



The machine is also suitable for renovation work in industrial warehouses or parking garages.

The W 35 Ri stands out for its low machine weight with additional weights that can be used as required for optimum ballasting and traction to meet varying requirements.

The LEVEL PRO **PLUS** leveling system fully integrated into the machine control system guarantees high-precision milling results.



Highlights of the Cold Milling Machine at a Glance

HIGH-PRECISION, INTUITIVE LEVELING WITH LEVEL PRO PLUS

- > High-precision LEVEL PRO PLUS leveling system
- > Fast, electronic cross-slope sensor
- > Laser leveling

SIMPLE, ERGONOMIC OPERATION

- > Variable operator's platform for operation from above or at the rear of the machine
- > Ergonomically designed multifunctional armrest
- > Simple, intuitive operating concept
- > Unobstructed view of the right side plate and important working areas
- > Display for machine parameters



- > Excellent maneuverability and minimal milling radii
- > Particularly compact machine dimensions
- > Hydraulic steering system for precise steering

PRECISE STEERING WITH HIGH TRACTION

- > Hydraulic all-wheel drive for excellent traction
- > Precise height adjustment
- > Memory function for height adjustment
- > Electronically controlled travel drive for high-precision milling

HIGH PRODUCTIVITY WITH LOW **ENVIRONMENTAL EMISSIONS** > High-performance engine that meets EU Stage 5 exhaust emission standard > Built-in diesel particulate filter > Variable additional weights up to 1,400 kg > State-of-the-art WITOS FleetView telematics system for efficient operations > Optimally arranged LED work lights W 35 Ri W WIRTGEN IRTGEN 5| FLEXIBILITY FOR DIFFERENT **MILLING JOBS**

- > Wear-resistant HT08 toolholder system
- > Manually raisable side plate on right side
- > High-performance, load-dependent milling drum water sprinkling
- > Milling drum housing for working widths up to 350 mm or 500 mm
- > Rapid milling drum changes
- > Three different milling drum speeds
- > Milling power control for maximum advance speed

EFFICIENT LOADING OF MILLED MATERIAL

- > Height-adjustable discharge conveyor that can swing in both directions
- > Hydraulically raisable conveyor mounting
- > Discharge conveyor can be quickly mounted and demounted by only one person



EVERYTHING UNDER CONTROL

With the W 35 Ri small milling machine, operators have complete control. The machine features clearly and ergonomically arranged control instruments, a perfect view of the most important working areas, an additional operator's platform behind the milling drum, and the intuitive LEVEL PRO PLUS leveling technology is also on board. The W 35 Ri - for stress-free work and increased output.



High-Precision, Intuitive LEVEL PRO *PLUS* Leveling System

When milling it's important to remove the layers of asphalt at the specified depth. WIRTGEN's intuitive **LEVEL PRO PLUS** leveling technology can be relied on to precisely maintain the specified milling depth.

HIGH-PRECISION LEVELING SYSTEM

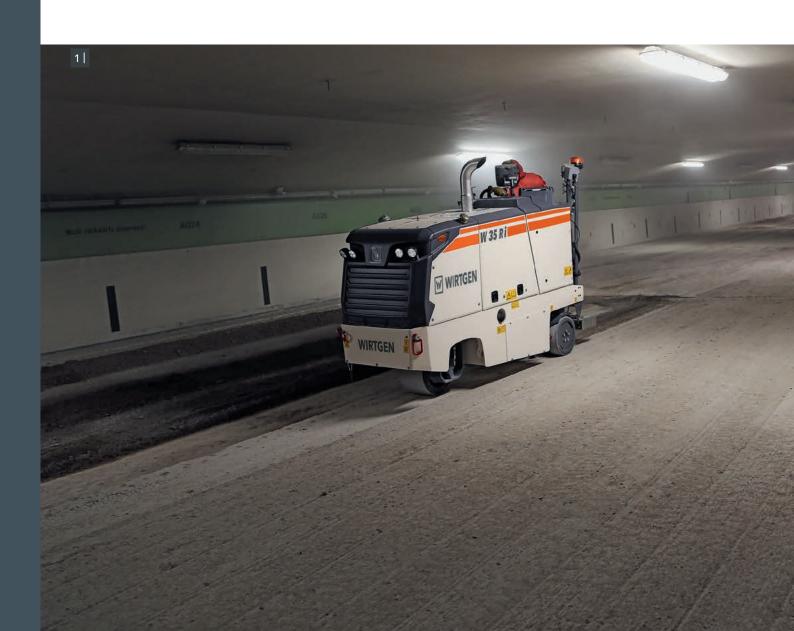
The **LEVEL PRO PLUS** leveling system programmed especially for cold milling machines offers easy and intuitive one-hand operation using the rotary knob, and the menu can be configured as desired. **LEVEL PRO PLUS** stands out due to its extremely precise milling results. The leveling system is fully integrated into the machine control system, enabling a high degree of automation.

