

A new level of efficiency.

# Cold Milling Machine

W 100 HR | W 130 HR





The high-performance cold milling machine in the one-meter class is designed for cost-effective milling operations at working widths of 1.0 m or 1.3 m.

Its high-capacity rear loading system conveys up to 92 m<sup>3</sup>/h and can be easily controlled by the multifunctional joystick.

Three selectable milling drum speeds enable high milling performance regardless of the job situation.

The optionally available, state-of-the-art LEVEL PRO **PLUS** leveling system guarantees high-precision milling results.

The completely revised, intelligent operating concept features an informative, color-controlled multifunctional display and digitally presaved milling depths.

A new level

of efficiency.



# Highlights of the W 100 HR and W 130 HR at a Glance

04  
05

## Operation

### 1 | HIGH-PRECISION LEVELING

- > Milling depth control system with memory positioning
- > Optional high-precision **LEVEL PRO PLUS** leveling system fully integrated into the machine control system
- > Optional high-precision **RAPID SLOPE** sensor

### 2 | OUTSTANDING VISIBILITY CONCEPT

- > Perfect view at the milling edge and important work areas
- > Perfectly arranged LED working lights
- > Optional new camera system

### 3 | SIMPLE AND COMFORTABLE TO OPERATE

- > Informative, multi-language color control display built into the right adjustable armrest
- > Multipurpose joystick with numerous automatic functions
- > Hydraulic machine height adjustment with two speed settings
- > Adjustable weather canopy



## Driving and Steering

### 4 | EXCELLENT MANEUVERABILITY

- > Extremely small milling radii
- > Travel speed of up to 8 km/h
- > Pivotal rear right support wheel for flush-to-curb milling

### 5 | PERFECT TRACTION AND TERRAIN MOBILITY

- > Powerfull all-wheel drive for maximum traction
- > Engageable flow divider for outstanding traction and maximum climbing
- > Ample ground clearance

## Milling and Loading

### 6 | NEW MILLING DRUM ASSEMBLY DELIVERS MAXIMUM PERFORMANCE

- > New milling drum design with highly wear-resistant HT22 toolholder system
- > Tremendous milling depth of up to 200 mm sufficient for the removal of full asphalt packages
- > Individually hydraulically lifting side plates
- > Milling drum rotation device for rapid pick changes

### 7 | MATERIAL LOADING WITH DISCHARGE CONVEYOR

- > High-capacity folding conveyor
- > Fast and easy to assemble and disassemble
- > Wide conveyor swing angles controlled via joystick



## Performance and Productivity

### 8 | OUTSTANDING MILLING PERFORMANCE

- > Automatic load control system for maximum milling performance
- > State-of-the-art engine technology for low diesel consumption
- > Three different milling drum speeds for powerful applications
- > Adjustable amount of water for low water consumption

### 9 | EASY TO TRANSPORT AND SERVICE

- > Compact machine design
- > Sturdy loading and lashing lugs for simple loading by crane
- > Intuitive multi-language machine diagnostic system
- > All service points easily accessible

# Highlights in Operation

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07

## MULTIPURPOSE JOYSTICK WITH NUMEROUS AUTOMATIC FUNCTIONS

Many important machine features have been grouped together intelligently in the ergonomically designed, intuitive multifunctional joystick and can therefore be performed with effortless ease. In addition, automatic functions have been included to make the operator's job easier.

## HYDRAULIC MACHINE HEIGHT ADJUSTMENT WITH TWO SPEED SETTINGS

The new feature on the left-hand control console enables easy and highly precise adjustment of the machine height to the current working situation.



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**INFORMATIVE, MULTI-LANGUAGE COLOR CONTROL DISPLAY BUILT INTO THE RIGHT ADJUSTABLE ARMREST**

The adjustable right armrest combines innovative design with perfect user-friendliness. Important data is displayed on the color-controlled multi-language display, e.g. the digital milling depth indicator.

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**MILLING DEPTH CONTROL SYSTEM WITH MEMORY POSITIONING**

For fast, convenient height adjustment, it's possible to save up to three different height positions per machine side to memory buttons on the multifunctional armrest.

**OPTIONAL HIGH-PRECISION LEVEL PRO *PLUS* LEVELING SYSTEM FULLY INTEGRATED INTO THE MACHINE CONTROL SYSTEM**

**LEVEL PRO *PLUS*** stands out due to its extremely precise milling results. The leveling system especially developed for cold milling machines is fully integrated into the machine control system, enabling a high degree of automation.

**OPTIONAL HIGH-PRECISION RAPID SLOPE SENSOR**

The internally-developed, electronic **RAPID SLOPE** sensor ensures that the cross-slope profile is extremely precise. The cross-slope sensor makes it possible to work significantly faster while maintaining the same leveling quality.

**PERFECT VIEW OF THE MILLING EDGE AND IMPORTANT WORK AREAS**

The operator's platform offers an unobstructed view of the milling edge, of the right side plate, and of the milled surface at the rear of the machine.

**PERFECTLY ARRANGED LED WORKING LIGHTS**

Perfectly arranged working lights make sure that the machine's entire surroundings are fully lit and the operator has always a perfect view.

**OPTIONAL NEW CAMERA SYSTEM**

The camera system consists of one camera and a heavy-duty monitor. The monitor provides a high-resolution view of the loading situation from the camera at the end of the discharge conveyor.

**ADJUSTABLE WEATHER CANOPY**

The height-adjustable canopy protects the machine operator from inclement weather, making work more comfortable.



Colored multifunctional control display.

