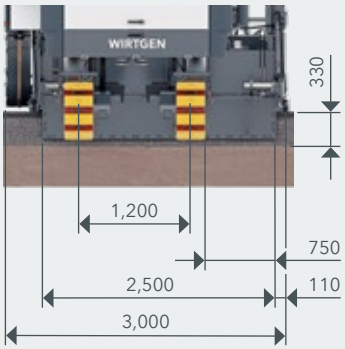

**Standard Milling Drum**
Milling width: 2,000 mm, milling depth: 0 – 330 mm,
tool spacing: 15 mm

**W 210 XF**
**with 2.2 m assembly**

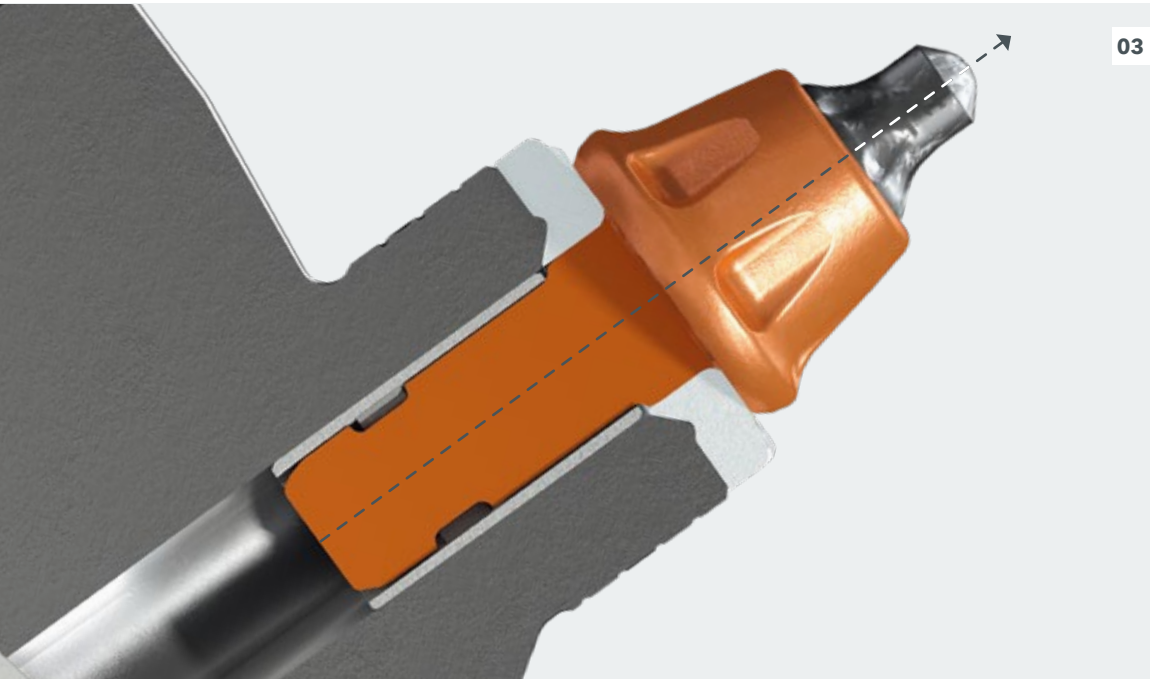



**Standard Milling Drum**
Milling width: 2,200 mm, milling depth: 0 – 330 mm,
tool spacing: 15 mm

**W 210 XF**
**with 2.5 m assembly**




**Standard Milling Drum**
Milling width: 2,500 mm, milling depth: 0 – 330 mm,
tool spacing: 15 mm



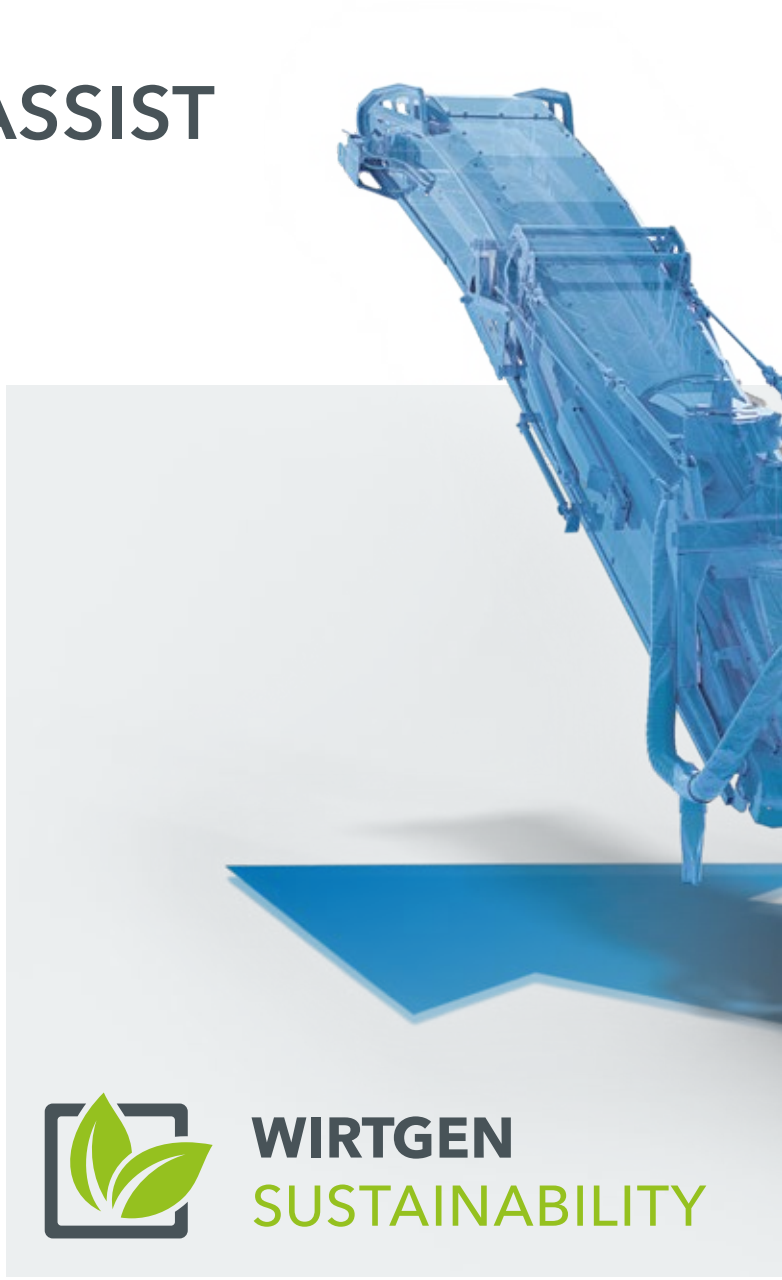
03

**01** Extremely wear-resistant quick-change toolholder system **HT22**.

**02** 2.0 m, 2.2 m, and 2.5 m milling drum assemblies.

**03** In combination with the new round-shank picks, the embossed centering recess on the new toolholder optimizes rotation behavior to reduce wear.

# INNOVATIVE MILL ASSIST



**OPERATOR**

**Operating Strategy**

> ECO
> Performance-optimized
> Milling pattern quality

**MACHINE**

**Working Parameters**

e.g.
> Milling width
> Milling depth
> Milling drum/picks
> ...


**Automatic Machine Settings**

> Milling speed
> Engine speed
> Water injection rate
> ...

**Information Display**

> Efficiency
> Milling pattern
> Optimization tips

**WIRTGEN SUSTAINABILITY**

**MILL ASSIST Automatic Mode**

In automatic mode, the innovative **MILL ASSIST** machine control system always selects the operating strategy with the best balance between performance and costs. Its process optimization functions automatically adjust the speeds of the diesel engine and the milling drum, the travel drive, the water system, and the machine's advance rate. This significantly reduces the operator's workload while improving machine performance and considerably reducing fuel consumption, $CO_2$ emissions, and noise.

