


Innovative professional machine offering maximum milling performance.

Cold Milling Machine W 210 Fi



US RELEASE



Innovative professional machine offering maximum milling performance.

The powerful cold milling machine offers compact dimensions and caters to a wide range of applications from surface course rehabilitation and pavement removal at full depth all the way to fine milling operations.

The range of applications is broadened even further thanks to the quick exchange of milling drum units and exceptionally rapid exchange of milling drums offering milling widths of 6 ft 7 in (2.0 m), 7 ft 3 in (2.2 m) or 8 ft 2 in (2.5 m) as part of MCS - Multiple Cutting System.

The innovative MILL ASSIST machine control system always adjusts the most favorable relationship between performance and cost when operating in automatic mode. An operating strategy can additionally be selected in terms of cost, performance or quality.

Thanks to the unique DUAL SHIFT powershift transmission with extended milling drum speed, the W 210 Fi is the ideal candidate for exceptionally challenging milling jobs.

The new LEVEL PRO *ACTIVE* leveling system integrated in the machine's control system optimizes precision in both height control and machine positioning.



W WIRTGEN

W 210 Fi

WIRTGEN

At a glance: outstanding features of the cold milling machine

04
05

Operation

1 | FULLY EQUIPPED OPERATOR'S PLATFORM

- > Perfect view of important areas of the operation
- > Exceptionally powerful LED lighting system
- > Ample storage space
- > Powerful heating system on the operator's platform
- > Flexible, vertically adjustable weather canopy

2 | INTUITIVE MMI - MAN-MACHINE INTERFACE

- > Flexible control panel concept for maximum machine control
- > 2" control panel including favorites keys
- > 5" control panels for leveling
- > 7" control panel for the convenient display of important parameters
- > Robust, high-quality camera system including 10" control panel

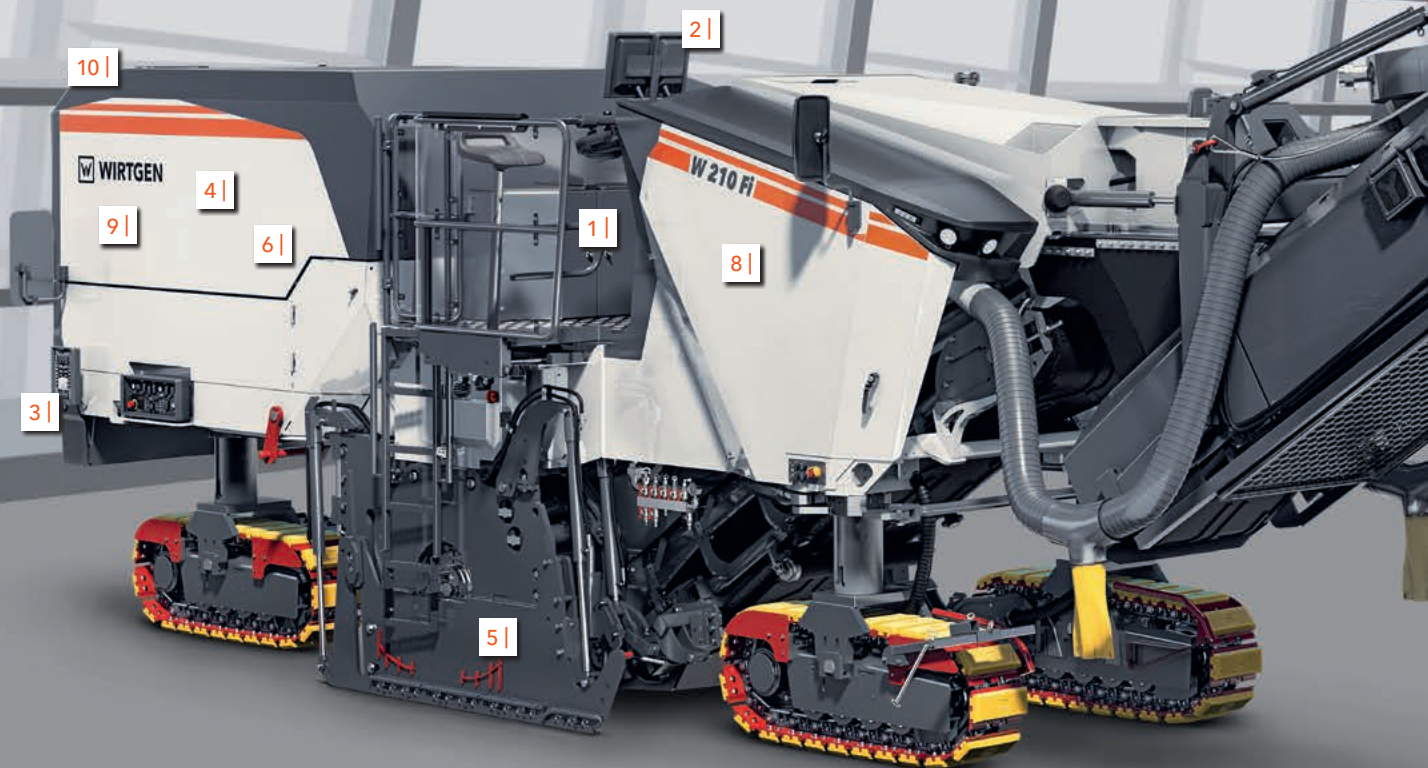
Quality

3 | VERSATILE, HIGH-PRECISION LEVEL PRO *ACTIVE* LEVELING SYSTEM

- > New, easy-to-operate **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

4 | HIGH RELIABILITY

- > Pioneering diagnostic concept
- > Redundant machine control system
- > Dual CAN network
- > Reliable protection against vandalism
- > Efficient servicing and maintenance concept



Milling

5 | 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

6 | INNOVATIVE MILL ASSIST

- > MILL ASSIST automatic mode
- > New DUAL SHIFT powershift transmission
- > Additional pre-selection of operating strategy in automatic mode
- > Clear pre-selection of consistent quality of the milling pattern
- > Innovative efficiency display



Performance

7 | 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

8 | INFORMATIVE WPT - WIRTGEN PERFORMANCE TRACKER

- > Tried-and-tested WITOS FleetView telematics system with optional WPT 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

9 | REDUCED DIESEL CONSUMPTION

- > Two-speed powershift transmission for a wide range of usable milling drum speeds
- > Automatic stop feature of the diesel engine
- > Maximum use of engine power in the low engine speed range
- > Automatic start-stop feature of the milling drum
- > 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
- > Start-stop engine feature via exterior control panel
- > Efficient water management

CONNECTED MILLING

06
07

COLD MILLING
MACHINE



CONNECTED
MILLING

MACHINE
USER





OPERATOR

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 PERFORMANCE TRACKER**, 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 PERFORMANCE TRACKER** 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.

Operation

Fully equipped operator's platform

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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 can be extended beyond the edge of the machine on the right by more than 7.9 in (20 cm) to ensure optimum visibility of the surface to be milled and of the material loading process. In addition, the slender design of the machine frame 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 210 Fi is equipped with 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. They ensure optimum lighting even in poor lighting conditions.

AMPLE STORAGE SPACE

The W 210 Fi offers ample storage space for leveling sensors, pick ejector drifts and pick containers. An optional additional 364.6-gallons (1,380-litre) XXL-size storage compartment at the rear of the machine can accommodate up to 69 pick containers; another 70-gallons (265-liter) storage compartment on the operator's platform can be installed as an optional feature.

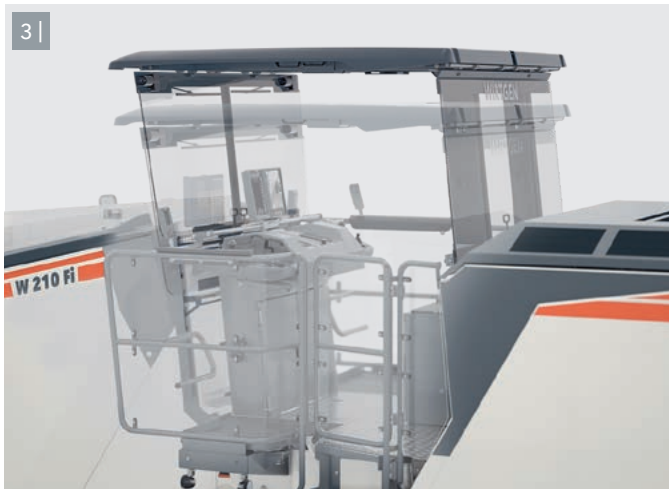
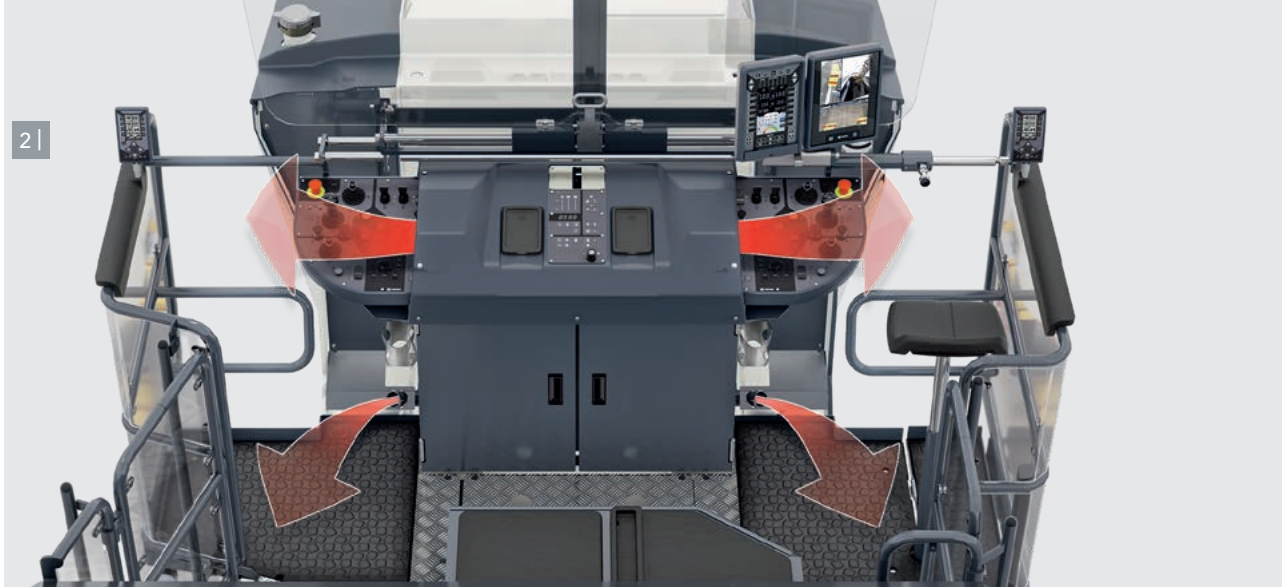


1 | Ergonomically designed operator's platform.

2 | Optimum heating effect to keep hands and feet warm.

3 | The weather canopy offers flexible vertical height adjustment.

4 | Weather canopy in transport position.



POWERFUL HEATING SYSTEM ON THE OPERATOR'S PLATFORM

The operator's platform of the cold milling machine is equipped with a powerful heating system. Intelligently arranged outlet nozzles near the operator's hands and feet ensure a good heating effect. Additional lateral wind and weather protection features and the retractable weather canopy effectively serve to keep the generated heat in the immediate environment of the machine operator.

FLEXIBLE, VERTICALLY ADJUSTABLE WEATHER CANOPY

The weather canopy can be individually adjusted in height hydraulically 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 robust windscreens are equipped with windscreen wipers. The outer roof shells can be moved independently to offer additional protection against rain. The handrails on the operator's platform are provided with wind protection elements.

Operation

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 easy-to-understand, intuitive control panel concept fully meets these requirements.

2" CONTROL PANEL INCLUDING FAVORITES KEYS

It is possible to install up to two additional 2" control panels on the operator's platform. Attaching the panel to the left or right handrail of the operator's platform enables easier and more effective operation. The panel can be programmed with up to 21 individually preferred features, such as slewing the discharge conveyor.