# Highlights in Driving and Steering

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09

PIVOTABLE REAR RIGHT  
SUPPORT WHEEL FOR  
FLUSH-TO-CURB MILLING

EXTREMELY SMALL  
MILLING RADII



POWERFULL ALL-WHEEL  
DRIVE FOR MAXIMUM  
TRACTION

TRAVEL SPEED OF UP TO 8 KM/H



### **EXTREMELY SMALL MILLING RADII**

Large steering angles to the left and right guarantee extremely small milling radii of at least 550 mm (W 100 HR) / 850 mm (W 130 HR) and turning circles, e. g. for milling around manhole covers.

### **TRAVEL SPEED OF UP TO 8 KM/H**

High travel speeds of up to 8 km/h allow the machine to be transported quickly between two job sites.

### **PIVOTABLE REAR RIGHT SUPPORT WHEEL FOR FLUSH-TO-CURB MILLING**

The rear right support wheel can be pivoted in front of the milling drum mechanically to allow flush-to-curb milling.

### **POWERFULL ALL-WHEEL DRIVE FOR MAXIMUM TRACTION**

The standard all-wheel drive system guarantees maximum traction in challenging site conditions and during loading.

### **ENGAGEABLE FLOW DIVIDER FOR OUTSTANDING TRACTION AND MAXIMUM CLIMBING**

The engageable hydraulic flow divider guarantees consistently high traction and optimum climbing ability regardless of ground conditions.

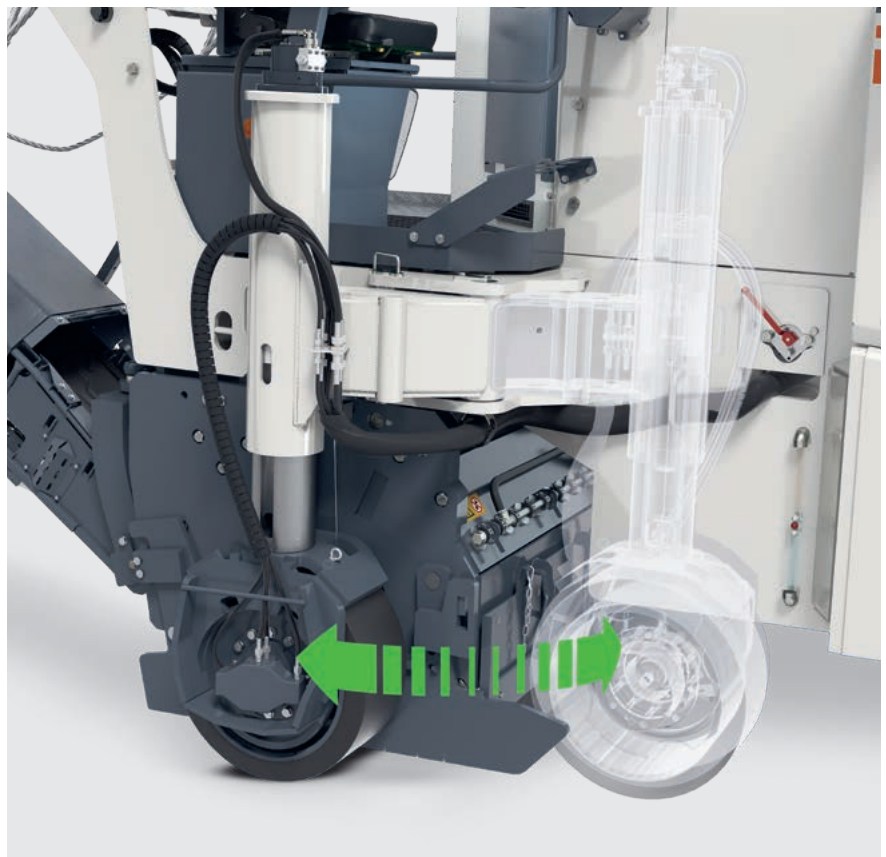
### **AMPLE GROUND CLEARANCE**

Ample ground clearance not only prevents the machine from being damaged by obstacles but also enables difficult maneuvers, such as reversing in the working pass or loading the machine onto a flatbed truck.

### **ENGAGEABLE FLOW DIVIDER FOR OUTSTANDING TRACTION AND MAXIMUM GRADEABILITY**



**AMPLE GROUND  
CLEARANCE**



*The right rear wheel can be pivoted rapidly.*

# Highlights in Milling and Loading

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11



HIGH CAPACITY FOLDING CONVEYOR

FAST AND EASY TO ASSEMBLE  
AND DISASSEMBLE

WIDE CONVEYOR SWING  
ANGLES CONTROLLED  
VIA JOYSTICK

MILLING DRUM ROTATION  
DEVICE FOR RAPID PICK  
CHANGES

TREMENDOUS MILLING DEPTH OF UP TO 200 MM

NEW MILLING DRUM DESIGN WITH HIGHLY  
WEAR-RESISTANT HT22 TOOLHOLDER SYSTEM

## **NEW MILLING DRUM DESIGN WITH HIGHLY WEAR-RESISTANT HT22 TOOLHOLDER SYSTEM**

The extremely wear-resistant **HT22** toolholder system (standard) minimizes downtimes and increases the service life of the entire milling drum.

## **TREMENDOUS MILLING DEPTH OF UP TO 200 MM**

The innovative milling drum assembly permits economical milling up to a tremendous depth of 200 mm. This allows complete asphalt packages to be removed in a single pass.

## **INDIVIDUALLY HYDRAULICALLY LIFTING SIDE PLATES**

Individually hydraulically lifting side plates effectively seal the milling chamber on both sides of the machine.