**New DUAL SHIFT Powershift Transmission**

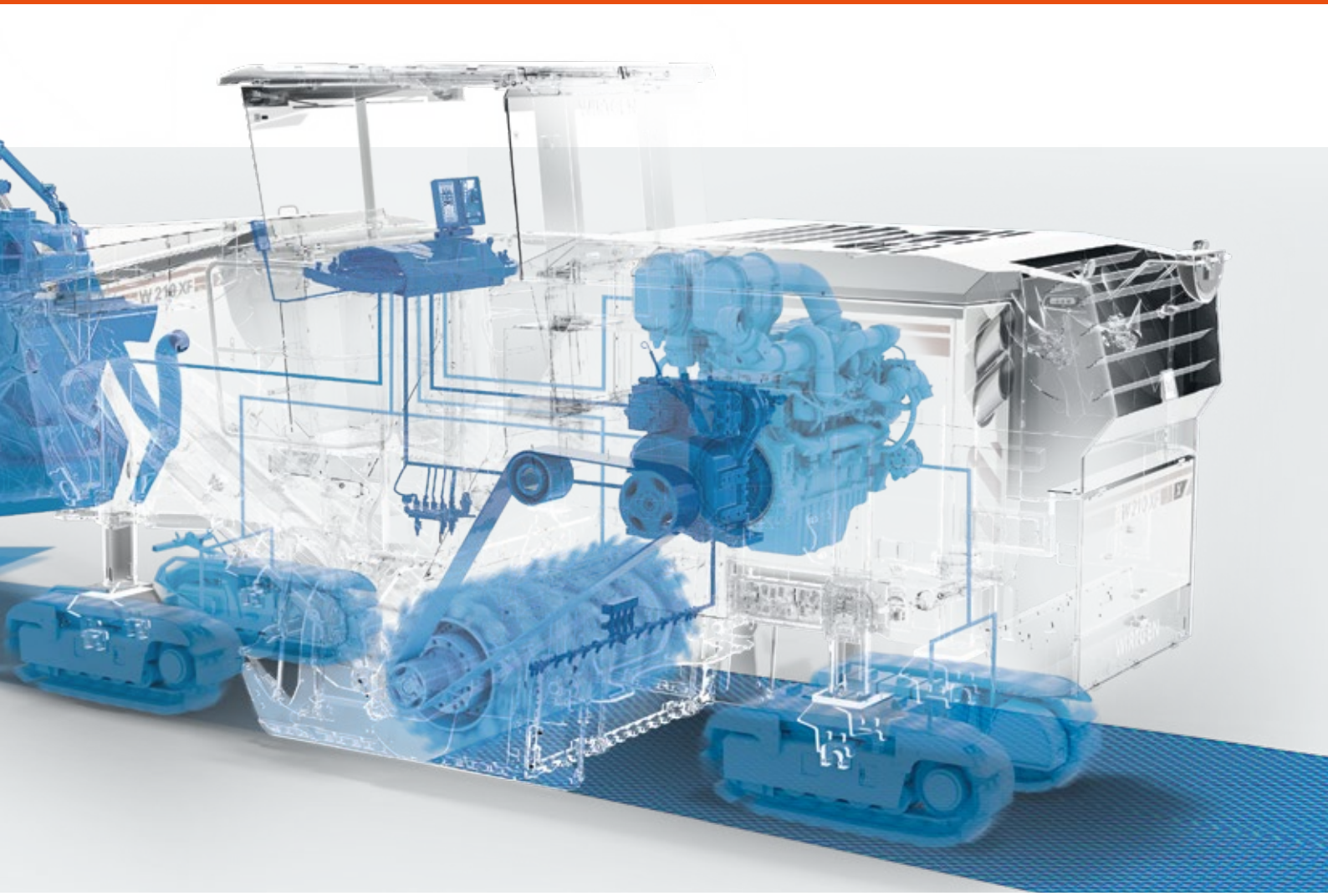
The new, two-speed **DUAL SHIFT** powershift transmission is controlled by **MILL ASSIST** and can also be shifted under load. **DUAL SHIFT** enables an extremely broad spectrum of milling drum speeds and makes the machine the ideal choice for a wide range of cost-effective milling applications. Low milling drum speeds reduce fuel consumption. High milling drum speeds enable, for example, maximum milling speeds in fine milling applications.

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

The operator can also pre-select one of the three operating strategies "ECO," "performance-optimized," or "milling pattern

## MILL ASSIST
Efficient automatic milling

## Three Strategy Presets
Optimal machine settings



quality" for the upcoming application. The machine then automatically regulates the main setting parameters according to the operating strategy.

**Clear Pre-Selection of Consistent Milling Pattern Quality**
The required quality of the milled surface can be preset by simple pre-selection of a quality value on a scale from 1 to 10. This automatically sets the milling drum speed and the milling speed under consideration of the milling drum type being used.

**Innovative Efficiency Indicator**
An efficiency indicator keeps the machine operator constantly informed about the working status. Changes to the milling parameters that could potentially improve efficiency are also displayed on the control panel.

**Direct Display of Momentary $CO_2$ Emissions**
The WIRTGEN telematics system enables precise measurement and a continuous display of the machine's current $CO_2$ emissions to the machine operator.

**WIRTGEN** > GOOD TO KNOW

The **MILL ASSIST** machine control system of the W 210 XF ensures efficient engine speeds and simultaneously increases productivity. In particular, this results in a significant reduction of $CO_2$ emissions per cubic meter of milled material.

# MAXIMUM MILLING PERFORMANCE


**More Power**
High-performance diesel engine

**Optimized Transport**
Removable additional ballast weight

**Extremely Powerful and Efficient John Deere Engine with a Torque Curve Specially Optimized for Cold Milling Machines**

The combination of an up to 14% increase in engine power compared with its predecessor, the W 210 F, and significantly increased maximum torque makes the machine even more efficient and versatile in use. What's more, WIRTGEN and John Deere worked hand-in-hand on the optimization of the engine torque curve to make it ideal for cold milling machines. This guarantees lower fuel consumption and higher productivity, even when working at the machine's maximum milling depth.

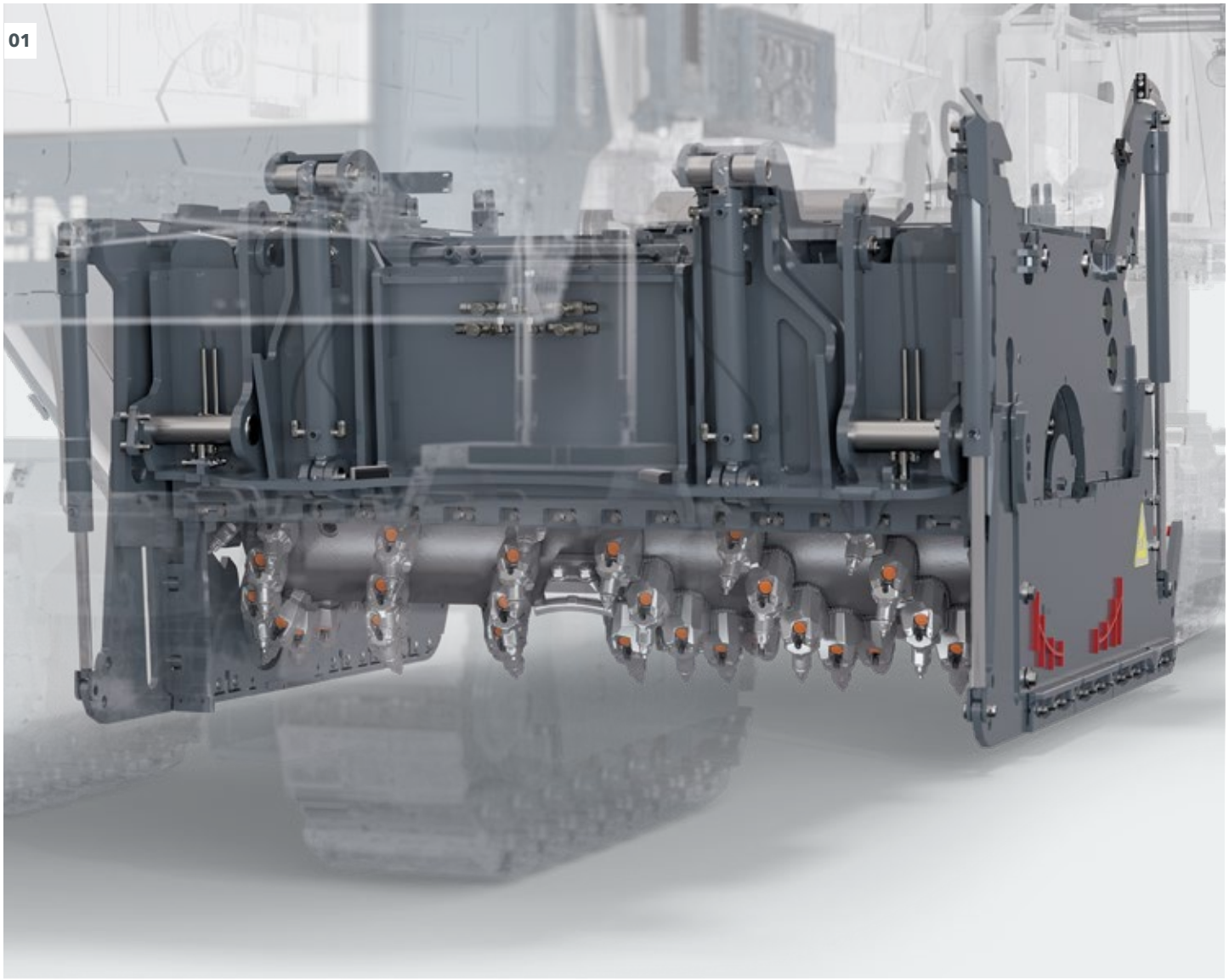
**Increased Ballasting Flexibility**

The additional 1,600 kg ballast weight can be quickly mounted on or removed from the back of the machine in two simple steps. This allows the required machine transport weight to be adjusted even more precisely.