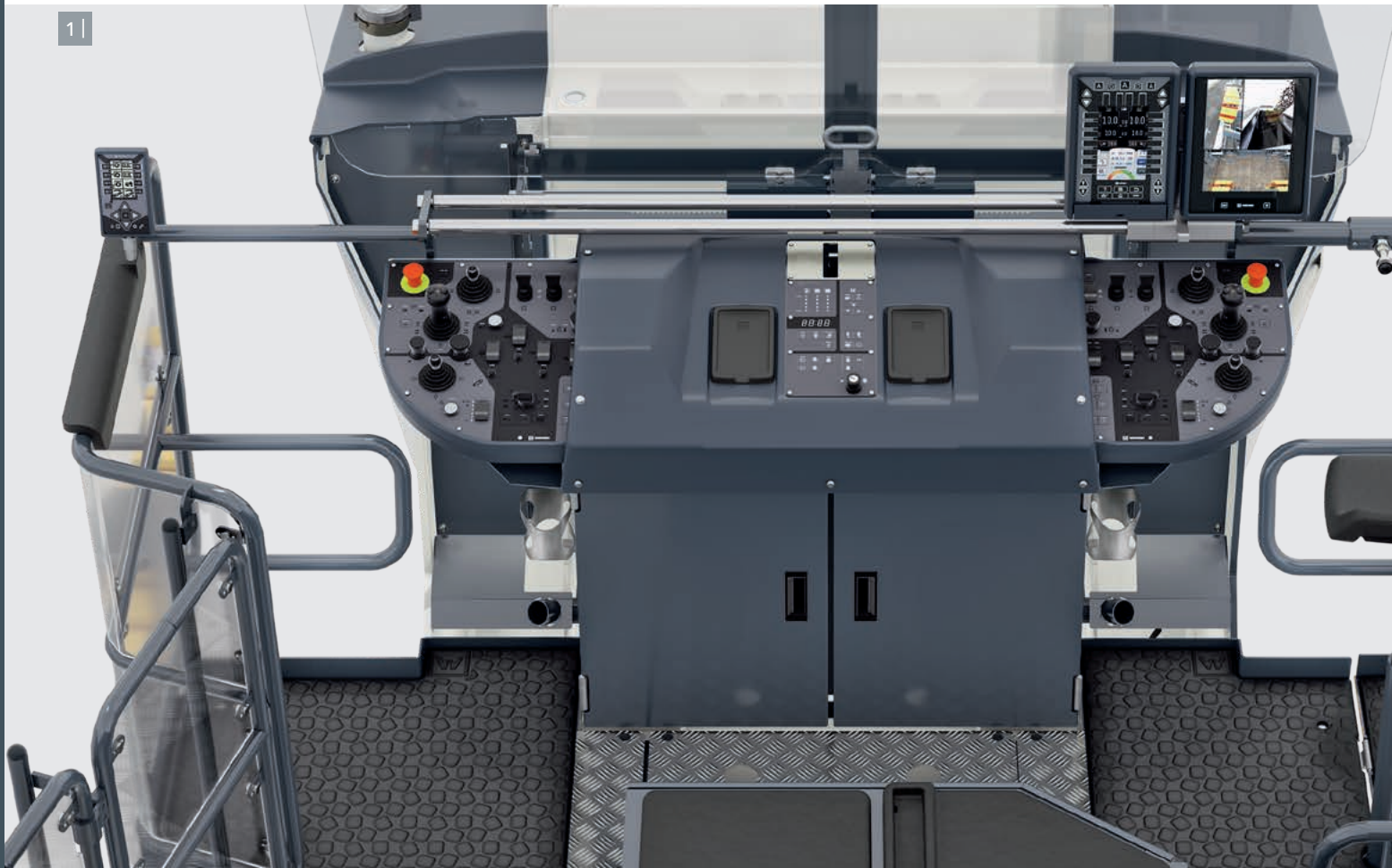
5" CONTROL PANELS FOR LEVELING

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.

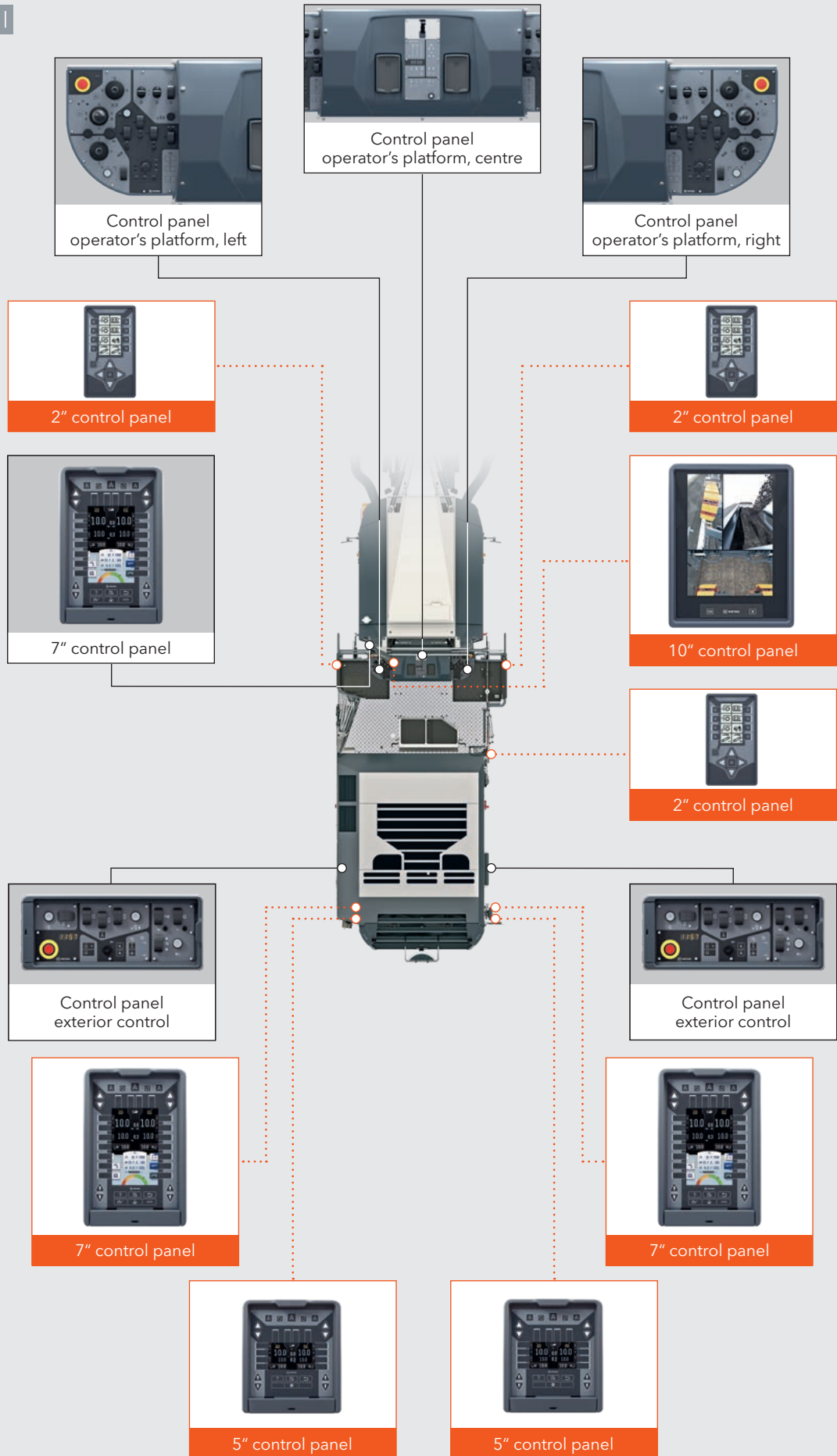
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1 | Customized, user-friendly panel arrangement.

2 | Overview of the different control panels and their positions.

2 |



□ = Standard control panels
□ = Optional control panels

Operation

Intuitive MMI - man-machine interface

ROBUST, HIGH-QUALITY CAMERA SYSTEM INCLUDING 10" CONTROL PANEL

A camera system comprising four or eight cameras is available as an optional equipment feature. The system comes 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.

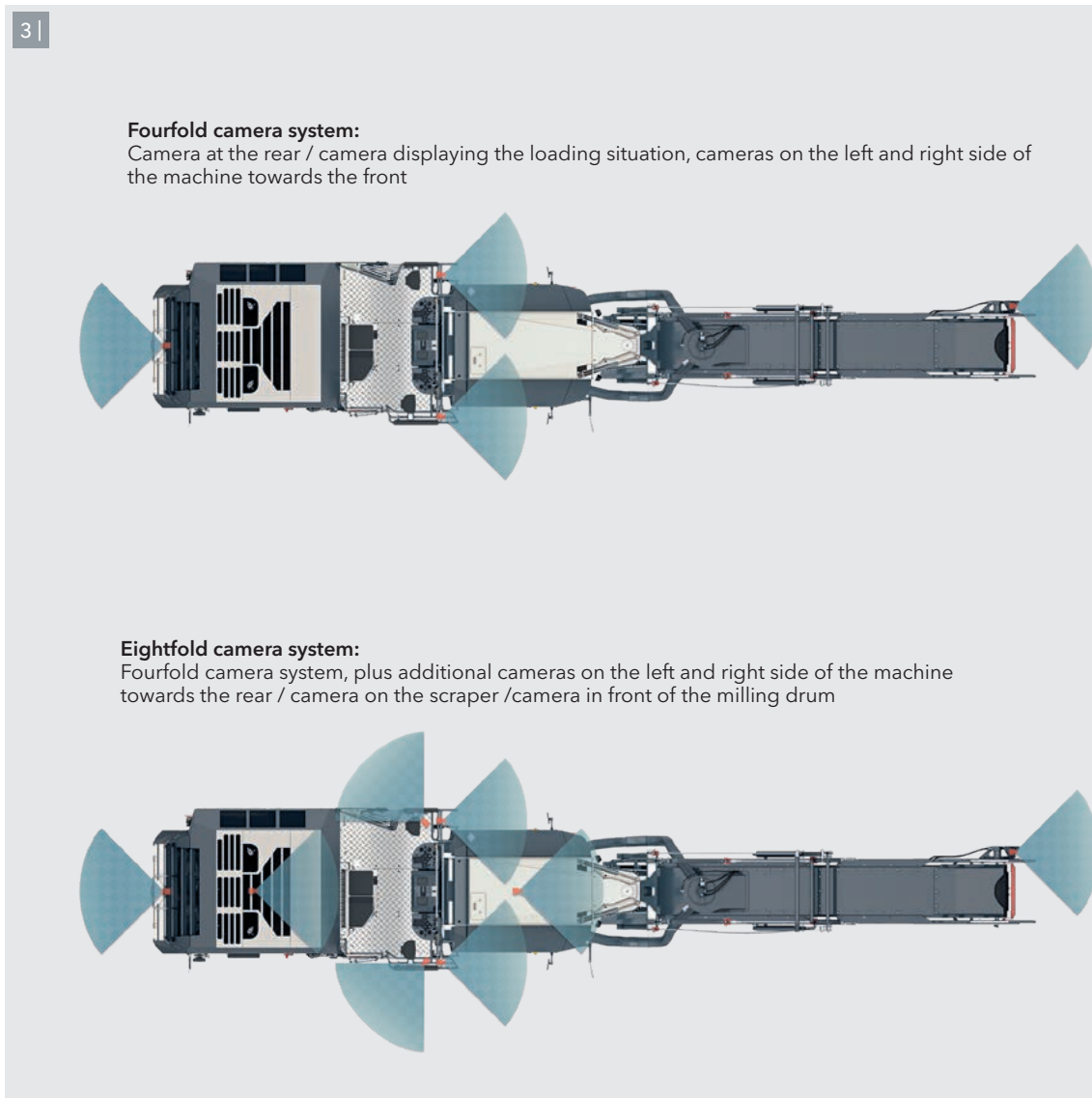
1 | 10" control panel with split screen feature for the simultaneous display of multiple camera images.

1 |



2 | Optional 5" control panel providing leveling details to the ground crew.

3 | Different camera systems for a good view of important areas of the operation.



Fourfold camera system:

Camera at the rear / camera displaying the loading situation, cameras on the left and right side of the machine towards the front

Eightfold camera system:

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

Quality

Versatile, high-precision leveling using **LEVEL PRO ACTIVE**

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NEW, EASY-TO-OPERATE 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 ma-

chine operator of a part of his workload. All sensors connected to the system are displayed and can be selected on the control panel, which additionally speeds up the progress of operations. The entire machine can thus be raised quickly and easily, for example, to drive over a manhole cover.