## **MILLING DRUM ROTATION DEVICE FOR RAPID PICK CHANGES**

The hydraulically operated milling drum rotation device turns drum in both directions, which makes it easier and quicker to change picks.

## **HIGH-CAPACITY FOLDING CONVEYOR**

The 400-mm-wide discharge conveyor is equipped with a heavy-duty cleat profile to ensure materials are transported effectively. It can be quickly folded for easy transportation and to adapt to the conditions on site.

## **FAST AND EASY TO ASSEMBLE AND DISASSEMBLE**

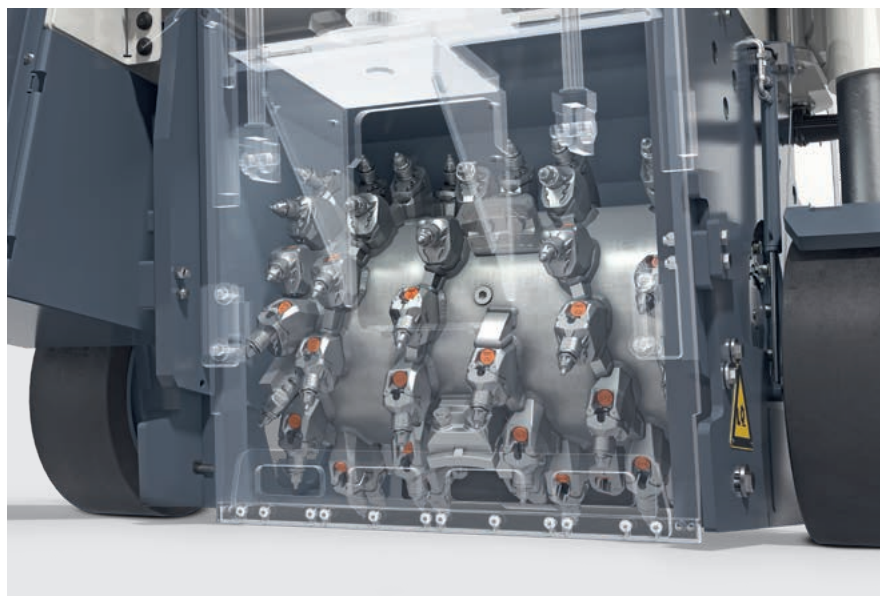
A special coupling device enables the discharge conveyor to be attached or removed in a few swift steps by only one person. This increases the flexibility of the machine.

## **WIDE CONVEYOR SWING ANGLES CONTROLLED VIA JOYSTICK**

Wide conveyor swing angles of 25° each to the right and left, controlled by the joystick in the right armrest, make it possible to easily load material, even in difficult job site situations.



**INDIVIDUALLY  
HYDRAULICALLY  
LIFTING SIDE PLATES**



*Intelligent milling drum design.*

# Highlights in Performance and Productivity

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COMPACT MACHINE DESIGN

STATE-OF-THE-ART ENGINE TECHNOLOGY

AUTOMATIC LOAD CONTROL SYSTEM

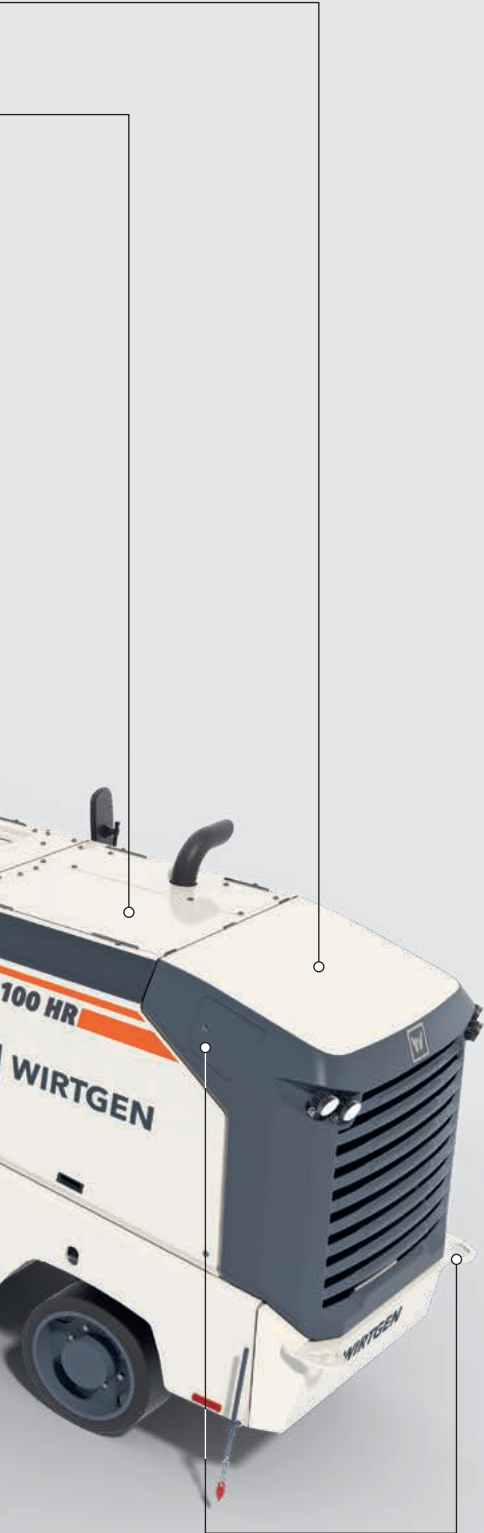
INTUITIVE MULTI-LANGUAGE  
MACHINE DIAGNOSTIC SYSTEM

THREE DIFFERENT MILLING DRUM SPEEDS

ADJUSTABLE AMOUNT OF WATER

ALL SERVICE POINTS  
EASILY ACCESSIBLE





**STURDY LOADING AND LASHING LUGS**

### AUTOMATIC LOAD CONTROL SYSTEM

The electronic load limit controller integrated into the machine control system ensures that the machine remains in the ideal high-performance milling range.