**Engine characteristics of the cold milling machine W 210 XF**

# MAXIMUM MILLING PERFORMANCE

**Large Scraper Lift**
The increased scraper lift enables milling to greater depths, thus expanding the range of possible applications when milling without material loading. It also results in less material accumulating in the milling drum housing, which reduces wear and tear on the housing and milling drum. Depending on requirements and the application at hand, different scraper contact pressure levels can also be adjusted quickly and conveniently by simply pressing a button on the 7" control panel.




**Precise and Flexible Loading**
Two slewing speeds and large slewing angle

**Ideal Handling of Peak Operating Loads**
New booster function

02


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

**Flexible and Efficient Loading of the Milled Material**
Exceptionally large conveyor slewing angles of 65° to both sides enable loading of the milled material even in difficult situations, for example, in road junctions or turning bays. Two slewing speeds allow precise control of the required angle of the discharge conveyor. The belt speed of the discharge conveyor can be adjusted to meet specific site conditions and loading situations at the push of a button. Furthermore, the hydraulically folding discharge conveyor can be quickly folded away when necessary on the construction site and for easy transportation.

**Booster Function for an Increased Discharge Trajectory**
Pressing the "Boost" button on one of the two main control panels briefly boosts the belt speed and conveying capacity of the discharge conveyor by 20%, which temporarily discharges the milled material much faster from the milling drum housing or discharges it into a tipper truck in a particularly high and long arc.

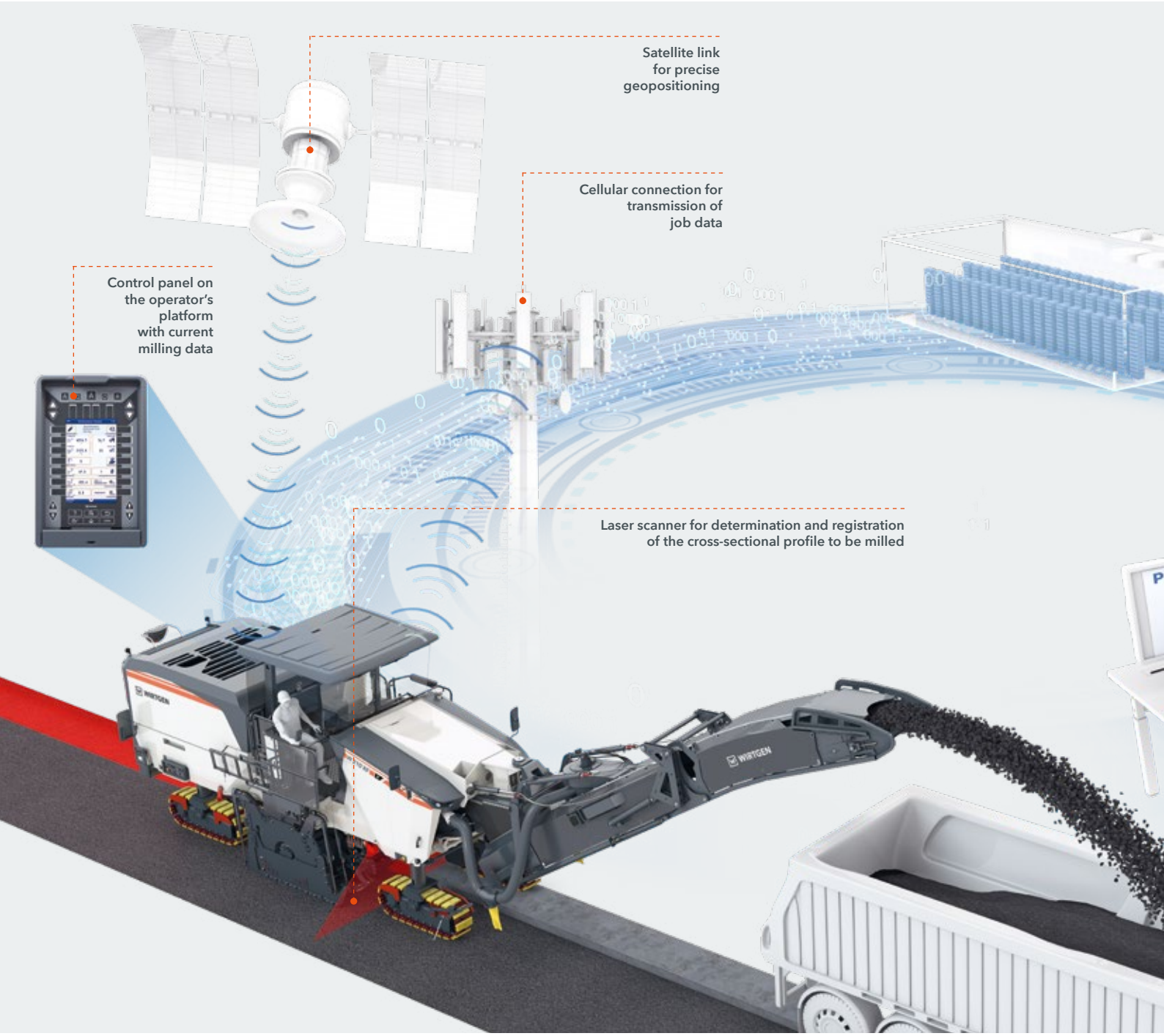
**ACTIVE CONVEYOR**
When repositioning the discharge conveyor in difficult situations on the site, the semi-automatic **ACTIVE CONVEYOR** slewing angle control system assists the operator in the best possible way – such as when milling in intersections or maneuvering around road fixtures.

# WPT MILLING

## Informative WIRTGEN GROUP Performance Tracker

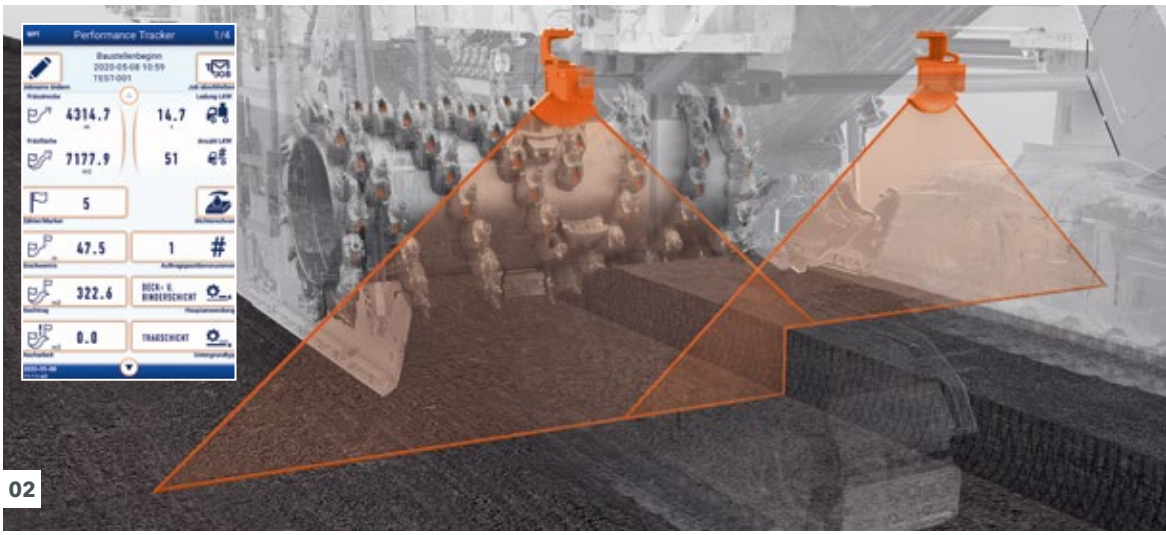
**Comprehensive Job Data**
Site reports by e-mail

**Easy Accounting**
No additional surveying costs



**01** The operator is kept constantly informed about current machine and application parameters – the relevant data are transmitted to the machine owner after the end of work.