FAST CROSS-SLOPE SENSOR

The fast, electronic RAPID SLOPE cross-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.

LASER LEVELING

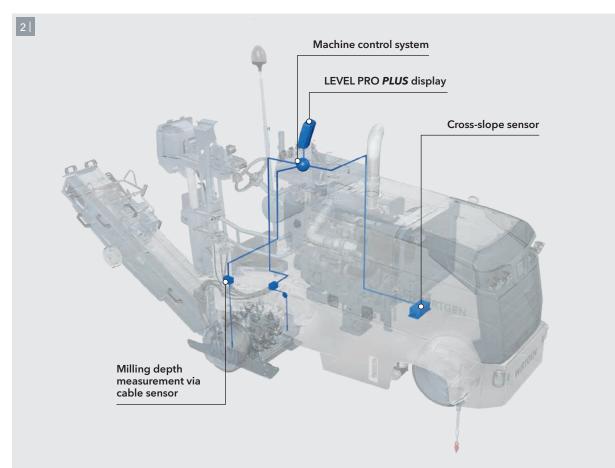
Laser sensors on the machine work in conjunction with a stationary rotating laser that creates a virtual reference surface. The extremely accurate height measurement via laser sensors is suitable, for example, for indoor milling work. Rotating lasers are not included in our delivery range.



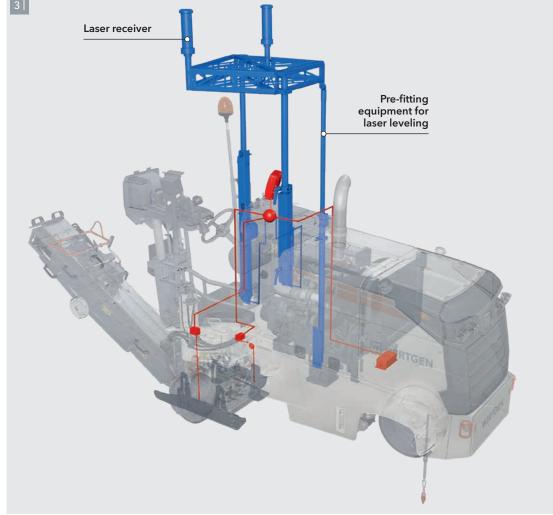
1 LEVEL PRO PLUS is synonymous with perfect leveling quality at high operating speeds.

2 | The LEVEL PRO PLUS leveling system uses a variety of different sensors.

3 | The pre-fitting equipment for laser leveling makes it possible to use laser receivers in combination with an external rotating laser. Laser leveling requires LEVEL PRO PLUS to be installed on the machine.







Simple, Ergonomic Operation

The effortless operation of the W 35 Ri is also perfectly integrated into the standardized operating concept of WIRTGEN's entire range of small milling machines, guaranteeing productive operation right from the start.

VARIABLE OPERATOR'S PLATFORM

For universal, ergonomic operation, the operator can choose to operate the small milling machine from above or from the rear of the machine. The operator can quickly and easily switch to the respective position on the job site.

ERGONOMIC MULTIFUNCTIONAL ARMREST

The individually adjustable armrest with multifunctional joystick guarantees fast, ergonomic operation.

INTUITIVE OPERATING CONCEPT

The simple operating concept increases the operator's performance and thus the productivity of the small milling machine.

UNOBSTRUCTED VIEW

An unobstructed view forward to the milled edge, of the right-hand side plate, and to the rear ensures that the machine can be used effectively on the job site in accordance with the on-site requirements.

DISPLAY

The display located in the operator's field of vision clearly shows important machine parameters.