### STATE-OF-THE-ART ENGINE TECHNOLOGY

The engine speed adapts to the respective requirements for quiet operation and to minimize diesel consumption, regardless of the milling depth.

### THREE DIFFERENT MILLING DRUM SPEEDS

Milling drum speed one is selected for low diesel and cutting tool consumption, milling drum speed two for maximum milling performance, milling drum speed three for the best milling surface quality.

### ADJUSTABLE AMOUNT OF WATER

The water injection quantity, which can be adjusted as required, ensures that water is used sparingly in every application.

### COMPACT MACHINE DESIGN

The machine's compact design not only enables quick turning and maneuvering on site, but also makes transporting the machine easier.

### STURDY LOADING AND LASHING LUGS

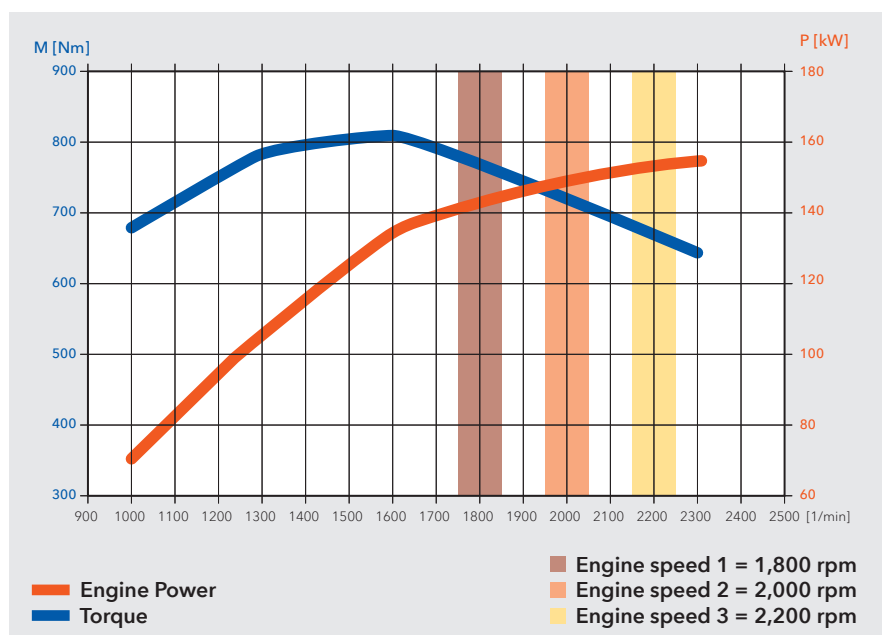
Sturdy loading and lashing lugs ensure the machine can be quickly and easily loaded by crane.

### INTUITIVE MULTI-LANGUAGE MACHINE DIAGNOSTICS SYSTEM

Thanks to the built-in machine diagnostics system, the operator is able to monitor the current operating data quickly on the multifunctional display in the right armrest - resulting in faster and more efficient operations.

### ALL SERVICE POINTS EASILY ACCESSIBLE

Excellent accessibility of all check points and points of maintenance minimizes maintenance requirements.



*Different engine speeds for low diesel consumption and maximum milling performance.*