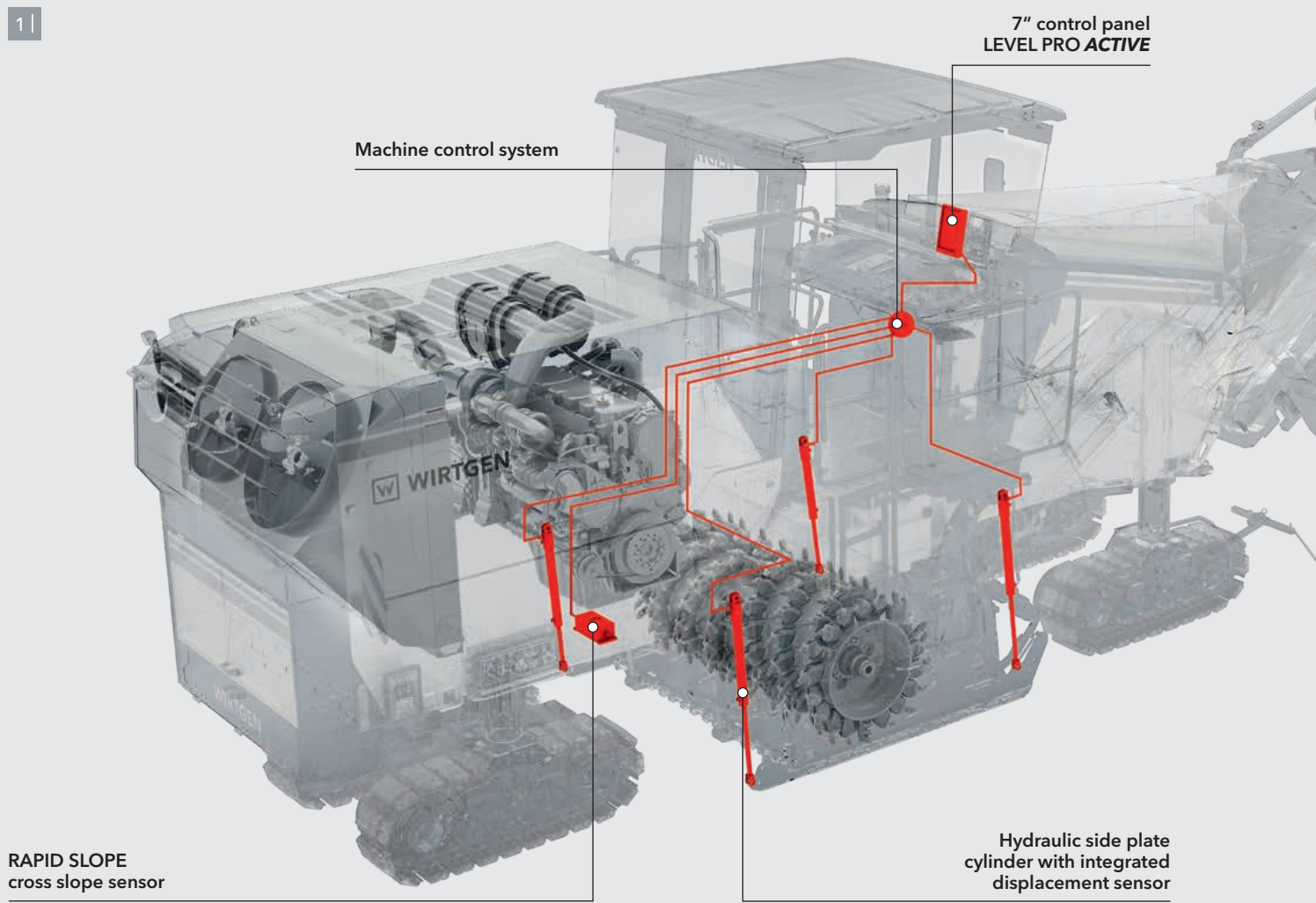
OPTIMIZED 3D AND LASER LEVELING

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

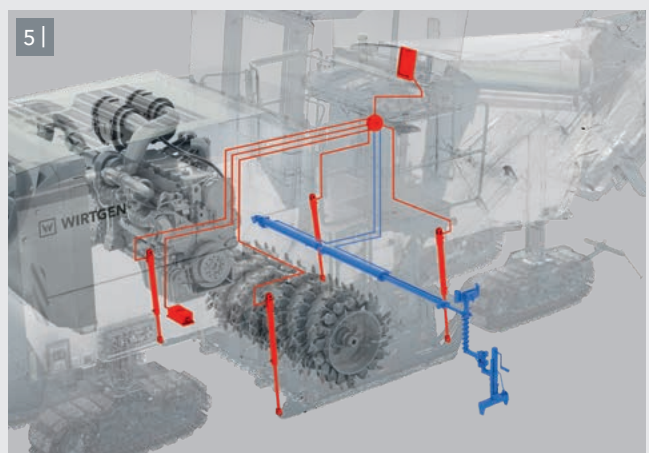
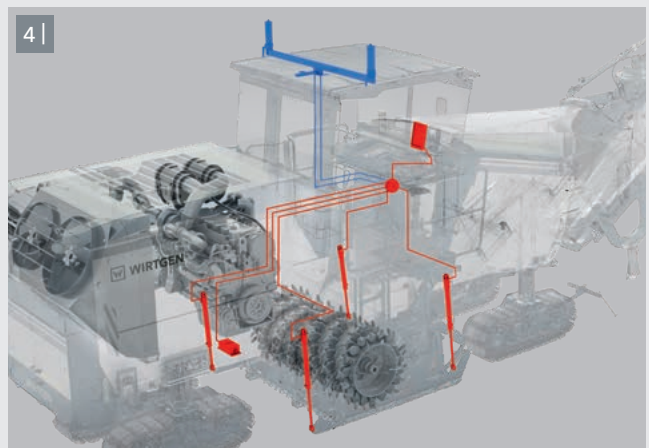
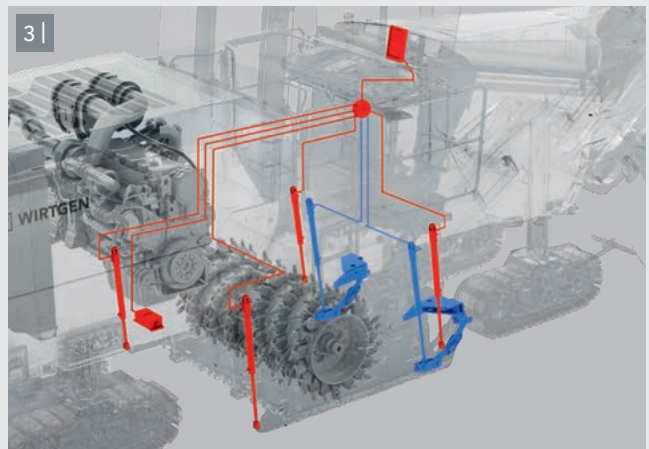
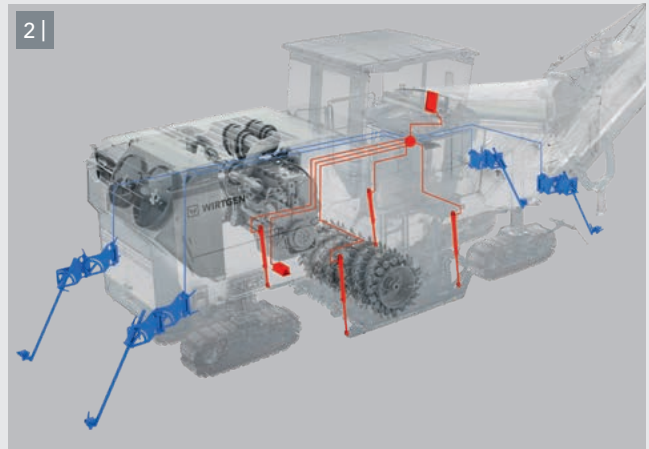
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both sides of the machine at a distance of up to 6 ft 3 in (1,900 mm) from the milling edge. The leveling boom including the Sonic Ski sensor can be telescoped hydraulically by up to 2 ft 9 in (840 mm) from the operator's platform even during the milling operation; mechanical adjustment allows an additional 2 ft 11 in (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.



1 | W 210 Fi fitted with standard leveling sensors.

2 | Multiplex system comprising up to four ultrasonic sensors.

3 | Scanning in front of the milling drum.

4 | 3D leveling/laser leveling.

5 | Telescoping leveling boom, right or left.

■ = Standard equipment
 ■ = Optional equipment

Quality High reliability

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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 op-

eration by the ground crew can be readily interchanged while fully maintaining all machine functions.

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.

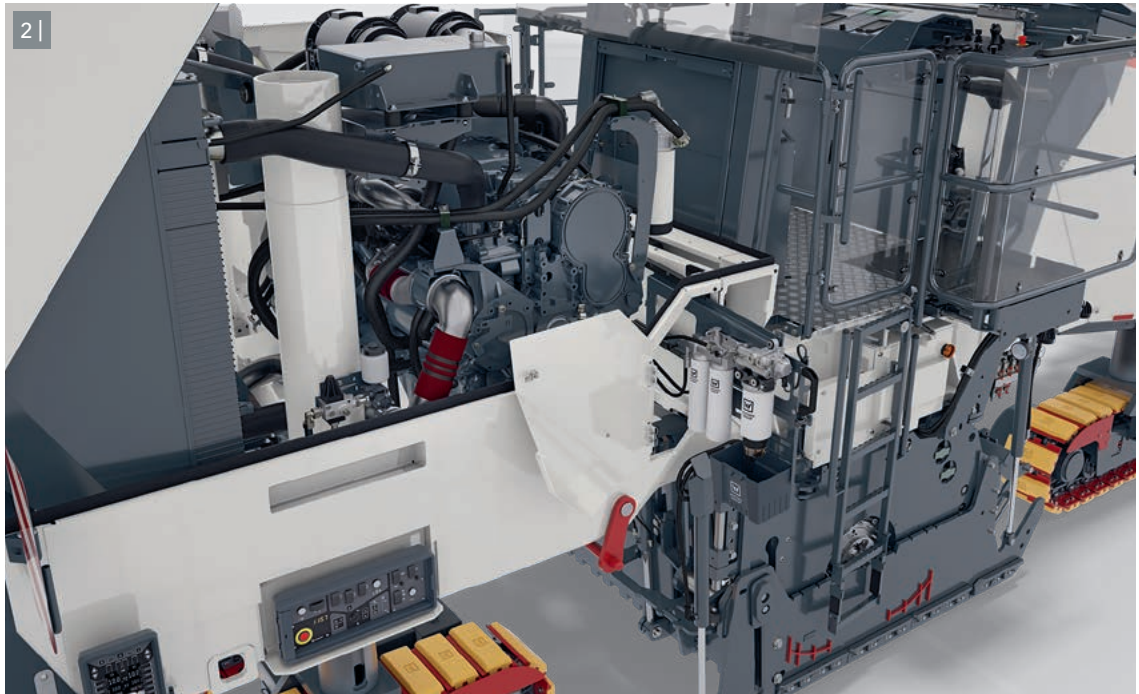
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1 | Direct forwarding of the image from the error message to the diagnostic system including clear location of the fault.

2 | Optimum access to the service points.

3 | Quick and reliable protection of the control panels.



RELIABLE PROTECTION AGAINST VANDALISM

The innovative vandalism protection feature protects the control panels against the use of force or theft. The control panels on the left and right side of the operator's platform can simply be inserted into the main control panel and locked. The linear control panels arranged on the operator's platform are folded over the central control panel and secured by means of a special mechanism. Securing the control panels in a few simple steps additionally speeds up the preparations for machine transport.

EFFICIENT SERVICING AND MAINTENANCE CONCEPT

The W 210 Fi offers exceptionally easy access to all service and maintenance points. The air, hydraulic oil and engine oil filters are readily accessible from the walkway when the engine compartment is open. The diesel filters can be easily reached to perform maintenance from the ground by means of a slide-out bracket. In addition, all relevant machine components offer quick and easy access.

Unmatched cutting technology

EASY EXCHANGE OF MILLING DRUMS IN RECORD TIME

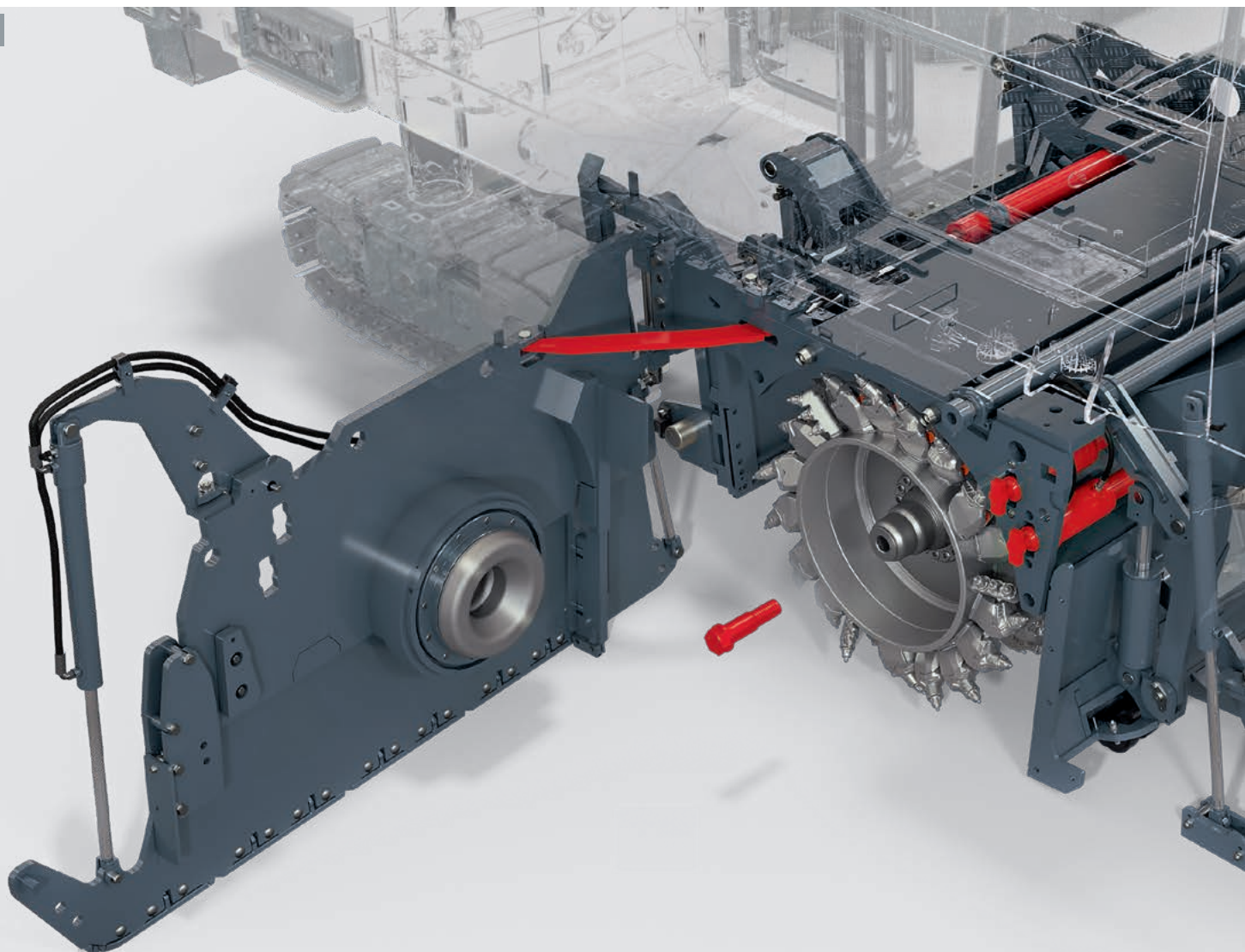
Milling drums are now exchanged even more quickly thanks to the new generation of MCS milling drums. A single central bolt needs to be loosened, which can be performed by the milling drum rotation device at the mere push of a button. All that remains to be done for the operator is to pull out the milling drum. The side door on the right is opened quickly and effortlessly as it features a hydraulic cylinder drive.