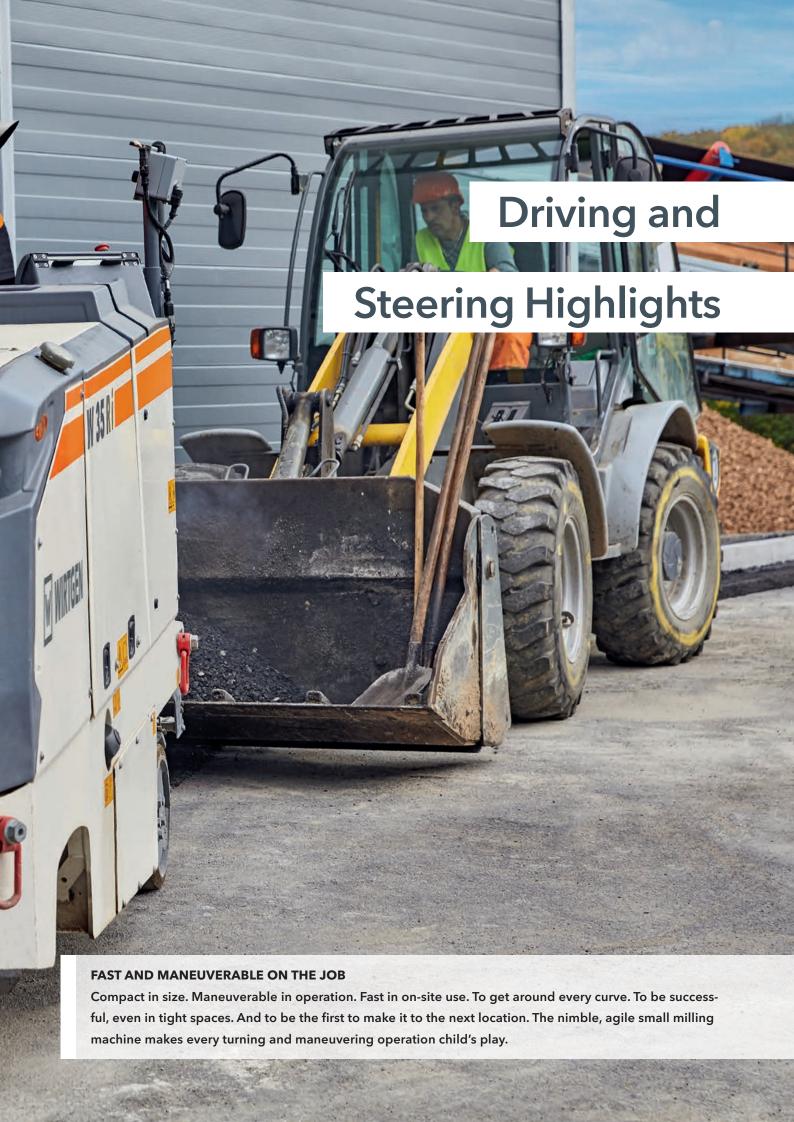


- 1 | The ergonomically designed operator's platform with multifunctional armrest significantly increases the machine's productivity.
- 2 The operator has everything under control with just one hand.
- 3 | The variable operator's platform that allows the position of the workstation to be changed increases the machine's range of applications.









A Highly Maneuverable and Compact Machine

The outstanding maneuverability of the extremely compact W 35 Ri small milling machine means that it can be used to complete a variety of jobs in the narrow sections of a milling site much more quickly and easily.

EXCELLENT MANEUVERABILITY

The large steering angles ensure that the the job site. It also features the smallest inside

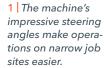
machine can quickly maneuver and turn on milling radius in its class.

COMPACT MACHINE DIMENSIONS

Thanks to its extremely compact design, the small milling machine can mill in confined spaces, fit through narrow factory doors, and is easy to transport.

PRECISE STEERING

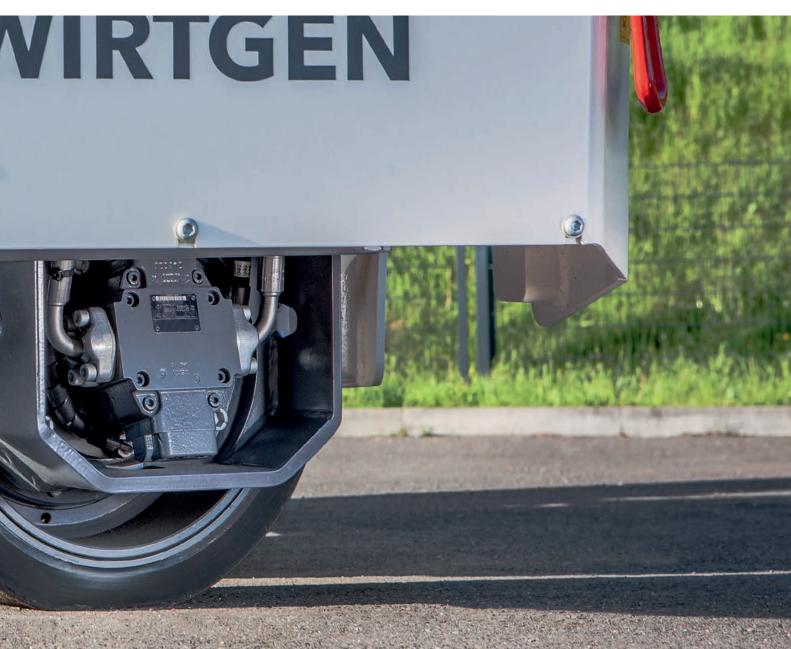
The hydraulic steering system features fast yet precise steering. When operated from the operator's platform at the rear of the machine, the machine can be steered electronically via the steering system built into the multifunctional joystick.