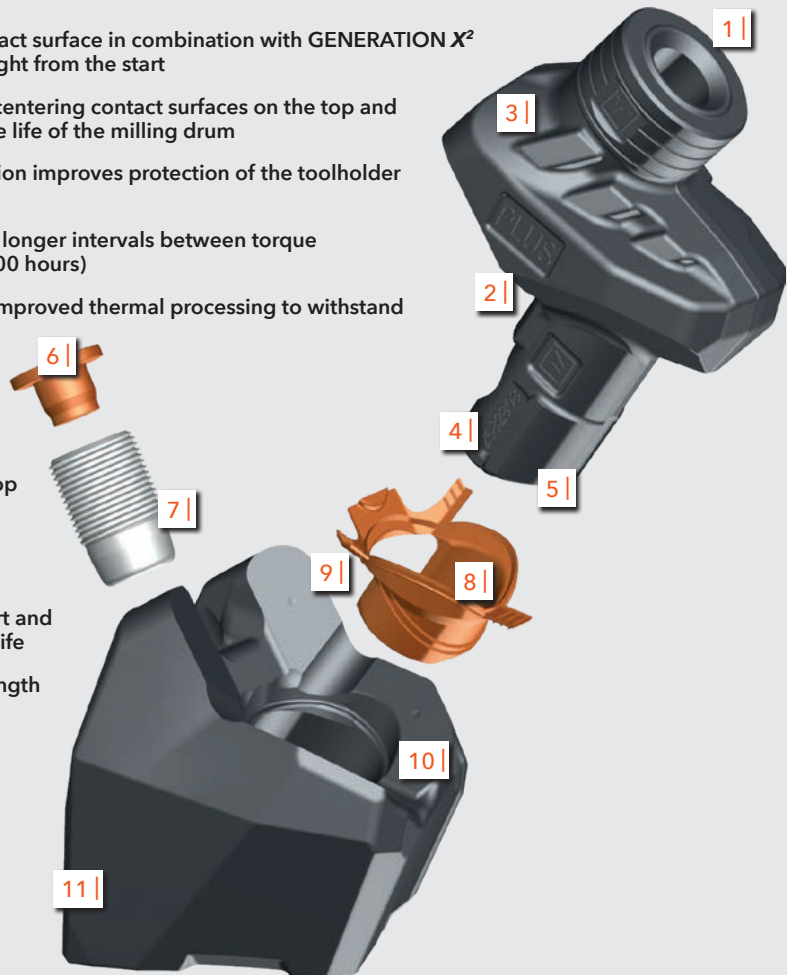
# Innovative HT22 Toolholder System

The HT22 toolholder system stands out for its use of highly wear-resistant steel, increased wear resistance, and significantly extended replacement intervals. The rugged upper part can be replaced quickly and easily right on the job site.



## HT22 TOOLHOLDER SYSTEM IN DETAIL

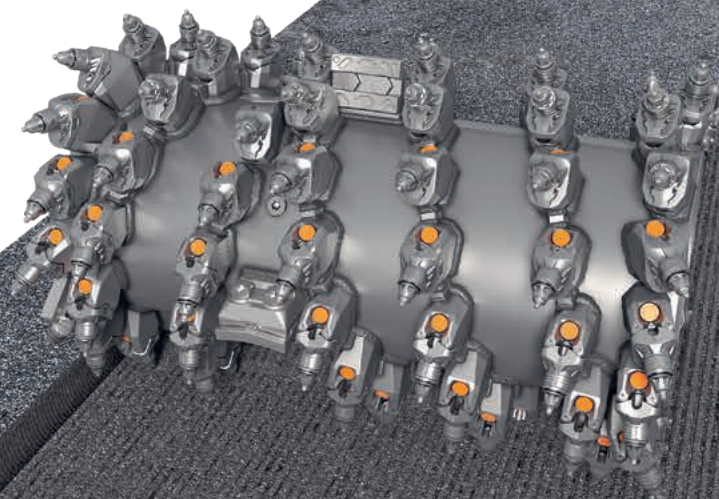
- 1 | Innovative centering marks on the tool contact surface in combination with GENERATION X<sup>2</sup> picks for maximum toolholder service life right from the start
- 2 | Significantly larger, more durable, and self-centering contact surfaces on the top and bottom parts significantly extend the service life of the milling drum
- 3 | Increased wear volume in the shoulder section improves protection of the toolholder base when milling abrasive materials
- 4 | Reduced maintenance requirements due to longer intervals between torque inspections of the toolholder bolts (every 500 hours)
- 5 | Optimized shaft geometry with additional improved thermal processing to withstand extreme stress
- 6 | Protective plug prevents bolt head from getting dirty
- 7 | Heavy-duty retaining bolt
- 8 | Seal between top and bottom part allows top part to be easily removed / inserted
- 9 | Bottom part covers top part completely for maximum protection
- 10 | Extra-large contact surface between top part and bottom part for longer bottom part service life
- 11 | Optimized welded joint with increased strength and flexibility for optimum pick rotation



# High-Quality Milled Surfaces

The more precise the milling result, the more efficiently, in terms of both time and cost, the subsequent construction stages can be completed, and the better the functional properties of the new pavement surface will be.

WIRTGEN milling drums are manufactured in a high-precision manufacturing process and meet stringent quality requirements.



# Additional Valuable Options

## ADDITIONAL OPTIONS THAT CAN BE ORDERED FOR THE BASIC MACHINE

Options can be preinstalled in the standard machine according to customer requirements.

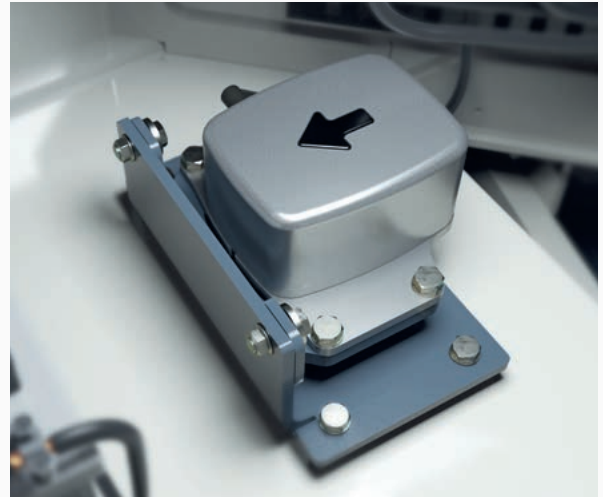
### 1 | LEVEL PRO **PLUS** LEVELING SYSTEM

Measurements are taken using wire-rope sensors on the right and left side plates. The milling depth is displayed on the **LEVEL PRO PLUS** operating display and can be set intuitively. The milling depth is controlled automatically. Additional preinstalled sensors are also available.