1 | *Extra-quick exchange of milling drums using the new MCS BASIC milling drum system.*

2 | *Large choice of different MCS milling drums.*

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.

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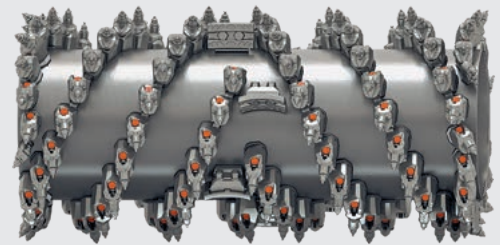
EASY EXCHANGE OF MILLING DRUM UNITS

Different milling widths of 6 ft 7 in (2.0 m), 7 ft 3 in (2.2 m) or 8 ft 2 in (2.5 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 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.



ECO cutter

Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 1ft 1 in (0 to 330 mm)
Pick spacing: 1 in (25 mm)



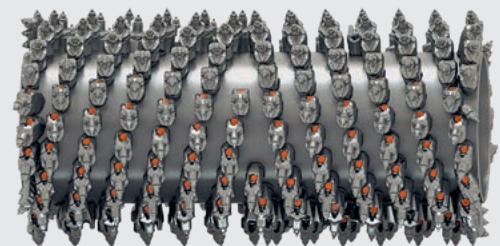
Standard milling drum

Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 1ft 1 in (0 to 330 mm)
Pick spacing: 0.7 in (18 mm)



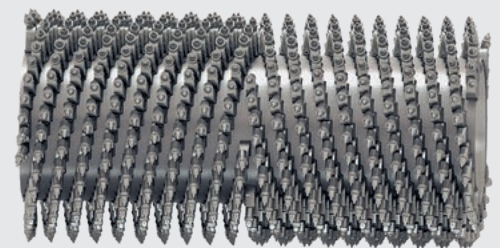
Standard milling drum

Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 1ft 1 in (0 to 330 mm)
Pick spacing: 0.6 in (15 mm)



Fine milling drum

Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 3.9 in (0 to 100 mm)
Pick spacing: 0.3 in (8 mm)



Micro-fine milling drum

Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 1.2 in (0 to 30 mm)
Pick spacing: 6 x 0.1 in (6 x 2 mm)

Unmatched cutting technology

OPTIMIZED WEAR PROTECTION FOR THE MILLING DRUM UNIT

Wear segments mounted on the side plates in a detachable fashion can be turned about 180° so that both sides can be used and the lifespan doubled. 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

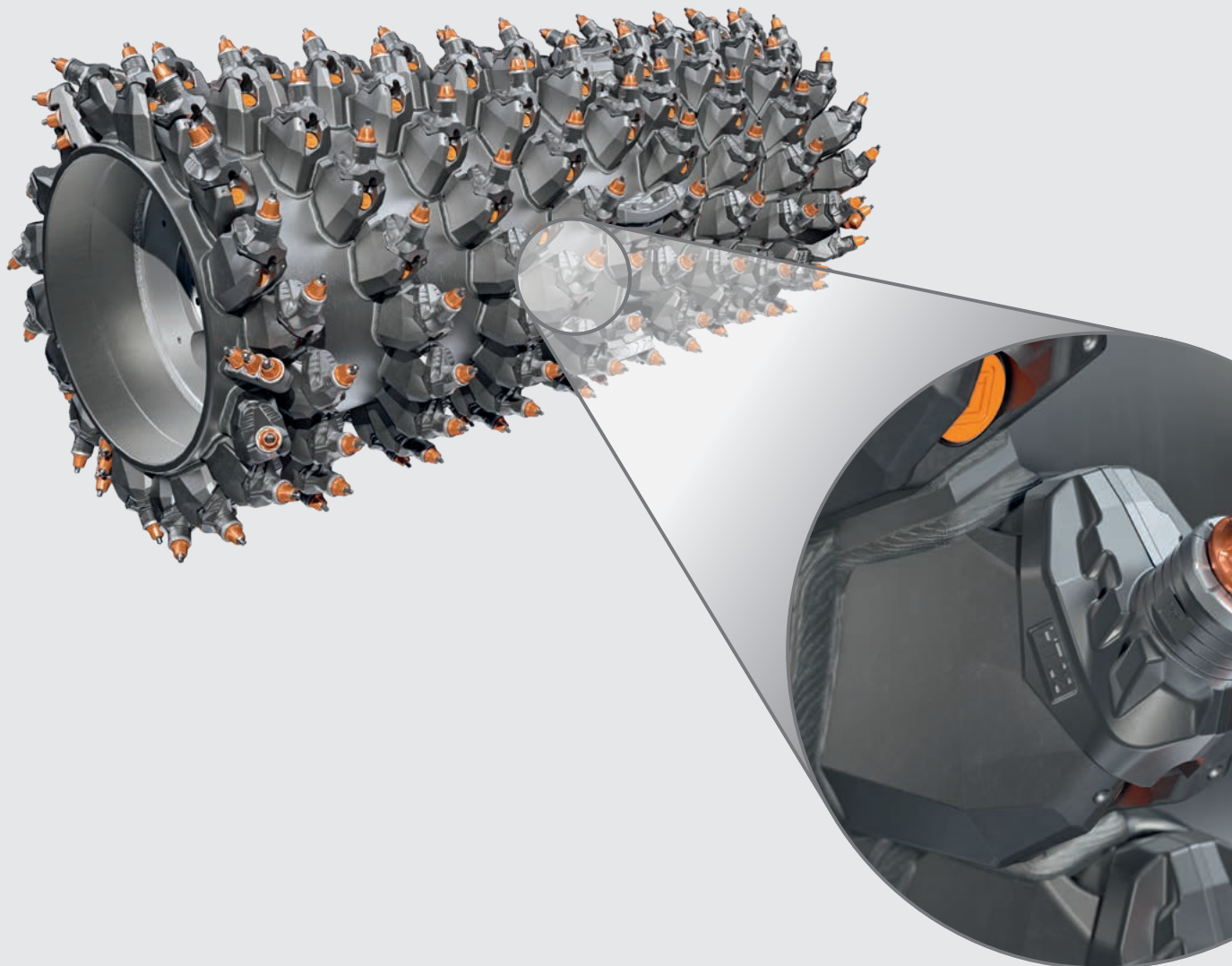
Fitted with the **HT22** quick-change toolholder system,

the milling drums on offer for the W 210 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

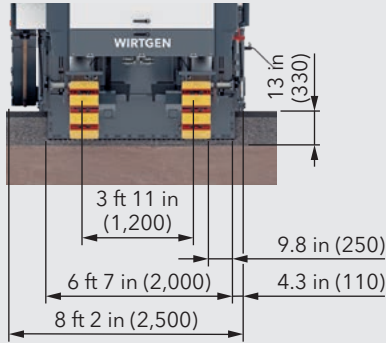
The new upper toolholder part **HT22 PLUS** features an innovative centering embossment in the pick contact surface. In combination with the new X² generation of picks, toolholder wear is reduced by up to 25%, and pick rotation is optimized as a result. Salient features of the new

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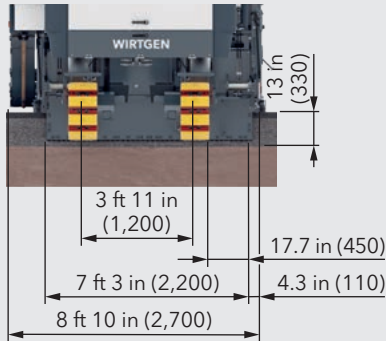
upper part include improved quality of the milled surface and extended replacement intervals.

2 | W 210 Fi with 6 ft 7 in (2.0-m) wide drum unit



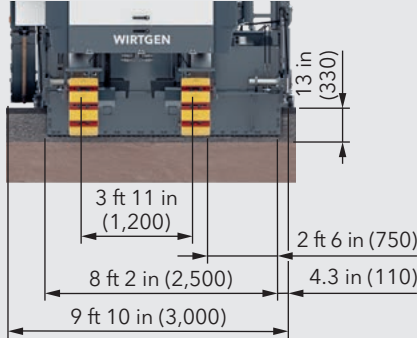
Standard milling drum
Milling width: 6 ft 7 in (2,000 mm)
Milling depth: 0 to 1 ft 1 in (0 to 330 mm)
Pick spacing: 0.6 in (15 mm)

W 210 Fi with 7 ft 3 in (2.2-m) wide drum unit



Standard milling drum
Milling width: 7 ft 3 in (2,200 mm)
Milling depth: 0 to 1 ft 1 in (0 to 330 mm)
Pick spacing: 0.6 in (15 mm)

W 210 Fi with 8 ft 2 in (2.5-m) wide drum unit



Standard milling drum
Milling width: 8 ft 2 in (2,500 mm)
Milling depth: 0 to 1 ft 1 in (0 to 330 mm)
Pick spacing: 0.6 in (15 mm)

1 | Extremely hard-wearing HT22 quick-change tool-holder system.

2 | Milling drum units 6 ft 7 in (2.0 m), 7 ft 3 in (2.2 m) and 8 ft 2 in (2.5 m) wide.



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3 | In combination with the new pick, the centering embossment on the new toolholder optimizes rotation to reduce wear and tear.

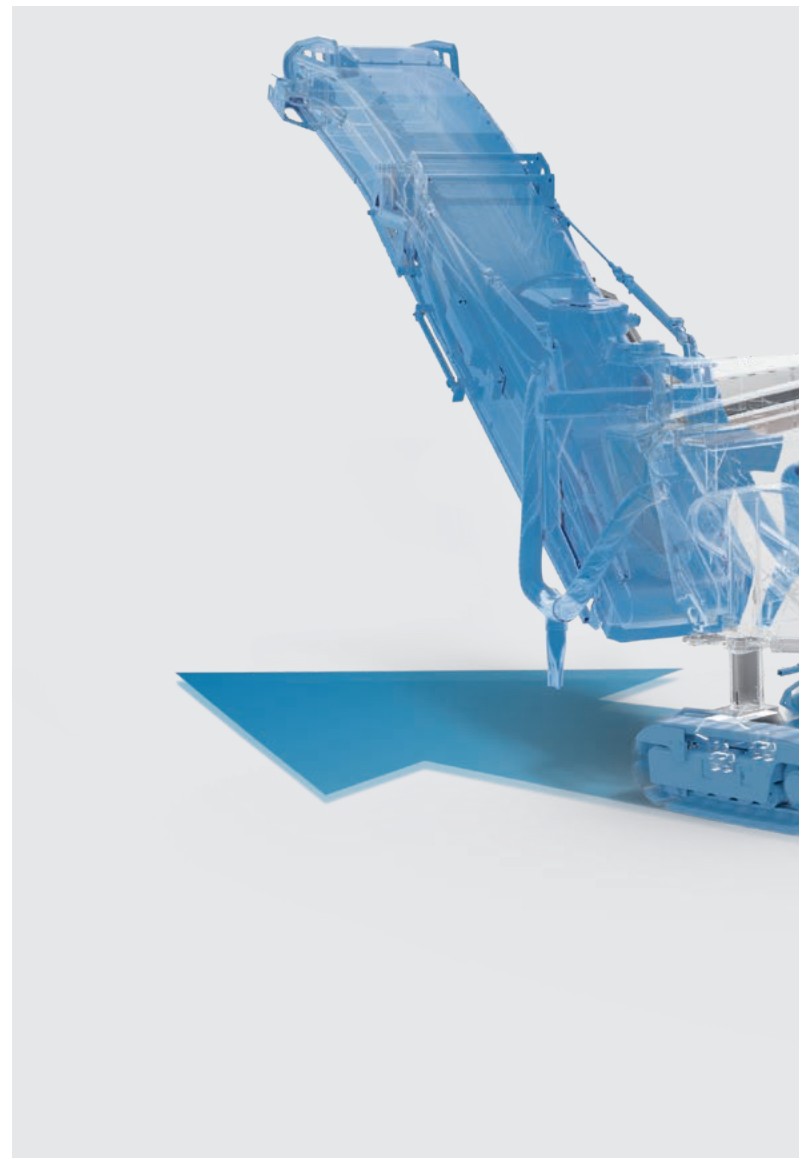
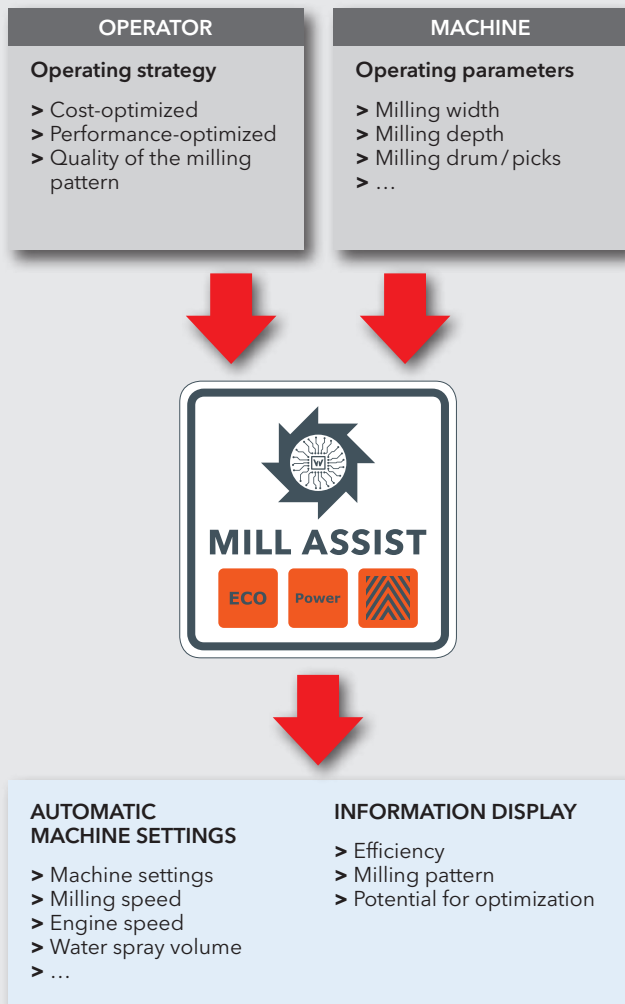
Innovative MILL ASSIST

MILL ASSIST AUTOMATIC MODE

The innovative **MILL ASSIST** machine control system always adjusts the most favorable 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, CO₂ emissions, pick consumption and noise emissions.