**02** The actual, currently implemented milling width is scanned by a laser scanner and clearly displayed on the control panel.




02


01

**Telematics System with Add-on WPT Milling Option**

WPT Milling uses a laser scanner to determine the cross-sectional profile to be milled. Area milling performance and milling volume are then precisely calculated using GNSS positioning and other sensors. The control panel on the operator's platform provides the machine operator with a constant real-time overview of the milling data registered by WPT. After project completion, an automatically generated report containing all relevant performance and consumption data is forwarded to the machine owner.

At the same time, Performance Monitoring in the Operations Center even allows the measured data to be clearly displayed in real-time during the ongoing process.

**Direct Display of Truck Loading Status**

The actual, currently implemented milling width is scanned by a laser scanner and displayed directly on the control panel together with the current truck loading status. The display of the tonnage currently loaded onto trucks makes it easy for the machine operator to prevent overloading.

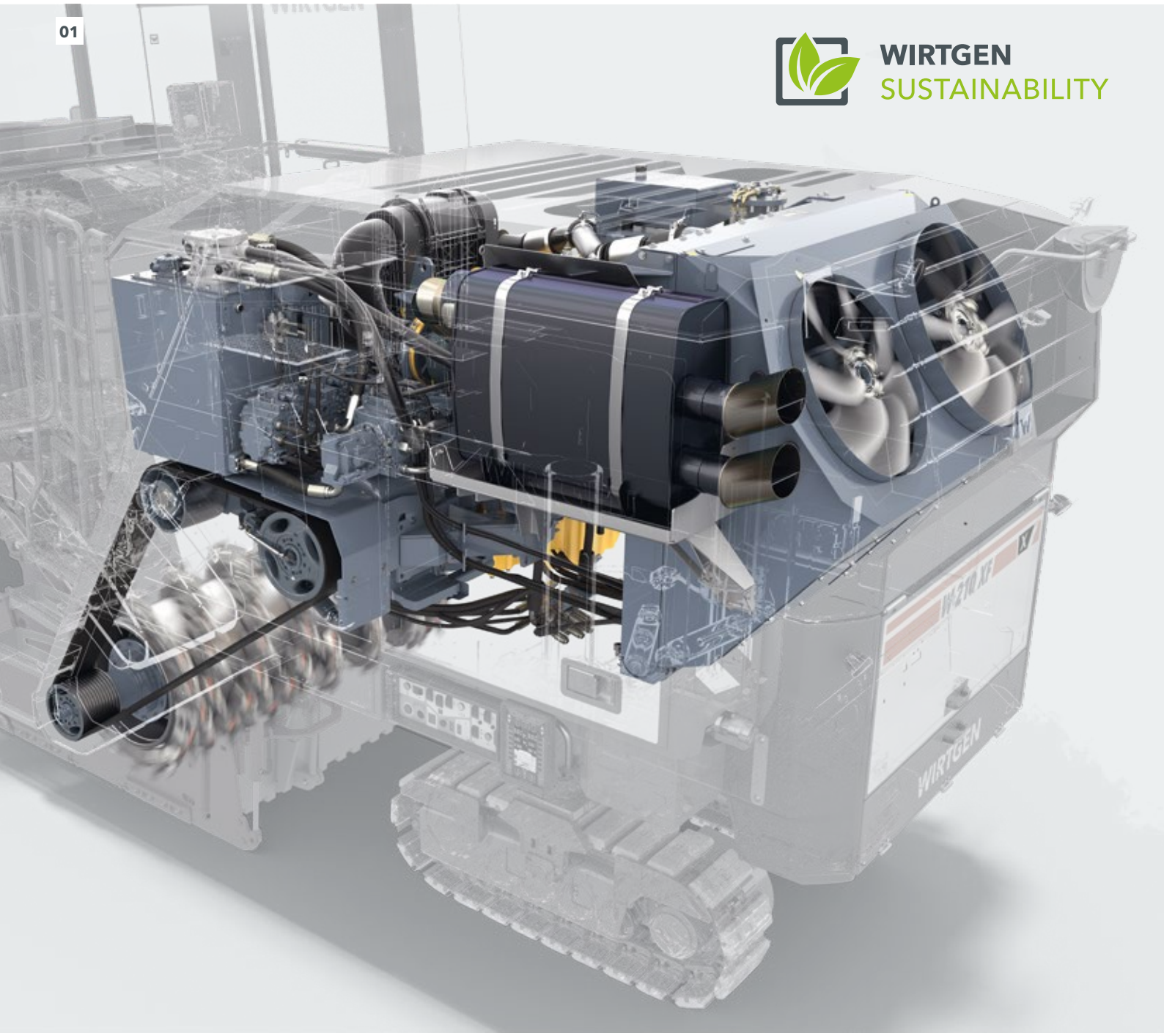
**Clearly Structured Site Documentation**

Once the milling work has been completed, a report is automatically generated in Excel and PDF format and forwarded, for example, to the machine owner's project management office by e-mail. The site survey report contains precise information about the milling volume, milled area, milling depths with corresponding GPS coordinates, and the consumables used.

**Fast and Precise Project Accounting**

The prompt, simple calculation of the surface area required for the correct invoicing of the work performed saves further costs, e.g. as incurred by the employment of an external surveyor.

# REDUCED FUEL CONSUMPTION – ACTIVE MINIMIZATION OF $CO_2$ EMISSIONS




**Consistently Efficient Engine Speeds**
Innovative **DUAL SHIFT** powershift transmission

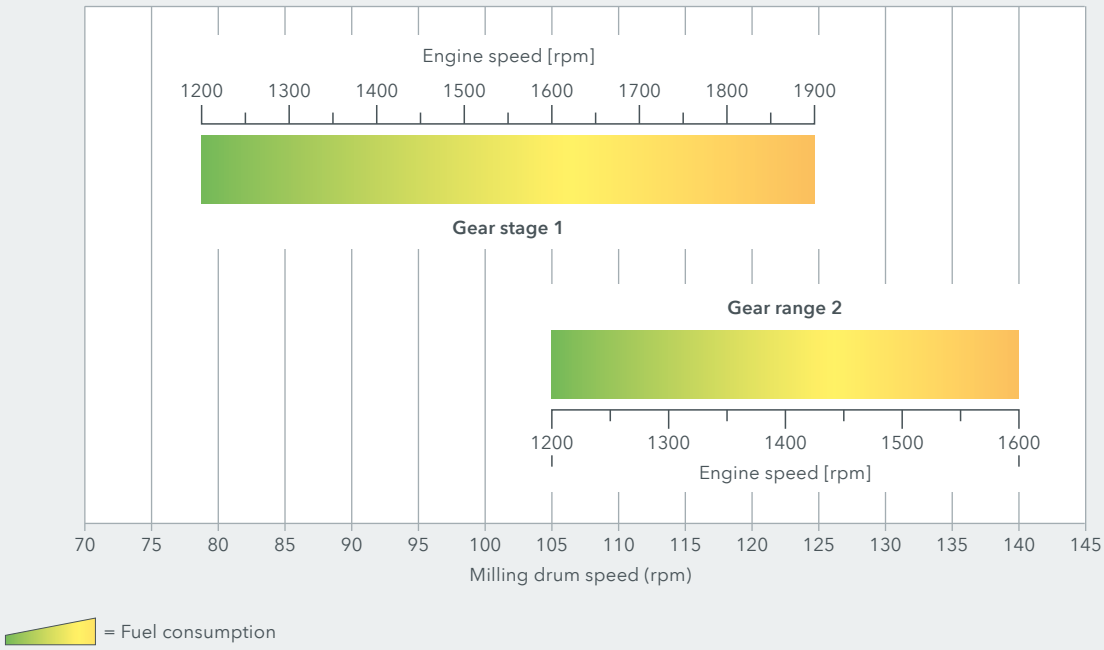
**Fuel-Efficient Cooling**
Dual fan controlled by engine speed

**01** Compact engine / drive unit of the W 210 XF.

**02** Enormously expanded range of milling drum speeds for reduced fuel consumption and pick wear.

**02**

**WIRTGEN Cold Milling Machine W 210 XF with 2-Speed DUAL SHIFT Powershift Transmission**




**2-Speed Powershift Transmission for a Wide Range of Usable Milling Drum Speeds**

The new 2-speed **DUAL SHIFT** powershift transmission ensures the use of efficient engine speeds while maintaining the most effective milling drum speeds. **DUAL SHIFT** offers the unbeatable advantages of low diesel consumption and reduced noise emissions with high milling performance.