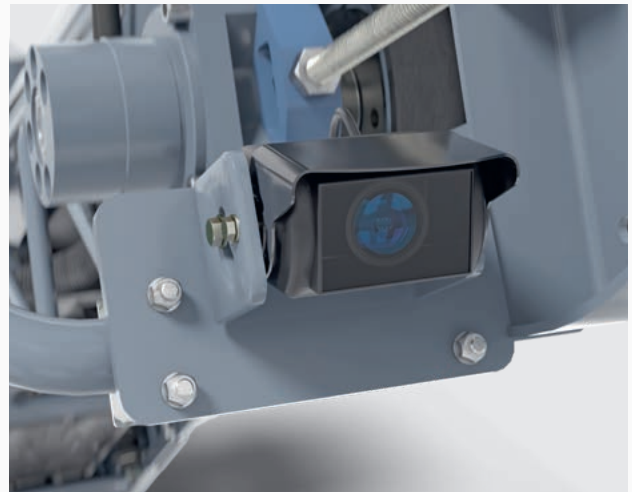
### 2 | RAPID SLOPE SENSOR

The **LEVEL PRO PLUS** leveling system can be expanded to include a RAPID SLOPE sensor. The cross-slope sensor is ideal, for example, for aligning the machine at a defined cross-slope to a one-sided reference.



### 3 | CAMERA SYSTEM

The camera system consists of one camera and a heavy-duty monitor. The monitor provides a high-resolution view of the loading situation from the camera at the end of the discharge conveyor.





**AVAILABLE OPTIONS THAT CAN BE ADDED LATER AS A RETROFIT KIT**

Options can be retrofitted to the machine at any time at the customer's request. WIRTGEN supplies complete retrofit kits for this purpose that can simply be installed in the machine.

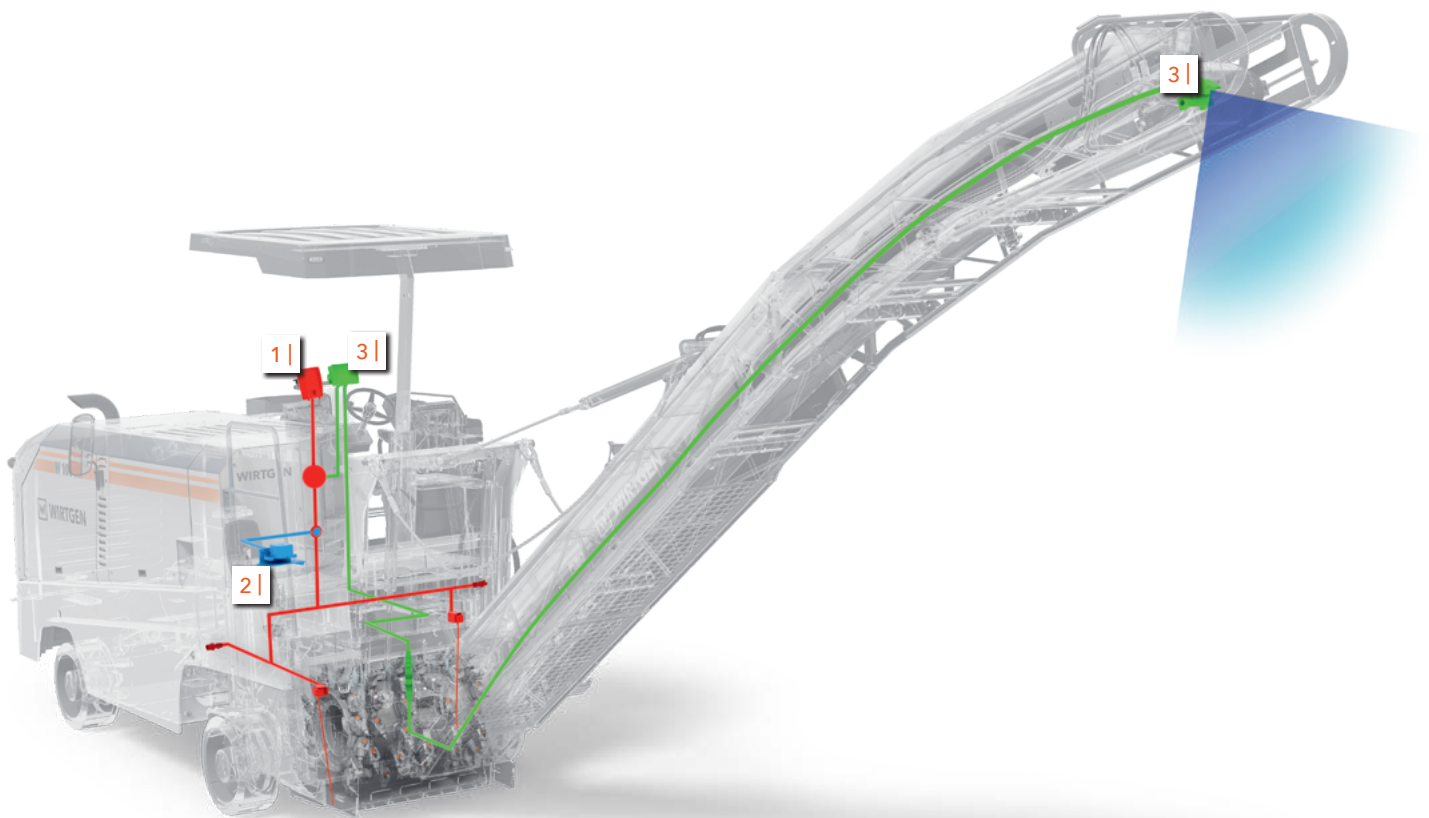
**1 | LEVEL PRO *PLUS* LEVELING SYSTEM RETROFIT KIT**