NEW DUAL SHIFT POWERSHIFT TRANSMISSION

The new **DUAL SHIFT** two-speed transmission is controlled via the **MILL ASSIST** feature and can be shifted even under load. **DUAL SHIFT** offers a tremendous milling drum speed range, making the machine the ideal candidate for a wide range of milling applications at low cost. Low milling drum speeds result in reduced diesel consumption. High milling drum speeds allow maximum advance rates, for example, in fine milling operations.



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: cost-optimized, performance-optimized, or quality of the milling pattern. The machine then automatically controls the main parameter settings in accordance with the strategy chosen.

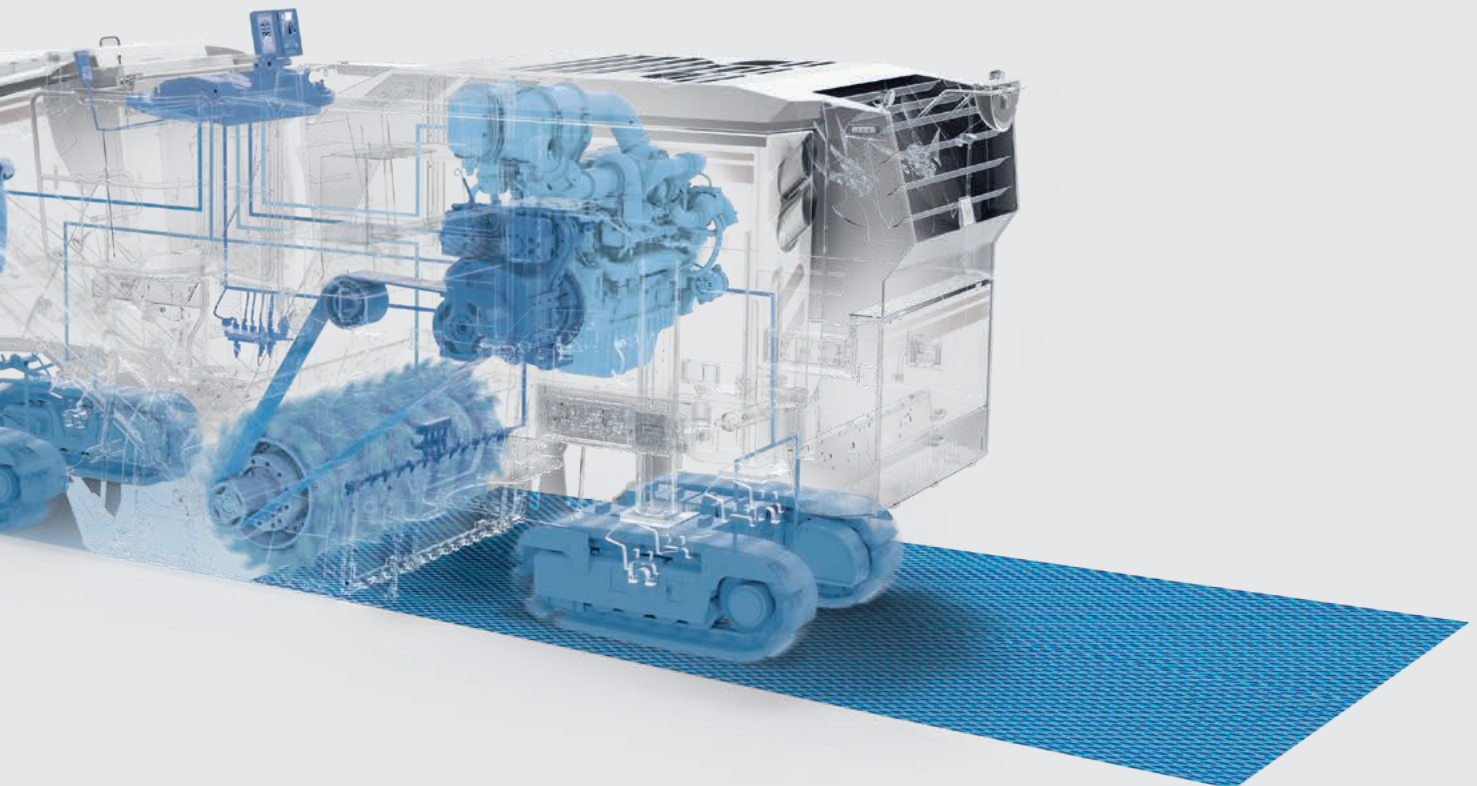
CLEAR PRE-SELECTION OF CONSISTENT QUALITY OF THE MILLING PATTERN

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.



Performance

Maximum milling performance

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POWERFUL DIESEL ENGINE

The machine's engine output, which has been increased by around 5% compared with the predecessor model W 210i, and significantly increased maximum torque combine to make the machine even more powerful and versatile in use.

INCREASED BALLASTING FLEXIBILITY

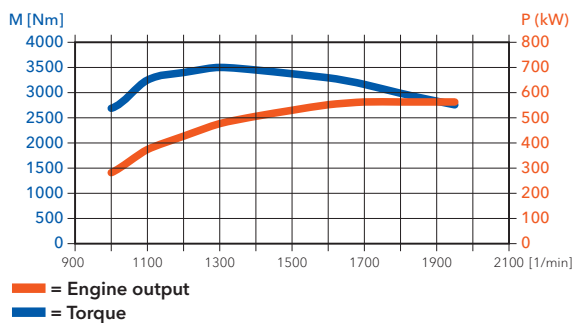
The additional weight of 3,500 lbs (1,600 kg) can be mounted on or removed from the back of the machine quickly and easily in two steps. This feature permits the machine's transport weight to be precisely adjusted to requirements.

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.

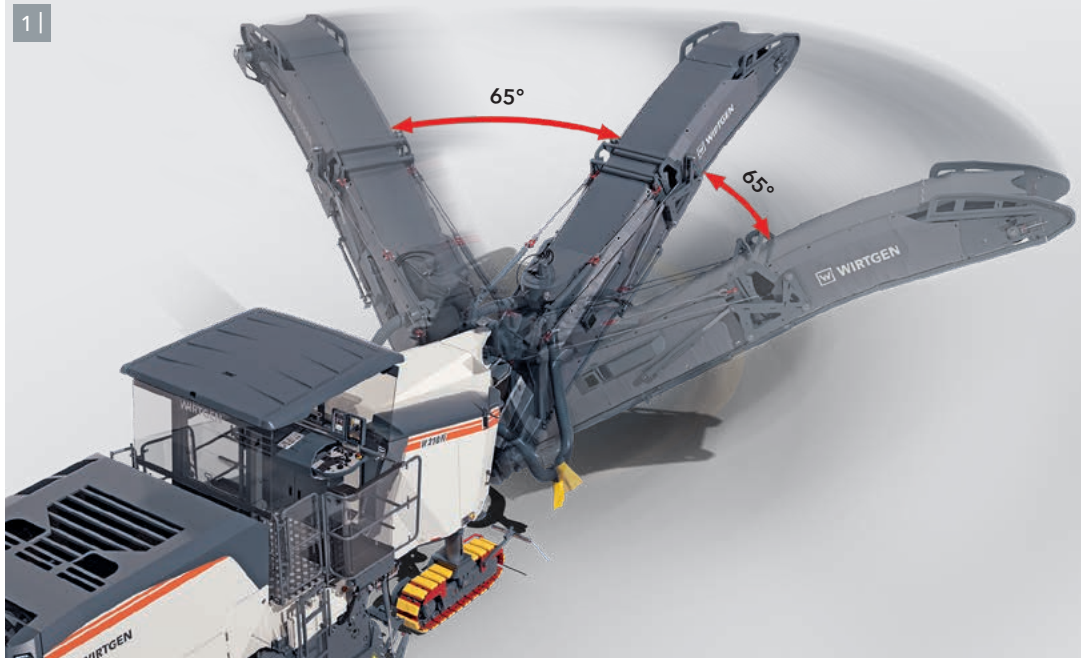


ENGINE CHARACTERISTICS OF COLD MILLING MACHINE W 210 Fi



1 | Large slewing range of the discharge conveyor.

2 | Increased scraper lift for a wider range of milling applications and reduced wear.



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. Two slewing speeds allow precise adjustment of the specified angular position. 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.

Performance

WPT - informative WIRTGEN PERFORMANCE TRACKER

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TRIED-AND-TESTED WITOS FLEETVIEW TELEMATICS SYSTEM WITH OPTIONAL WPT FEATURE

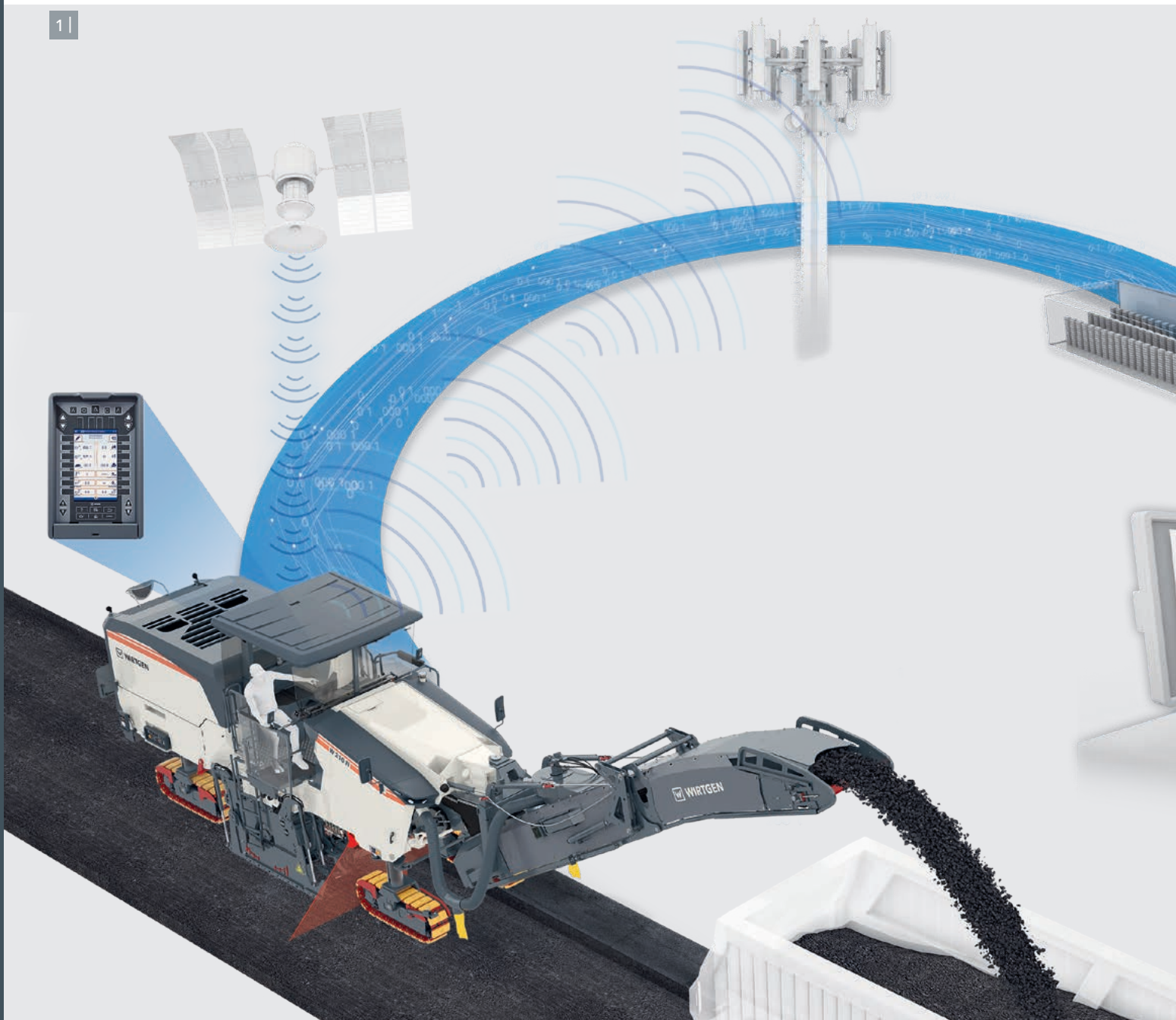
The WITOS FleetView telematics system comprises a control unit (TCU) with GPS receiver and the rights of use for the web-based WITOS FleetView application. The web application provides a compact overview of the machine status including consumption details, operating hours, position data, error messages and service intervals. The optional **WPT** feature is additionally used to record the

actual milling performance and present consumption and position data in a concise, automatically generated report.