**Automatic Shut-Off Function for the Diesel Engine**

The diesel engine is automatically switched off in idle mode after an appropriate cooling time. The remaining time to engine shut-off is displayed on the control panels during the cooling phase.

**Maximum Utilization of Engine Power in the Low Engine Speed Range**

The integrated **MILL ASSIST** machine control system ensures that the diesel engine of the W 210 XF runs mainly in the lower speed range while simultaneously assuring high performance and low fuel consumption.

**Automatic Start-Stop Function for the Milling Drum**

When the milling process is interrupted, e.g. when waiting for a truck, the start-stop function temporarily switches off the milling drum after a few seconds, leading to a further reduction of fuel consumption. The milling drum is then automatically switched on again when milling is resumed.

**Smart Dual Fan Concept**

Two separate speed-controlled and intelligently arranged cooling fans deliver the necessary capacity for cooling the diesel engine and the hydraulic system whenever necessary. The cooling system therefore also makes an effective contribution to the achievement of lower fuel consumption.

**WIRTGEN > GOOD TO KNOW**

All the cutting-edge features of the W 210 XF described here lead to a significant increase in sustainability.

# ENVIRONMENTALLY COMPATIBLE MACHINE TECHNOLOGY

**Environmental Focus**
Low $CO_2$ emissions

**Minimal Water Usage**
Efficient water metering

# WIRTGEN SUSTAINABILITY


**01** **Extremely Powerful and Fuel-Efficient Diesel Engine**

The state-of-the-art, fuel-efficient diesel engine of the W 210 XF delivers maximum engine power with exceptionally high maximum torque. At the same time, the engine technology of the W 210 XF fulfills the stringent requirements of the currently highest EU Stage 5 / US EPA Tier 4f standards for the minimization of exhaust gas emissions.

**02** **Reduced Noise Emissions During Repositioning**

The maximum travel speed of the cold milling machine is 100 m/min, which, due to the low engine speeds required, results in reduced fuel consumption and lower noise emissions.

**03** **Engine Start-Stop Function via External Control Panel**

The diesel engine can also be switched on and off effortlessly by ground crews via the external control panel, making it possible to further reduce fuel consumption and noise emissions.

**04** **ECO Operating Strategy for Minimal Consumption**

Pre-selection of the ECO operating strategy in the **MILL ASSIST** engine control system guarantees lower fuel consumption, less pick wear, and reduced noise emissions.

**05** **Efficient Water Management**

Four independently electrically switchable segments of the water spray bar controlled from the operator's platform allow the optimum amount of water to be added to the milling process, for example when milling only half the width of a lane. Automatic activation and deactivation of the water system and water injection dependent on milling performance considerably reduce water usage.

**06** **Improved VCS Extraction System**

VCS improves air quality and visibility in the machine operator's and ground crew's working area. In addition, the improved construction of the more easily accessible VCS suction channel reduces the cleaning effort otherwise required.

**WIRTGEN > GOOD TO KNOW**

All of the features of the W 210 XF described here play an active role in environmental protection and the conservation of natural resources.

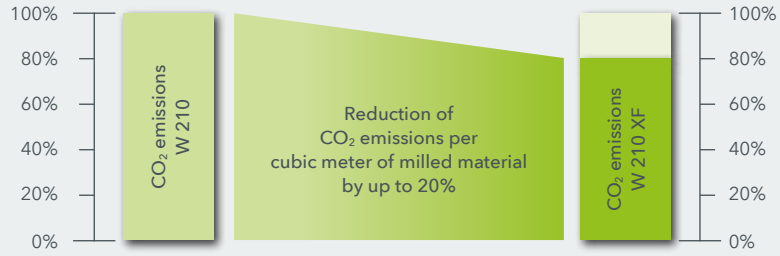
# SUSTAINABLE INNOVATIONS FOR A GREEN FUTURE

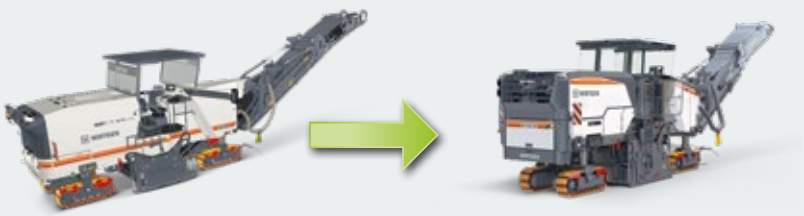
Today, it is more important than ever to minimize harmful $CO_2$ emissions on road construction sites – while still maintaining high levels of performance and productivity. Innovative WIRTGEN technologies play an extremely important role in actively protecting the environment and conserving natural resources.

The W 210 XF from the F-series – the current generation of large milling machines from WIRTGEN – successfully cuts $CO_2$ emissions during milling operations by significantly reducing fuel consumption per cubic meter of milled material.

**WIRTGEN** > GOOD TO KNOW

Compared to its predecessor model, the W 210 from 2010, the W 210 XF reduces $CO_2$ emissions per cubic meter of milled material by up to 20%. Innovative WIRTGEN technologies such as **MILL ASSIST**, the **DUAL SHIFT** power shift transmission, and the dual fan cooling concept all make a valuable contribution to this.



WIRTGEN W 210 (2010)

WIRTGEN W 210 XF (2024)

As the W 210 XF is HVO-ready, running the machine on high-quality HVO biofuel offers further potential for the reduction of $CO_2$ emissions.


WIRTGEN
SUSTAINABILITY

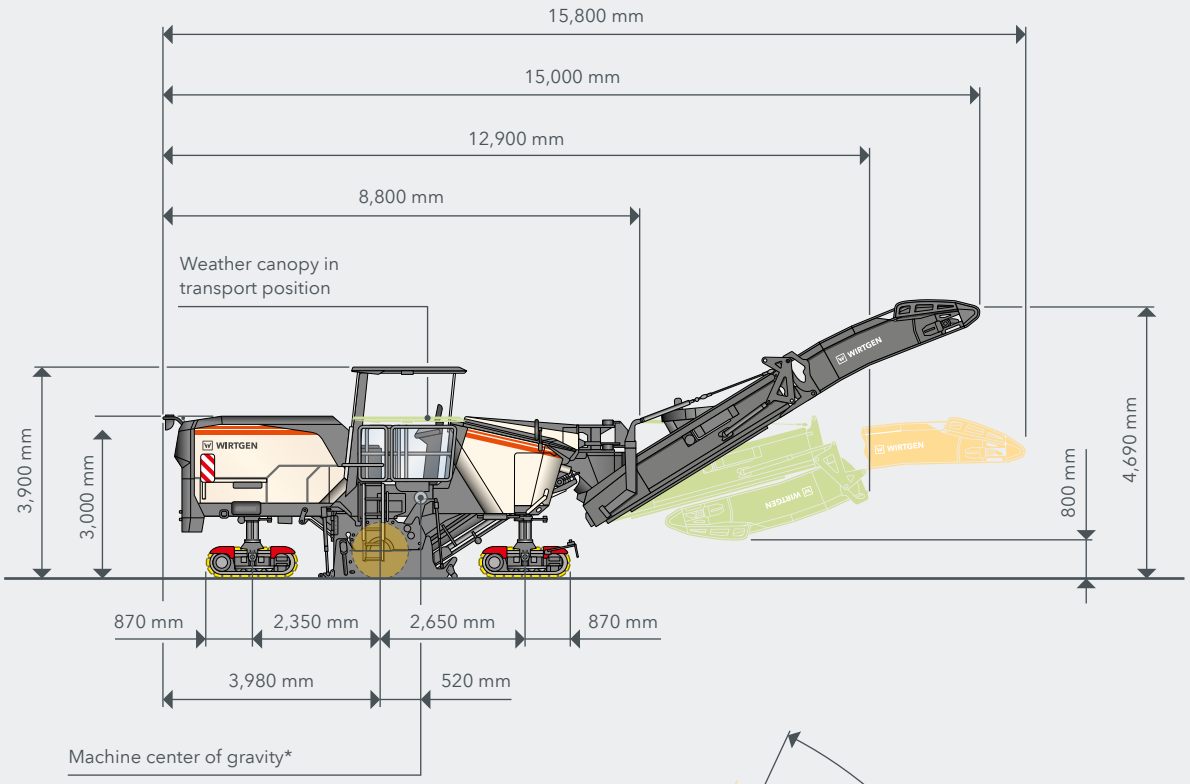
The high-performance cold milling machine with compact dimensions is the ideal choice for a broad spectrum of applications ranging from surface layer rehabilitation and complete pavement removal to fine milling operations. The machine's already wide range of applications is further expanded by MCS – the Multiple Cutting System – which enables quick exchange of the milling drum assembly and particularly fast exchange of the milling drum for milling widths of 2.0 m, 2.2 m, or 2.5 m.
Thanks to the unique **DUAL SHIFT** powershift transmission with an extended range of milling drum speeds, the W 210 XF is the ideal choice for particularly challenging milling tasks.