**2 | RAPID SLOPE SENSOR RETROFIT KIT**



**3 | CAMERA SYSTEM RETROFIT KIT**



# Technical Specifications

## W 100 HR | W 130 HR

	W 100 HR	W 130 HR
<b>Milling Drum</b>		
Milling width	1,000 mm	1,300 mm
Milling depth* <sup>1</sup>	0 to 200 mm	
Drum diameter with tools	860 mm	
<b>Engine</b>		
Manufacturer	Deutz	
Type	TCD 2012 L06 2V	
Cooling	water	
Number of cylinders	6	
Rated power at 2,200 min <sup>-1</sup>	155 kW / 208 HP / 211 PS	
Displacement	6.1 l	
Fuel consumption at rated power   during a mixture of job site operations	42 l / h   17 l / h	
Emission standards	EU Stage 3a / US EPA Tier 3 / CN Stage 3	
<b>Electrical System</b>		
Electrical power supply	24 V	
<b>Tank Capacities</b>		
Fuel	320 l	
Hydraulic oil	80 l	
Water	700 l	
<b>Driving Performance</b>		
Travel speed in milling gear in 4-wheel drive design	0 to 30 m/min (0 to 1.8 km/h)	
Travel speed in travel gear	0 to 133 m/min (0 to 8 km/h)	
<b>Tires</b>		
Tire size, front (Ø x W)	620 x 230 mm	
Tire size, rear (Ø x W)	620 x 255 mm	
<b>Loading of the Milled Material</b>		
Belt width of discharge conveyor	400 mm	
Theoretical capacity of discharge conveyor	92 m <sup>3</sup> /h	

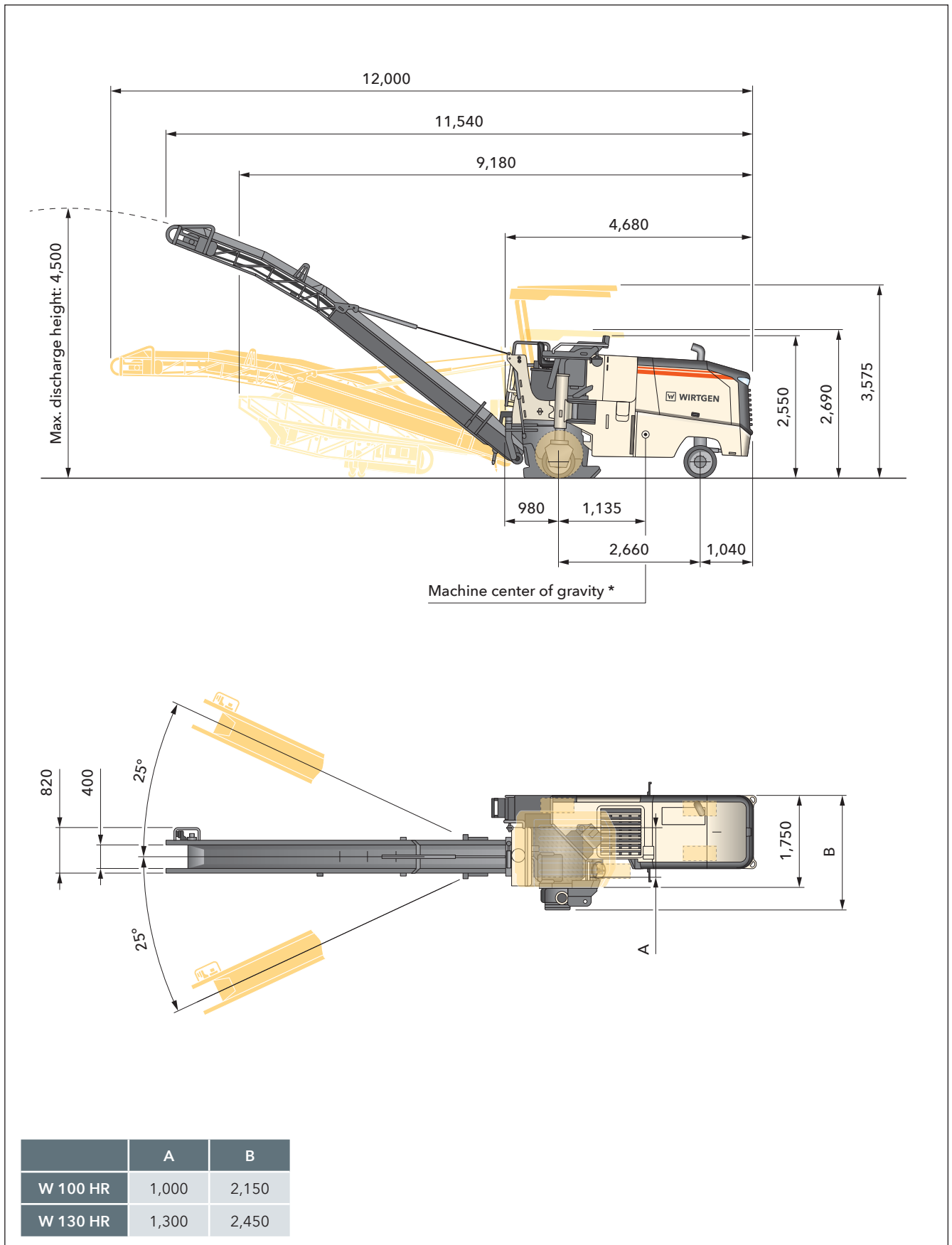
\*<sup>1</sup> = The maximum cutting depth may deviate from the value indicated due to tolerances and wear

	W 100 HR	W 130 HR
<b>Weight of Basic Machine</b>		
Net weight of machine with discharge conveyor, without operating agents	13,000 kg	13,500 kg
Operating weight, CE * <sup>2</sup>	13,600 kg	14,100 kg
Maximum operating weight (full tanks, full range of equipment)	14,200 kg	14,700 kg
<b>Weight of Operating Agents</b>		
Water	700 kg	
Fuel (0.83 kg/l)	265 kg	
<b>Additional Weight</b>		
<b>Operator and Tools</b>		
Machine operator	75 kg	
5 pick containers	125 kg	
On-board tools	30 kg	