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.

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AUTOMATICALLY GENERATED MEASUREMENT REPORTS

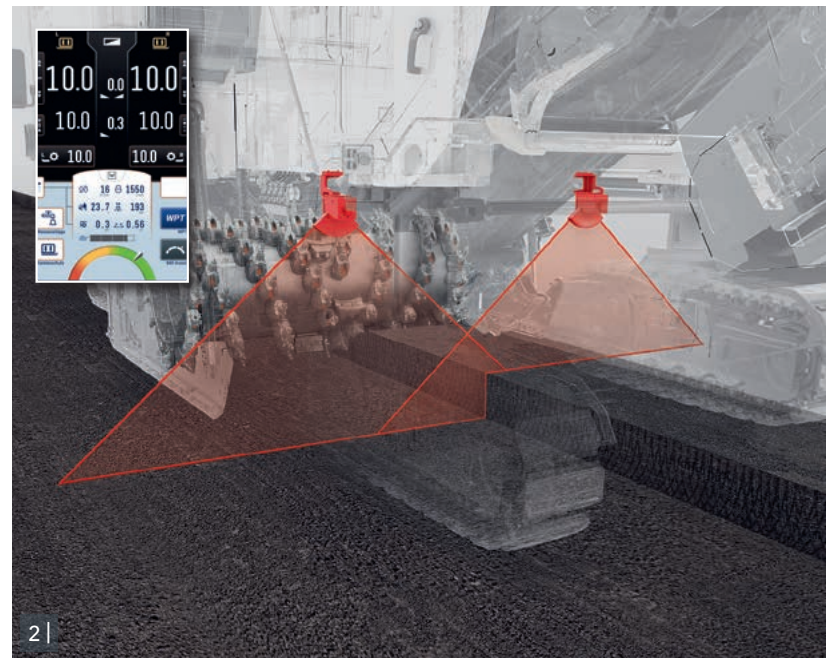
Milling performance data are continuously transmitted to a database server via a mobile radio connection. After completion of the milling operation, a measurement report is automatically generated in both Excel and PDF format and forwarded via e-mail, for example, to the order management department of 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 colors 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.



1 | 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.

2 | The current actual milling width is detected by means of a laser scanner and indicated clearly on the control panel.

Economy

Reduced diesel consumption

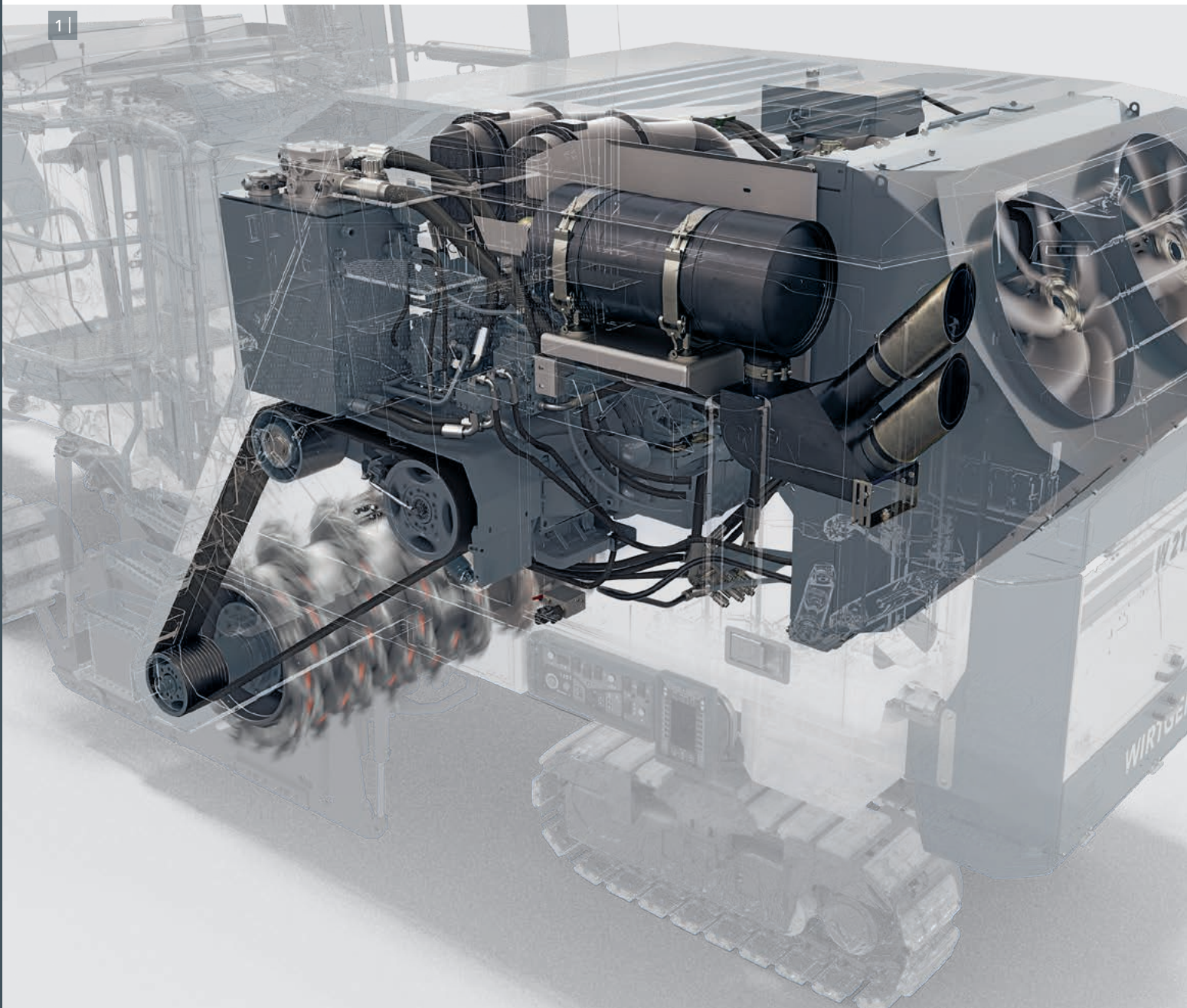
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TWO-SPEED POWERSHIFT TRANSMISSION FOR A WIDE RANGE OF USABLE MILLING DRUM SPEEDS

The innovative **DUAL SHIFT** two-speed powershift transmission enables efficient engine speeds to be combined with powerful milling drum speeds. Low diesel consumption and reduced noise emissions paired with high milling performance are the unbeatable advantages offered by the **DUAL SHIFT** feature.

AUTOMATIC STOP FEATURE OF THE DIESEL ENGINE

The diesel engine is switched off automatically after an appropriate cool-down period when in idle mode. The shut-off delay is displayed on the control panel during the cool-down phase.



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 210 Fi to run mainly in the lower speed range while at the same time ensuring high performance and low diesel consumption.

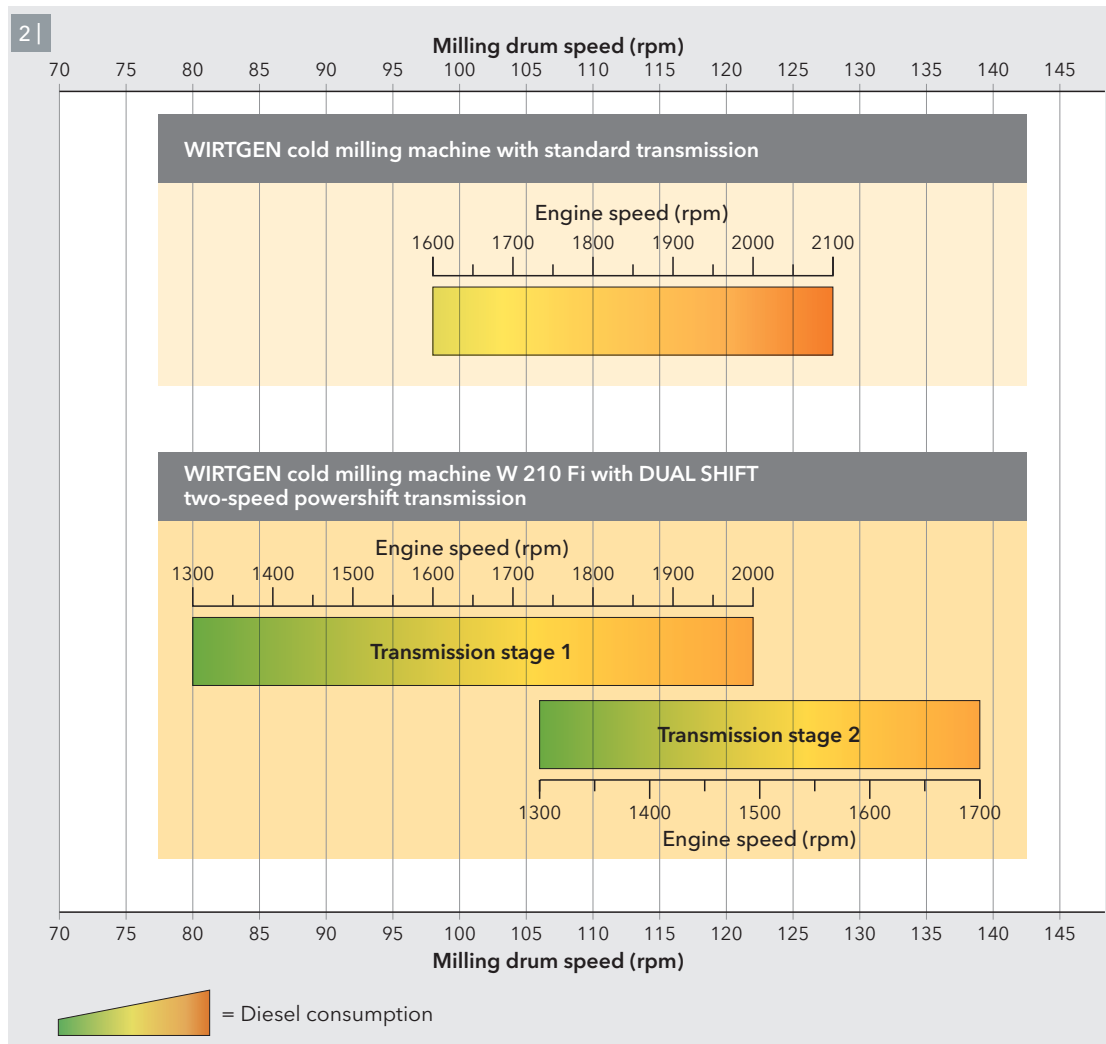
AUTOMATIC START-STOP FEATURE OF THE MILLING DRUM

The start-stop feature temporarily stops the milling drum after a few seconds if the milling

process is interrupted, for example, when waiting for trucks, thus additionally reducing diesel consumption. The milling drum is started again automatically to continue the milling operation.

INTELLIGENT DUAL FAN CONCEPT

Two separate 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.



1 | Compact engine station.

2 | Tremendously extended milling drum speed range to reduce diesel consumption and pick wear.

Economy

Environmentally sustainable machine technology

It is more important today than ever before to minimize exhaust, noise and dust emissions on road construction sites - while at the same time maintaining high levels of performance and productivity. Innovative WIRTGEN technologies make a significant contribution towards actively protecting both the environment and natural resources.

Consumption-optimized speed ranges during the milling operation, engine speeds adjusted in line with the machine's advance rate, and temperature-controlled fan speeds save resources and contribute to maintaining a clean environment. In addition, reclaimed asphalt pavement is a valuable recycling material that is fully reused in the production of asphalt mixes.