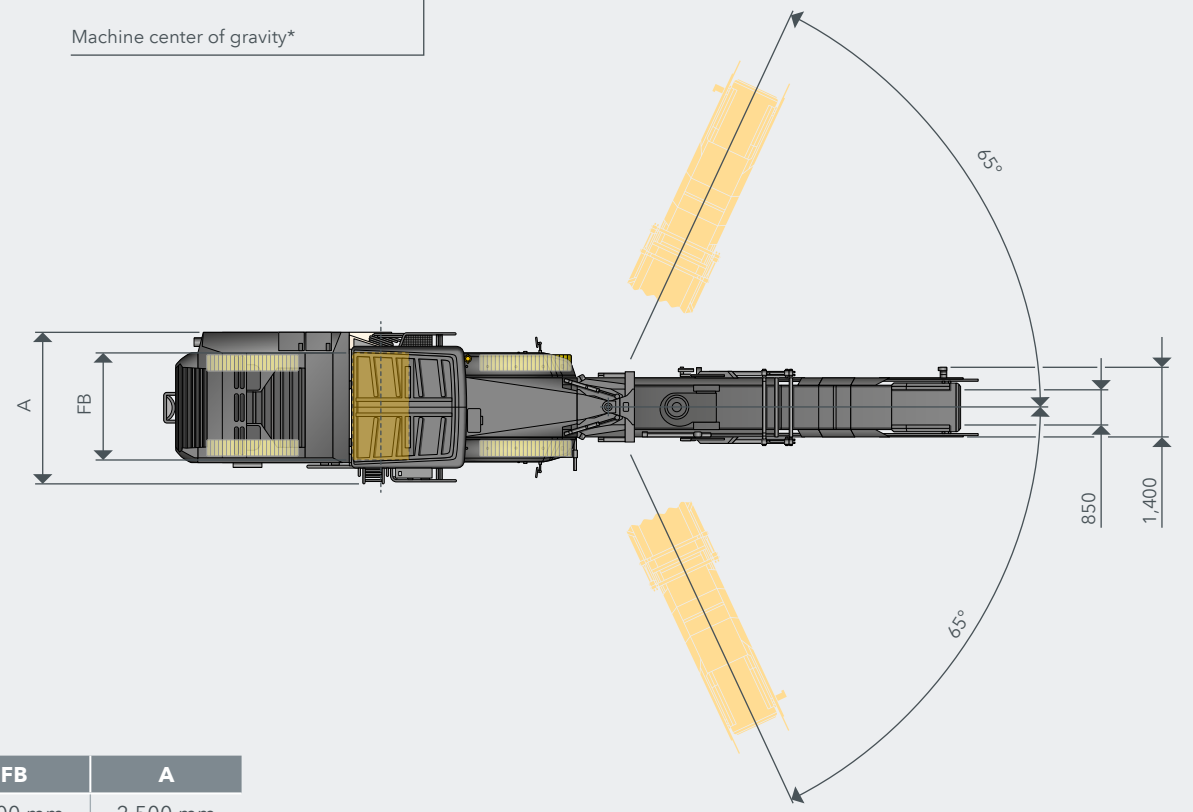
| TECHNICAL SPECIFICATIONS W 210 XF | No EU regulation / US EPA Tier 2 | EU Stage 5 / US EPA Tier 4f |
|---|---|---|
| **Milling Drum** | | |
| Standard milling width | 2,000 mm | |
| Optional milling width 1 | 2,200 mm | |
| Optional milling width 2 | 2,500 mm | |
| Milling depth [1)] | 0 – 330 mm | |
| Cutting diameter | 1,020 mm | |
| **Engine** | | |
| Manufacturer | John Deere | John Deere |
| Type | 6180HD-NC-PINb-N | 6180HD-S5-PDRb-N |
| Cooling system | Water | Water |
| Number of cylinders | 6 | 6 |
| Rated power | at 1,900 rpm: 575 kW / 771 HP / 782 PS | at 1,900 rpm: 575 kW / 771 HP / 782 PS |
| Maximum power | at 1,700 rpm: 580 kW / 778 HP / 789 PS | at 1,700 rpm: 580 kW / 778 HP / 789 PS |
| Displacement | 17.9 l | 17.9 l |
| Fuel consumption at rated power \| mixed on-site operations | 150 l/h \| 60 l/h | v |
| Engine sound power level according to DIN EN 500-2 \| on operator's platform | ≤ 112 dB(A) \| ≥ 90 dB(A) | ≤ 115 dB(A) \| ≥ 92 dB(A) |
| Exhaust emission standard | No EU regulation / US EPA Tier 2 | EU Stage 5 / US EPA Tier 4f |
| **Electrical System** | | |
| Power supply | 24 V | |
| **Tank capacities** | | |
| Fuel | 1,200 l | |
| Hydraulic oil | 100 l | |
| Water | 3,270 l | |
| **Driving Performance** | | |
| Max. travel and milling speed | 0 – 100 m/min (6 km/h) | |
| **Track Units** | | |
| Track units front/rear (L x W x H) | 1,730 x 300 x 610 mm | |
| **Loading of Milled Material** | | |
| Belt width of primary conveyor | 850 mm | |
| Belt width discharge conveyor | 850 mm | |
| Theoretical capacity of discharge conveyor | 375 m³/h | |

| TECHNICAL SPECIFICATIONS W 210 XF | No EU regulation / US EPA Tier 2 | EU Stage 5 / US EPA Tier 4f |
|---|---|---|
| **Weight of Base Machine** | | |
| Unladen weight of machine without operating fluids | 27,550 kg | |
| Operating weight, CE [2)] | 29,800 kg | |
| Maximum operating weight (full tank with maximum equipment) in FB2500 | 36,450 kg | |
| **Weight of Operating Fluids** | | |
| Water | 3,270 kg | |
| Fuel (0.83 kg/l) | 1,000 kg | |
| **Additional Weights** | | |
| **Machine operator and tools** | | |
| > Machine operator | 75 kg | |
| > 5 pick containers | 125 kg | |
| > Tools | 30 kg | |
| **Optional milling drum assemblies (alternative to standard)** | | |
| > Quick-change milling drum assembly FB2200 | 220 kg | |
| > Quick-change milling drum assembly FB2000 **MCS *BASIC*** | 670 kg | |
| > Quick-change milling drum assembly FB2200 **MCS *BASIC*** | 920 kg | |
| > Quick-change milling drum assembly FB2500 **MCS *BASIC*** | 1,240 kg | |
| **Optional milling drums (alternative to standard)** | | |
| > Milling drum FB2000 **HT22 *PLUS*** LA18 with 146 picks | -70 kg | |
| > Milling drum FB2200 **HT22 *PLUS*** LA15 with 176 picks | 150 kg | |
| > Milling drum FB2200 **HT22 *PLUS*** LA18 with 155 picks | 20 kg | |
| **Optional MCS milling drums (alternative to standard)** | | |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA15 with 162 picks | 250 kg | |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA18 with 146 picks | 225 kg | |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA15 with 18 standard picks and 144 PCD cutting tools | 330 kg | |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA15 with 176 picks | 470 kg | |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA18 with 155 picks | 340 kg | |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA15 with 18 standard picks and 158 PCD cutting tools | 550 kg | |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA18 with 171 picks | 570 kg | |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA18 with 18 standard picks and 153 PCD cutting tools | 645 kg | |
| **Optional additional equipment** | | |
| > Operator's platform with simple stand-up seat, large storage compartment, and weather canopy | 520 kg | |
| > Operator's platform with premium comfort cabin | 770 kg | |
| > Two-part additional ballast 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 **MCS *BASIC*** with a hydraulically opening side panel | 140 kg | |
| > VCS extraction system | 140 kg | |
| > Extension of **LEVEL PRO *ACTIVE*** with leveling booms and a Sonic-Ski sensor | 75 kg | |
| > Extension of **LEVEL PRO *ACTIVE*** with one hydraulic cylinder sensor mounted on the right | 65 kg | |
| > Extension of **LEVEL PRO *ACTIVE*** with two hydraulic cylinder sensors mounted on the right and left | 110 kg | |