\*<sup>2</sup> = Machine weight, half the weight of all operating agents, tools, machine operator, excluding optional equipment

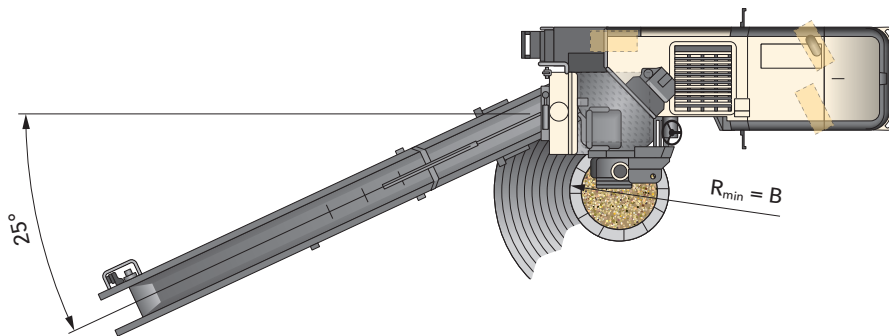
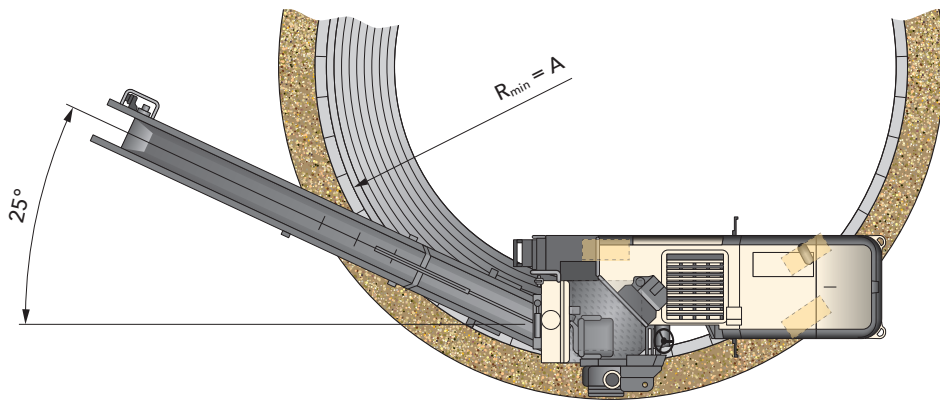
# Dimensions

## W 100 HR | W 130 HR



Dimensions in mm

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



	A	B
W 100 HR	3,800	550
W 130 HR	4,100	850

Milling radius, 150 mm milling depth, dimensions in mm

# Standard Equipment

## W 100 HR | W 130 HR

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	W 100 HR	W 130 HR
<b>Basic Machine</b>		
Base machine with engine	■	■
Engine cover with noise insulation	■	■
<b>Milling Drum Unit</b>		
Wide opening scraper plate with automatic electric safety drum shutdown	■	■
Hydrostatic milling drum drive	■	■
Milling drum housing FB1000, milling depth 200 mm for use with discharge conveyor, including scraper	■	-
Milling drum housing FB1300, milling depth 200 mm for use with discharge conveyor, including scraper	-	■
Side plate with hydraulic lifting function	■	■
<b>Milling Drums</b>		
Milling drum FB1000 HT22 LA18 with 80 picks	■	-
Milling drum FB1300 HT22 LA18 with 97 picks	-	■
<b>Loading of the Milled Material</b>		
Discharge conveyor, 8,020 mm long, 400 mm wide	■	■
<b>Machine Control and Leveling System</b>		
Digital milling depth indicator in the control display	■	■
Pre-programmable height positions with automatic positioning	■	■
<b>Operator's Platform</b>		
Continuous operator's platform with steering on right side	■	■
Canopy fiberglass manually lowering	■	■
<b>Track Unit and Height Adjustment</b>		
Infinitely variable, hydraulic all-wheel drive with three speed ranges	■	■
Solid tires	■	■
Hydraulic, easy front wheel steering	■	■
Digital representation on the display	■	■
For milling along kerb edges, the rear right support wheel can be swiveled mechanically in front of the milling drum	■	■
Hydraulically assisted spring-loaded brake	■	■
<b>Miscellaneous</b>		
Lighting system including 4 LED headlights and a rotating beacon	■	■
Water sprinkler unit with tank (700 l capacity)	■	■
Set of tools for maintenance and servicing	■	■
Standard painting in RAL 9001 (cream)	■	■
Mirror front right and rear left	■	■
Lighting system including 5 LED working lights, 24 V	■	■

- = Standard equipment
- = Standard equipment, replaceable with optional equipment
- = Optional equipment

# Optional Equipment

## W 100 HR | W 130 HR

	W 100 HR	W 130 HR
<b>Machine Control and Leveling System</b>		
LEVEL PRO <b>PLUS</b> leveling system right and left	<input type="checkbox"/>	<input type="checkbox"/>
RAPID SLOPE cross-slope sensor for LEVEL PRO <b>PLUS</b> leveling system	<input type="checkbox"/>	<input type="checkbox"/>
<b>Operator's Platform</b>		
Monitor system with 1 camera and an additional color screen	<input type="checkbox"/>	<input type="checkbox"/>

- = Standard equipment
- = Standard equipment, replaceable with optional equipment
- = Optional equipment



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