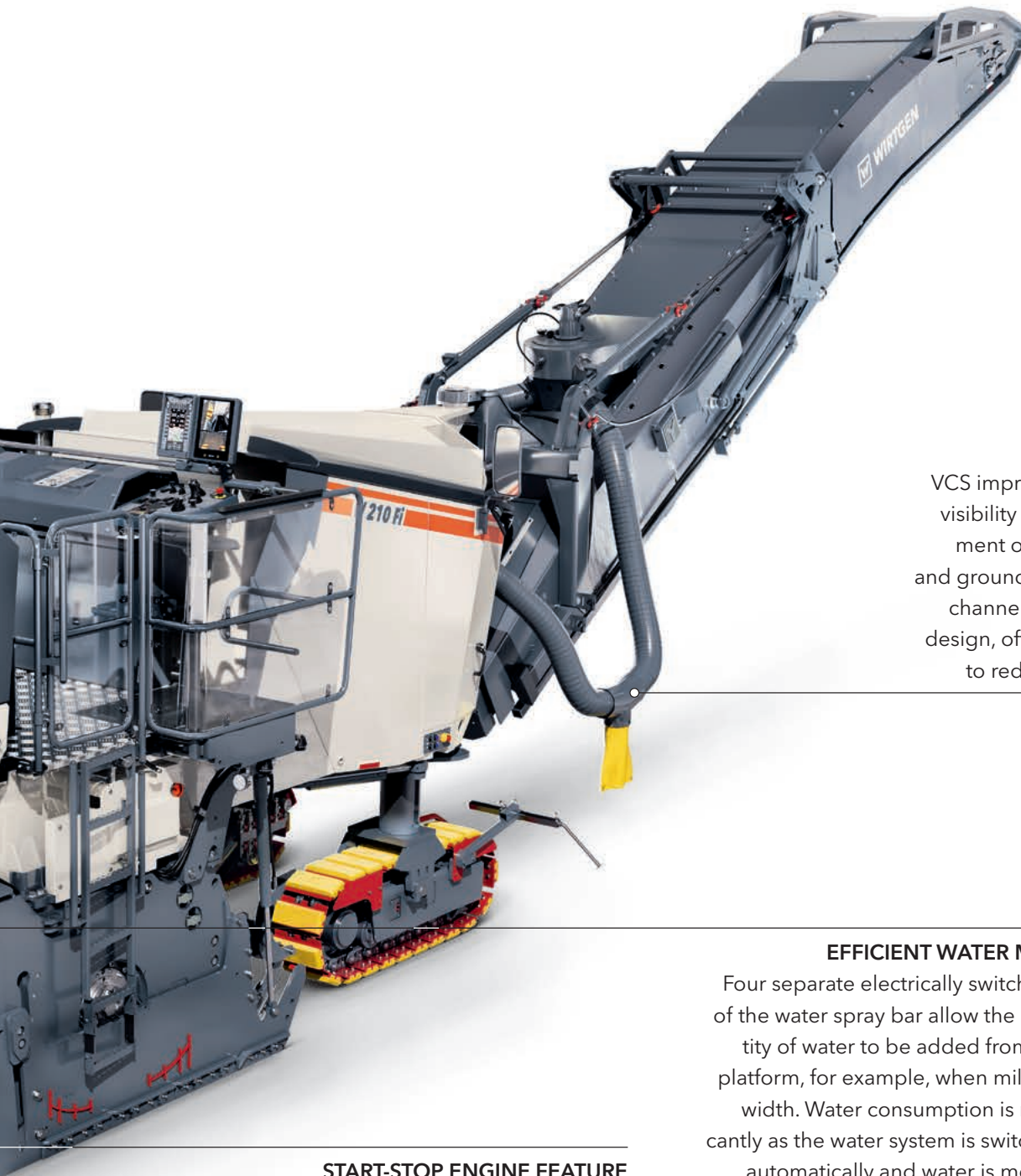
MAXIMUM EXHAUST GAS PURIFICATION FOR LOW EXHAUST EMISSIONS

The state-of-the-art, fuel-efficient diesel engine installed in the W 210 Fi offers maximum engine performance at an exceptionally high maximum torque. The engine technology complies with the requirements of the currently highest emission standard US EPA Tier 4f to minimize exhaust emissions.

REDUCED NOISE EMISSIONS DURING REPOSITIONING

The cold milling machine offers a maximum travel speed of up to 328.1 ft/min (100 m/min), which requires only low engine speeds - resulting in reduced diesel consumption and noise emissions.





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.

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.

EFFICIENT WATER MANAGEMENT

Four separate 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.

Technical specification

W 210 Fi (US standard)

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Milling drum	
Milling width, standard	7 ft 3 in (2,200 mm)
Milling width, optional 1	6 ft 7 in (2,000 mm)
Milling width, optional 2	8 ft 2 in (2,500 mm)
Milling depth * ¹	0 to 1ft 1 in (0 to 330 mm)
Cutting diameter	3 ft 4 in (1,020 mm)
Engine	
Manufacturer	Caterpillar
Type	C18 ATAAC
Cooling	Water
Number of cylinders	6
Rated power at 1,950 min ⁻¹	563 kW/755 HP/766 PS
Maximum power at 1,700 min ⁻¹	563 kW/755 HP/766 PS
Displacement	4.8 gal (18.1 l)
Fuel consumption at rated power Fuel consumption, field mix	38.8 gal/h (147 l/h) 15.5 gal/h (59 l/h)
Exhaust emission standards	US EPA Tier 4f
Sound power level in accordance with DIN EN 500-2 Engine operator's stand	≤ 112 dB(A) ≥ 80 dB(A)
Electrical system	
Voltage supply	24 V
Filling capacities	
Fuel	317 gal (1,200 l)
Hydraulic oil	26.5 gal (100 l)
Water	865 gal (3,270 l)
Driving performance	
Max. travel and milling speed	0 to 330 ft/min (3.7 mph) (0 to 100 m/min (6 km/h))
Track units	
Track units, front and rear (L x W x H)	5 ft 8 in x 11.8 in x 2 ft (1,730 x 300 x 610 mm)
Loading of the milled material	
Belt width of primary conveyor	2 ft 9 in (850 mm)
Belt width of discharge conveyor	2 ft 9 in (850 mm)
Theoretical capacity of discharge conveyor	490 yd ³ /h (375 m ³ /h)

*¹ = The maximum milling depth may deviate from the value indicated due to tolerances and wear.

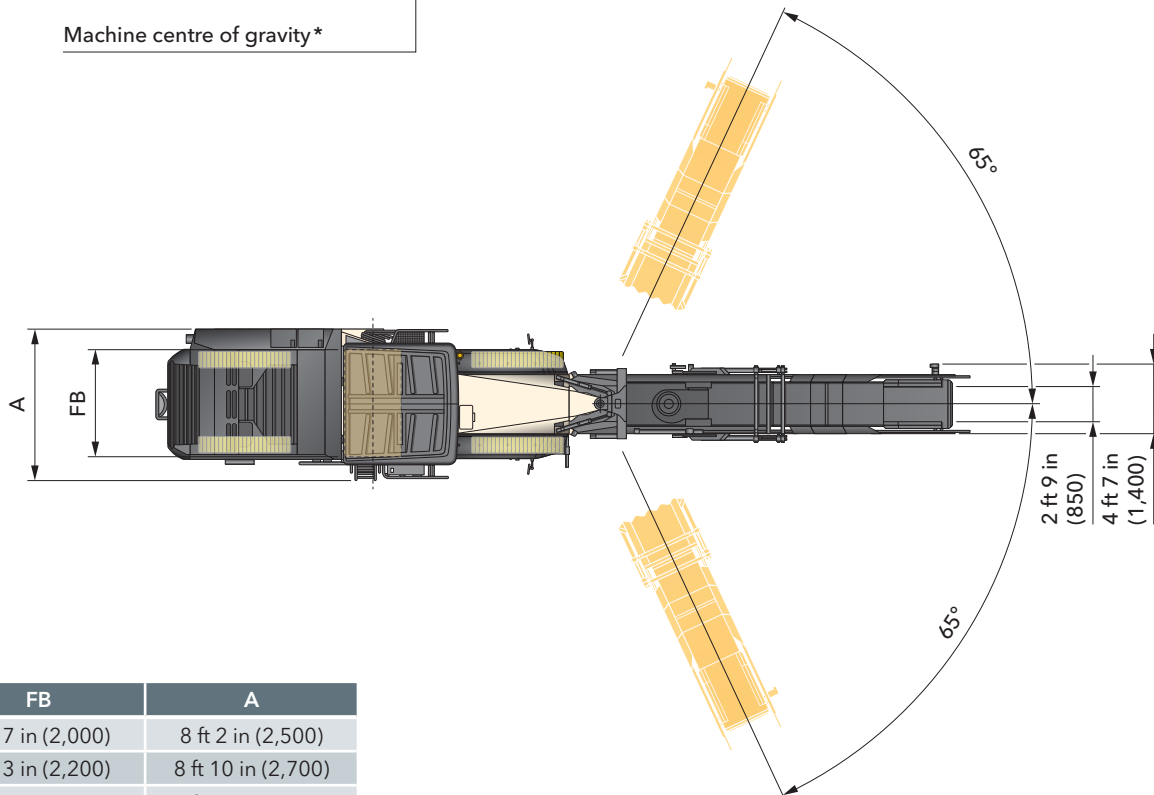
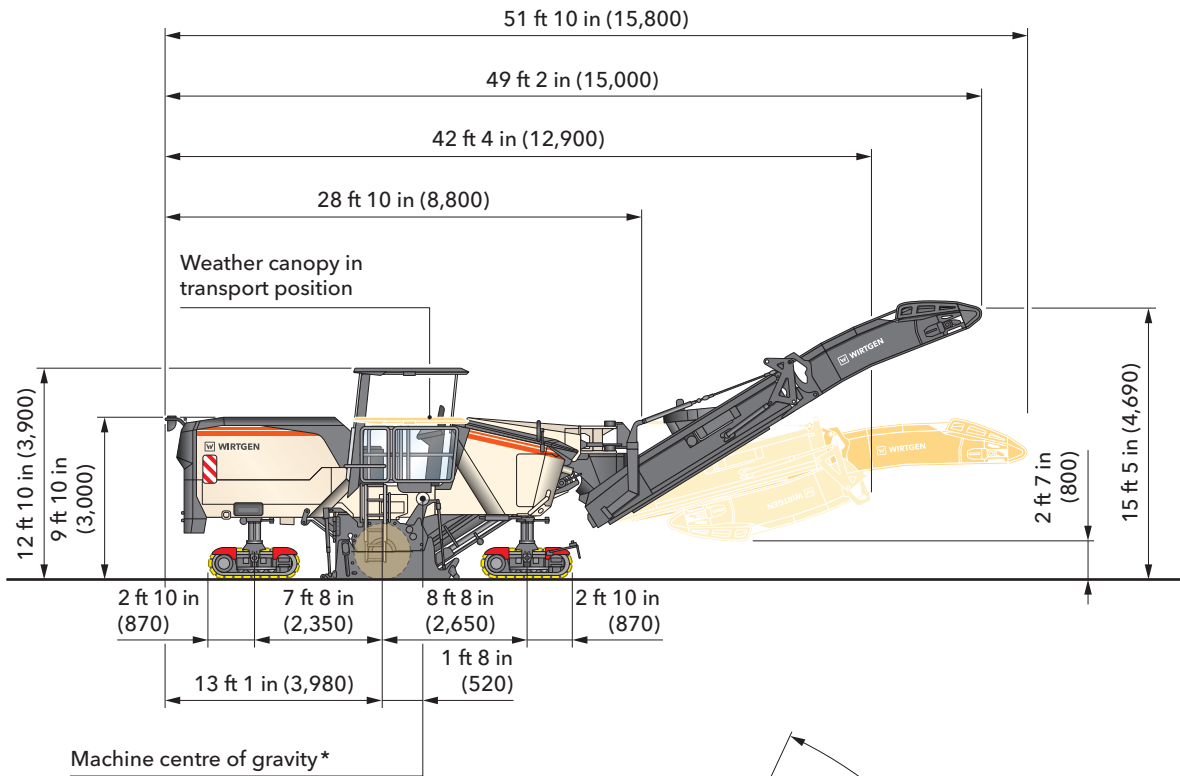
Weight of machine - Basic	
Empty weight of machine excluding operating fluids	59,400 lbs (27,000 kg)
Operating weight, CE*2	64,500 lbs (29,300 kg)
Maximum operating weight (full tanks, full range of equipment), in FB2500	80,300 lbs (36,500 kg)
Weight of machine - US standard	
Empty weight of machine excluding operating fluids	67,100 lbs (30,500 kg) ^{US standard}
Shipping weight, US standard (full fuel tanks, without water)	69,700 lbs (31,700 kg)

Weights of operating fluids	
Water	7,200 lbs (3,270 kg)
Fuel (6.9 lbs/gal (0.83 kg/l))	2,200 lbs (1,000 kg)
Additional add-on weights	
Operator and tools	
Operator	165 lbs (75 kg)
5 pick containers	275 lbs (125 kg)
On-board tools	65 lbs (30 kg)
Optional milling drum units in lieu of standard	
Quick-change milling drum unit FB2000 MCS BASIC	1,500 lbs (670 kg)
Quick-change milling drum unit FB2200 MCS BASIC	2,000 lbs (920 kg) ^{US standard}
Quick-change milling drum unit FB2500 MCS BASIC	2,750 lbs (1,240 kg)
Optional MCS milling drums in lieu of standard	
Milling drum MCS BASIC FB2000 HT22 LA15 with 162 picks	550 lbs (250 kg)
Milling drum MCS BASIC FB2000 HT22 LA18 with 146 picks	500 lbs (225 kg)
Milling drum MCS BASIC FB2200 HT22 LA15 with 175 picks	1,050 lbs (470 kg) ^{US standard}
Milling drum MCS BASIC FB2200 HT22 LA18 with 155 picks	750 lbs (340 kg)
Milling drum MCS BASIC FB2500 HT22 LA18 with 171 picks	1,250 lbs (570 kg)
Optional additional equipment	
Operator's platform with functional stand-up seat and large storage compartment	200 lbs (80 kg) ^{US standard}
Operator's platform with functional stand-up seat, a large storage compartment and weather canopy	1,300 lbs (600 kg)
Operator's platform including a high-quality comfort cabin	1,900 lbs (850 kg)
Two-piece additional weight with a total weight of 3,500 lbs (1,600 kg)	3,500 lbs (1,600 kg) ^{US standard}
Large storage compartment on rear of machine for 69 pick containers	350 lbs (150 kg)
Extension of MCS BASIC with a hydraulically opening side door	300 lbs (140 kg) ^{US standard}
VCS extraction system	300 lbs (140 kg) ^{US standard}
Extension of LEVEL PRO ACTIVE with two levelling booms mounted on the right and left	100 lbs (75 kg)
Extension of LEVEL PRO ACTIVE with a hydraulic sensor mounted on the right	140 lbs (65 kg)
Extension of LEVEL PRO ACTIVE with two hydraulic sensors mounted on the right and left	250 lbs (110 kg) ^{US standard}