[1)] The maximum milling depth may deviate from the value indicated due to tolerances and wear.
[2)] Machine weight, half weight of all operating fluids, tools, machine operator, no optional equipment

## SIDE VIEW / TOP VIEW W 210 XF

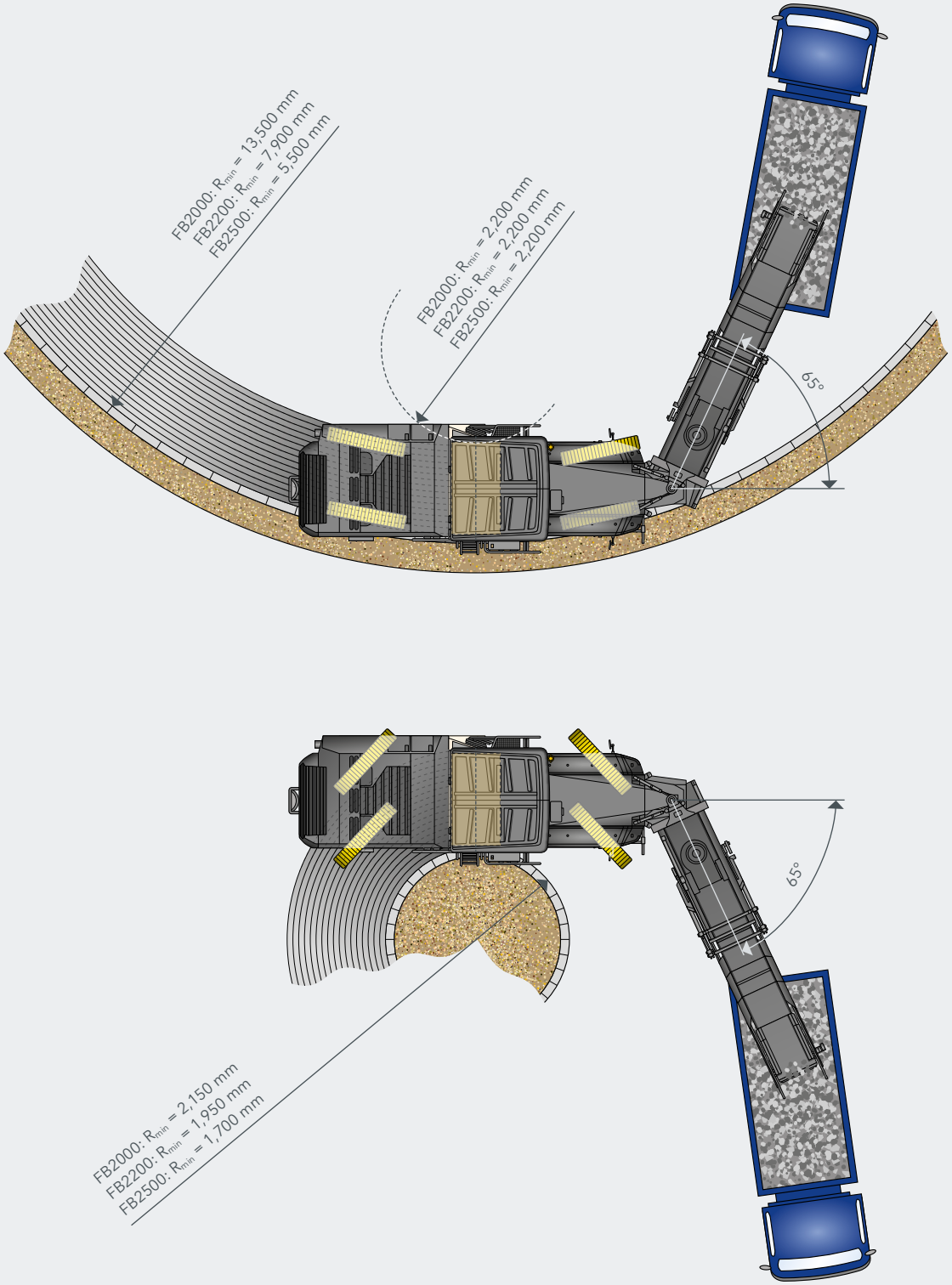



| FB | A |
|---|---|
| 2,000 mm | 2,500 mm |
| 2,200 mm | 2,700 mm |
| 2,500 mm | 3,000 mm |

*Based on operating weight, CE with unfolded conveyor

## MILLING RADIUS W 210 XF AT A MILLING DEPTH OF 150 MM



| **STANDARD EQUIPMENT W 210 XF** | **No EU regulation / US EPA Tier 2** | **EU Stage 5 / US EPA Tier 4f** |
|---|---|---|
| **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 | ■ | ■ |
| > **DUAL SHIFT** two-speed powershift transmission for efficient engine speeds combined with powerful milling drum speeds | ■ | ■ |
| > Automatic pressure adjustment of the hydraulic pump for cylinder functions in accordance with performance requirements for reduced diesel consumption | ■ | ■ |
| > Hydraulically opening, soundproof engine cowling | ■ | ■ |
| > Air compressor system | ■ | ■ |
| > Battery-operated hydraulic unit for auxiliary drive | ■ | ■ |
| > Two cooling fans to minimize power consumption of the cooling system | ■ | ■ |
| **Milling Drum Unit** | | |
| > Adjustment of material depressor contact pressure via the control panel or automatically via the „**MILL ASSIST**" feature to reduce chunk formation | ■ | ■ |
| > Electrical adjustment of scraper contact pressure via the control panel | ■ | ■ |
| > Automatically controlled locking feature of scraper | ■ | ■ |
| > Milling drum rotation device with electro-hydraulic milling drum drive for slowly turning the milling drum during pick replacement. | ■ | ■ |
| > 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 „**MILL ASSIST**" 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 | ■ | ■ |
| > Quick-change milling drum unit FB2000 | □ | □ |
| > Water spray bar for FB2000 | □ | □ |
| **Milling Drums** | | |
| > Milling drum FB2000 **HT22** ***PLUS*** LA15 with 162 picks | □ | □ |
| **Loading of the Milled Material** | | |
| > Discharge conveyor, 7,900 mm long, 850 mm wide, with hydraulic folding device | □ | ■ |
| > Increased conveyor swing angles of 65° each to the left and right | ■ | ■ |
| > Discharge conveyor with adjustable conveying speed and two slewing speeds for precise loading | ■ | ■ |
| > 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 1300 rpm | ■ | ■ |
| **Machine Control and Levelling System** | | |
| > User-friendly control panel including 7" colour screen | ■ | ■ |
| > **LEVEL PRO** ***ACTIVE*** levelling system with numerous automated and complementary operator relieving features | ■ | ■ |
| > **LEVEL PRO** ***ACTIVE*** – automatic height control in transport mode | ■ | ■ |
| > **LEVEL PRO** ***ACTIVE*** – ramp milling and auto-start feature for the second milling cut | ■ | ■ |
| > RAPID SLOPE cross-slope sensor for **LEVEL PRO** ***ACTIVE*** levelling system | ■ | ■ |
| > „**MILL ASSIST**" 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 | ■ | ■ |
| > Automatic start-stop feature of the milling drum to reduce diesel consumption | ■ | ■ |
| > 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 210 XF | No EU regulation / US EPA Tier 2 | EU Stage 5 / US EPA Tier 4f |
|---|---|---|
| **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 | ■ | ■ |
| > Electrical level indicator for the water tank on the external control panels | ■ | ■ |
| > Time display on the main control panel and on the exterior control panels | ■ | ■ |
| > Two mirrors at the front, one mirror at the rear of the machine | ■ | ■ |
| > Operator's platform with functional stand-up seat, large storage compartment | ▣ | ▣ |
| **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% | ■ | ■ |
| **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/inserter | ■ | ■ |
| > 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 | ▣ | ▣ |
| > Version without WPT Milling | ▣ | ▣ |
| > Standard LED lighting system with 20,600 lumens | ▣ | ▣ |

■ = Standard equipment
▣ = Standard equipment, can be replaced with optional equipment if required
□ = Optional equipment

| **OPTIONAL EQUIPMENT W 210 XF** | **No EU regulation / US EPA Tier 2** | **EU Stage 5 / US EPA Tier 4f** |
|---|---|---|
| **Milling Drum Unit** | | |
| > Quick-change milling drum unit FB2200 | ☐ | ☐ |
| > Quick-change milling drum unit FB2000 **MCS *BASIC*** | ☐ | ☐ |
| > Quick-change milling drum unit FB2200 **MCS *BASIC*** | ☐ | ☐ |
| > Quick-change milling drum unit FB2500 **MCS *BASIC*** | ☐ | ☐ |
| > Electrically switchable sectional water spray bar for FB2000 | ☐ | ☐ |
| > Water spray bar for FB2200 | ☐ | ☐ |
| > Electrically switchable sectional water spray bar for FB2200 | ☐ | ☐ |
| > Water spray bar for FB2500 | ☐ | ☐ |
| > Electrically switchable sectional water spray bar for FB2500 | ☐ | ☐ |
| > Bolted-on right side panel for milling drum unit | ☐ | ☐ |
| > Side panel for milling drum unit with MCS | ☐ | ☐ |
| > Extension of **MCS *BASIC*** with a hydraulically opening side door for FB2000 | ☐ | ☐ |
| > Extension of **MCS *BASIC*** with a hydraulically opening side door for FB2200 | ☐ | ☐ |
| > Extension of **MCS *BASIC*** with a hydraulically opening side door for FB2500 | ☐ | ☐ |
| > Mounting aid for lifting out the primary conveyor when changing the milling drum unit | ☐ | ☐ |
| > Actual milling depth measurement and display on the **LEVEL PRO *ACTIVE*** panel | ☐ | ☐ |
| > Overload sensors installed on the scraper | ☐ | ☐ |
| > Active floating position for the side plates, left and right | ☐ | ☐ |
| > Wear protection rollers for side plates, left or right | ☐ | ☐ |
| > Milling drum mounting and transport carriage FB1500 to FB2500 | ☐ | ☐ |
| > Transport roller set for simplified milling drum unit change (FB1500 - FB3800) | ☐ | ☐ |
| > Quick-change milling drum unit FB2000 MCS and milling drum **MCS *BASIC*** FB2000 LA15 | ☐ | ☐ |
| > Quick-change milling drum unit FB2200 MCS and milling drum **MCS *BASIC*** FB2200 LA15 | ☐ | ☐ |
| > Quick-change milling drum unit FB2500 MCS and milling drum **MCS *BASIC*** FB2500 LA18 | ☐ | ☐ |
| **Milling Drums** | | |
| > Milling drum FB2000 **HT22 *PLUS*** LA18 with 146 picks | ☐ | ☐ |
| > Milling drum FB2200 **HT22 *PLUS*** LA15 with 176 picks | ☐ | ☐ |
| > Milling drum FB2200 **HT22 *PLUS*** LA18 with 155 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA15 with 162 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA18 with 146 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA15 with 176 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA18 with 155 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA15 with 193 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA18 with 171 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA8 with 272 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA25 with 126 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT5** LA6X2 with 672 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2000 **HT22 *PLUS*** LA15 with 18 standard picks and 144 PCD tools | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA8 with 297 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA25 with 134 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT5** LA6X2 with 740 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2200 **HT22 *PLUS*** LA15 with 18 standard picks and 158 PCD tools | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA8 with 335 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA25 with 141 picks | ☐ | ☐ |
| > Milling drum **MCS *BASIC*** FB2500 **HT22 *PLUS*** LA18 with 18 standard picks and 153 PCD tools | ☐ | ☐ |
| **Loading of the Milled Material** | | |
| > Discharge conveyor, 7,900 mm long, 850 mm wide | ☐ | – |
| > VCS extraction system | ☐ | ☐ |
| > Signal lights for visual “stop” and “go” instructions for the truck driver | ☐ | ☐ |
| > Support device for discharge conveyor | ☐ | ☐ |
| > **ACTIVE CONVEYOR** swing angle control for discharge conveyo | ☐ | ☐ |

| OPTIONAL EQUIPMENT W 210 XF | No EU regulation / US EPA Tier 2 | EU Stage 5 / US EPA Tier 4f |
|---|---|---|
| **Machine Control and Levelling System** | | |
| > Extension of **LEVEL PRO *ACTIVE*** with levelling booms and one Sonic Ski sensor | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with one hydraulic sensor mounted on the right | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with two hydraulic sensors mounted on the left and the right | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with two ultrasonic sensors for multiplex scanning | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with four ultrasonic sensors for multiplex scanning | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with pre-fitting for 3D levelling for machines without canopy | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with pre-fitting for 3D levelling for machines with canopy | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with pre-fitting for 3D levelling for machines with cabin | ☐ | ☐ |
| > Extension of **LEVEL PRO *ACTIVE*** with two laser receivers | ☐ | ☐ |
| > 5" control panel for controlling the levelling system | ☐ | ☐ |
| > 7" control panel for displaying the machine control system and for contolling the levelling system | ☐ | ☐ |
| > Qty. 1 – 2" control panel including favourites buttons | ☐ | ☐ |
| > Qty. 2 – 2" control panels including favourites buttons | ☐ | ☐ |
| > User-specific storage of machine settings via SMART KEY key fob | ☐ | ☐ |
| **Operator's Platform** | | |
| > Operator's platform with functional stand-up seat, a large storage compartment and weather canopy | ☐ | ☐ |
| > Operator´s platform with air-conditioned comfort cabin | ☐ | ☐ |
| > Additional stand-up seat for operator's platform | ☐ | ☐ |
| > Warm air heating close to the operator´s hands and feet | ☐ | ☐ |
| **Miscellaneous** | | |
| > Hydraulically operated filling pump for water refilling | ☐ | ☐ |
| > Film coating according to the customer's wishes | ☐ | ☐ |
| > WPT milling including WITOS FleetView - precise tracking of the milling performance for machines without canopy or with operator's cabin | ☐ | ☐ |
| > Extended LED lighting system with 37,600 lumens | ☐ | ☐ |
| > High-performance LED lighting system with 50,000 lumens, including LED lighting balloon | ☐ | ☐ |
| > Two additional weights with a total weight of 1,600 kg | ☐ | ☐ |
| > Compact storage compartment at the rear of the machine for a pick container | ☐ | ☐ |
| > Large storage compartment at the rear of the machine for 69 pick containers | ☐ | ☐ |
| > Preliminary equipment for hydraulically driven sweeping brush | ☐ | ☐ |
| > Storage compartment close to the rear track units for 8 pick containers | ☐ | ☐ |
| > Hydraulically driven sweeping unit | ☐ | ☐ |
| > Powerful high-pressure water cleaner, 150 bar, 15 l/min | ☐ | ☐ |
| > Hydraulic pick ejector | ☐ | ☐ |
| > 2-fold camera system | ☐ | ☐ |
| > 4-fold camera system with 10" control panel | ☐ | ☐ |
| > 8-fold camera system with 10" control panel | ☐ | ☐ |
| > Monitor system for cabin option with 8 cameras and 10" control panel | ☐ | ☐ |
| > Retrofit kit JD M modem (4G) for John Deere Operations Center | ☐ | ☐ |
| > Dual starter system | ☐ | ☐ |
| > Electrical diesel suction and pressure pump including 7.50 m suction hose | ☐ | ☐ |
| > Licence plate holder with LED lighting | ☐ | ☐ |

■ = Standard equipment
■ = Standard equipment, can be replaced with optional equipment if required
☐ = Optional equipment

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