*2 = Weight of machine, half weight of all operating materials, machine operator, on-board tools, no optional equipment features

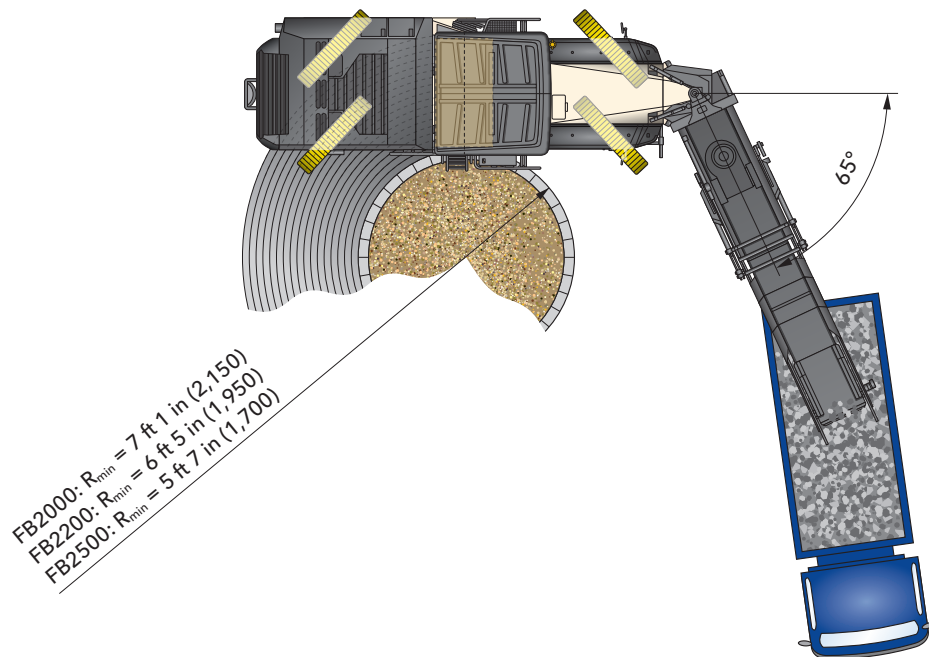
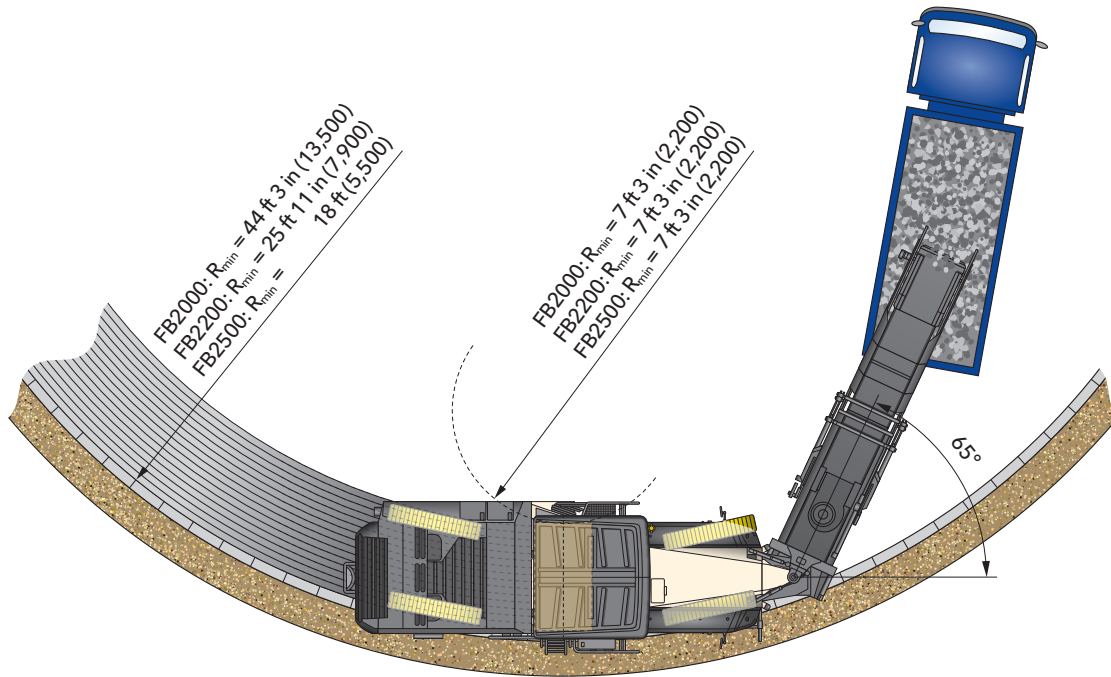
Dimensions

W 210 Fi (US standard)



FB	A
6 ft 7 in (2,000)	8 ft 2 in (2,500)
7 ft 3 in (2,200)	8 ft 10 in (2,700)
8 ft 2 in (2,500)	9 ft 10 in (3,000)

Dimensions in American standard and mm
*Based on operating weight, CE with conveyor folded out



Milling radius, milling depth 5.9 in (150 mm), dimensions in American standard and mm

Standard equipment features

W 210 Fi (US standard)

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Basic machine	
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 cylinder pump 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 5.9 in (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 1 ft 6 in (450 mm), clearance left 1 ft 1 in (330 mm)	■
Quick-change milling drum unit FB2200 (7 ft 3 in) MCS BASIC	□
Extension of MCS BASIC with a hydraulically opening side door for FB2200 (7 ft 3 in)	□
Electrically switchable sectional water spray bar for FB2200 (7 ft 3 in)	□
Hydraulic pick extractor	□
Milling drums	
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT22 LA15 with 176 picks	□
Loading of the milled material	
Increased conveyor slewing 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 1,300 rpm	■
Discharge conveyor, 25 ft 11 in (7,900 mm) long, 2 ft 9 in (850 mm) wide, with hydraulic folding device	■
VCS extraction system	□
Support device for discharge conveyor	□
Machine and leveling control	
User-friendly control panel including 7" color screen	■
LEVEL PRO ACTIVE leveling system with numerous automated and complementary features relieving the operator of a part of his workload	■
LEVEL PRO ACTIVE - automatic height control in transport mode	■
LEVEL PRO ACTIVE - ramp milling and auto-start feature for the second milling cut	■

- = Standard equipment
- = Extended equipment (US standard)
- = Optional equipment

Machine and leveling control	
RAPID SLOPE cross-slope sensor for LEVEL PRO ACTIVE leveling 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 integrated into 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	■
Actual milling depth measurement and display on the LEVEL PRO ACTIVE panel	□
Active floating position for the side plates, left and right	□
7" control panel for displaying the machine control system and for controlling the leveling system (2 units)	□
Extension of LEVEL PRO ACTIVE with two hydraulic sensors mounted on the right and left	□
4-fold camera system with 10" control panel	□
Operator's stand	
Convenient access to the operator's platform, right and left	■
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 and weather canopy	□
Crawler 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" lights feature in the area of the operator's platform and access	■
High-pressure water system with automatic on/off function, 261 psi (18 bar), 17 gal/min (67 l/min)	■
Good accessibility to all maintenance points on the engine station	■
Pneumatic hammer with pick extractor/insertor	■
Comprehensive toolkit in lockable toolbox	■
Pre-fitting for installing the WITOS FleetView control unit	■
European design type certification, EuroTest mark and CE conformity	■
Water tank filling from rear of machine	□
Standard painting in RAL 9001 (cream)	□
WITOS FleetView - professional telematics solution to optimize machine use and servicing	□
Extended LED lighting system with 37,600 lumens	□
Two-piece additional weight totaling 3,500 lbs (1,600 kg)	□
Storage compartment close to the rear track units for 8 pick containers	□

■ = Standard equipment

□ = Extended equipment (US standard)

□ = Optional equipment

Optional equipment features

W 210 Fi (US standard)

Milling drum unit	
Quick-change milling drum unit FB2000 (6 ft 7 in) MCS BASIC	<input type="checkbox"/>
Quick-change milling drum unit FB2500 (8 ft 2 in) MCS BASIC	<input type="checkbox"/>
Extension of MCS BASIC with a hydraulically opening side door for FB2000 (6 ft 7 in)	<input type="checkbox"/>
Extension of MCS BASIC with a hydraulically opening side door for FB2500 (8 ft 2 in)	<input type="checkbox"/>
Electrically switchable sectional water spray bar for FB2000 (6 ft 7 in)	<input type="checkbox"/>
Electrically switchable sectional water spray bar for FB2500 (8 ft 2 in)	<input type="checkbox"/>
Wear protection rollers for side plates	<input type="checkbox"/>
Quick-change milling drum unit FB2000 (6 ft 7 in) MCS and milling drum MCS BASIC FB2000 (6 ft 7 in) LA15	<input type="checkbox"/>
Quick-change milling drum unit FB2200 (7 ft 3 in) MCS and milling drum MCS BASIC FB2200 (7 ft 3 in) LA15	<input type="checkbox"/>
Quick-change milling drum unit FB2500 (8 ft 2 in) MCS and milling drum MCS BASIC FB2500 (8 ft 2 in) LA18	<input type="checkbox"/>
Milling drums	
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT22 LA15 with 162 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT22 LA18 with 146 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT22 LA18 with 155 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2500 (8 ft 2 in) HT22 LA18 with 171 picks	<input type="checkbox"/>
Milling drum FB2000 (6 ft 7 in) HT22 LA8 with 274 picks	<input type="checkbox"/>
Milling drum FB2000 (6 ft 7 in) HT22 LA25 with 124 picks	<input type="checkbox"/>
Milling drum FB2000 (6 ft 7 in) HT5 LA6X2 with 672 picks	<input type="checkbox"/>
Milling drum FB2200 (7 ft 3 in) HT22 LA8 with 298 picks	<input type="checkbox"/>
Milling drum FB2200 (7 ft 3 in) HT22 LA25 with 134 picks	<input type="checkbox"/>
Milling drum FB2200 (7 ft 3 in) HT5 LA6X2 with 740 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT22 LA8 with 272 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT22 LA25 with 126 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT5 LA6X2 with 672 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2000 (6 ft 7 in) HT22 LA15 with 18 standard picks and 144 PCD tools	<input type="checkbox"/>
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT22 LA8 with 297 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT22 LA25 with 121 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT5 LA6X2 with 740 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2200 (7 ft 3 in) HT22 LA15 with 18 standard picks and 158 PCD tools	<input type="checkbox"/>
Milling drum MCS BASIC FB2500 (8 ft 2 in) HT22 LA8 with 335 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2500 (8 ft 2 in) HT22 LA25 with 148 picks	<input type="checkbox"/>
Milling drum MCS BASIC FB2500 (8 ft 2 in) HT22 LA18 with 18 standard picks and 152 PCD tools	<input type="checkbox"/>

- = Standard equipment
- = Extended equipment (US standard)
- = Optional equipment

Loading of the milled material	
Mounting aid for lifting out the primary conveyor when changing the milling drum unit	<input type="checkbox"/>
Machine and leveling control	
Overload sensors installed on the scraper	<input type="checkbox"/>
5" control panel for controlling the leveling system	<input type="checkbox"/>
2" control panel including "Favorites" keys	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with leveling booms and one Sonic Ski sensor	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with two ultrasonic sensors for multiplex scanning	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with four ultrasonic sensors for multiplex scanning	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with pre-fitting for 3D leveling for machines without canopy	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with pre-fitting for 3D leveling for machines with canopy	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with pre-fitting for 3D leveling for machines with cabin	<input type="checkbox"/>
Extension of LEVEL PRO ACTIVE with two laser receivers	<input type="checkbox"/>
Operator's stand	
Operator's platform with functional stand-up seat, a large storage compartment and weather protection canopy	<input type="checkbox"/>
Warm air heating close to the operator's hands and feet	<input type="checkbox"/>
Additional stand-up seat for operator's platform	<input type="checkbox"/>
Miscellaneous	
Hydraulically operated filling pump for water refilling	<input type="checkbox"/>
Painting in one special color (RAL)	<input type="checkbox"/>
WIRTGEN PERFORMANCE TRACKER including WITOS FleetView - precise tracking of the milling performance for machines without canopy or with operator's cabin	<input type="checkbox"/>
WIRTGEN PERFORMANCE TRACKER including WITOS FleetView - precise tracking of the milling performance for machines with canopy	<input type="checkbox"/>
High-performance LED lighting system with 50,000 lumens, including LED lighting balloon	<input type="checkbox"/>
Large storage compartment at the rear of the machine for 69 pick containers	<input type="checkbox"/>
Milling drum mounting and transport carriage FB1500 (4 ft 11 in) to FB2500 (8 ft 2 in)	<input type="checkbox"/>
Signal lights for visual "Stop" and "Go" instructions to the truck driver	<input type="checkbox"/>
Powerful high-pressure water cleaner, 2175 psi (150 bar), 4 gal/min (15 l/min)	<input type="checkbox"/>
8-fold camera system with 10" control panel	<input type="checkbox"/>
Dual starter system	<input type="checkbox"/>
Electrical diesel suction and pressure pump including 24 ft 7 in (7.50 m) suction hose	<input type="checkbox"/>
License plate holder with LED lighting	<input type="checkbox"/>

- = Standard equipment
- = Extended equipment (US standard)
- = Optional equipment



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