2 The small milling machine is ideally suited for fast maneuvering in narrow areas - also thanks to the ability to simply swing in the right rear wheel.





Precise Steering with High Traction

The W 35 Ri is equipped with a sensitive steering system that enables it to mill with maximum precision whenever required - such as around hydrants or drains, for example. In addition, optimal traction ensures that milling operations can be carried out without interruption.

HYDRAULIC ALL-WHEEL DRIVE

The machine's hydraulic all-wheel drive offers excellent traction in difficult job site situations and during loading.

PRECISE HEIGHT ADJUSTMENT

The electrohydraulic, two-stage height adjustment system allows the operator to set the milling depth precisely.

MEMORY FUNCTION FOR HEIGHT ADJUSTMENT

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.

ELECTRONICALLY CONTROLLED TRAVEL DRIVE

The electronically controlled travel drive with one transport speed and two milling speeds makes fine maneuvering possible when extremely precise milling is required.



1 - 2 | The electronically controlled travel drive makes high-precision milling possible - such as around road installations, for example.







It doesn't matter whether you're milling out smaller areas, milling out a space around manhole covers, marking road surfaces and removing markings, or doing fine milling work in combination with a large milling machine. Equipped with different milling drums and WIRTGEN's innovative cutting technology, the versatile W 35 Ri small milling machine has the right answer to nearly every challenge.

Flexibility for Different Milling Jobs

Intelligent milling drum, side plate, and scraper solutions make milling faster, easier, and increase overall quality.

WEAR-RESISTANT HT08 TOOLHOLDER SYSTEM

The HT08 toolholder system stands out thanks to its outstanding wear resistance and long tool life.

RAISABLE SIDE PLATE ON RIGHT SIDE

Side plates on both sides reliably seal the drum housing and enable the milled material to be loaded cleanly. The side plate on the right side can be conveniently raised via a foot pedal in order to drive over obstacles (such as a curb).

HIGH-PERFORMANCE, LOAD-DEPENDENT WATER SPRINKLING

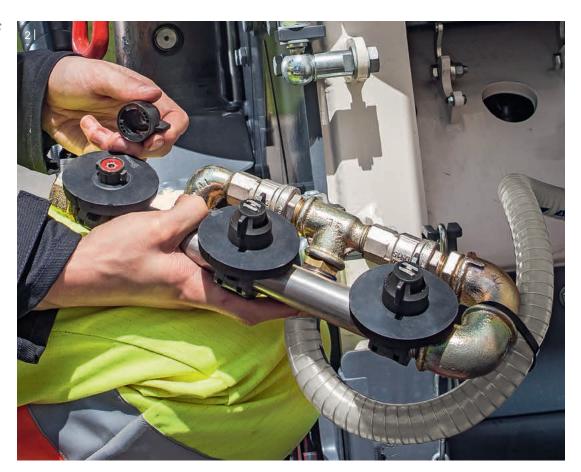
Together with the water spray bar, the high-performance, load-dependent water pump reliably cools the picks, binds dust, and ensures that the machine remains productive for extended periods of time. It also maintains constant high water pressure for easy machine cleaning on the job site.

1 | The right side plate can be raised via a foot pedal.



2 The sprinkler unit is easily accessible and the individual spray nozzles can be easily removed for cleaning.

3 All of the picks can be easily and conveniently replaced after opening the MCS side panel.







Flexibility for Different Milling Jobs

MILLING DRUM HOUSINGS FOR WORKING WIDTHS UP TO 350 MM AND 500 MM

The standard milling drum housing can be fitted with milling drums with a working width of up to 350 mm, and with milling drums with a working width of up to 500 mm at the customer's request. A large number of different original WIRTGEN milling drums and special milling drums are available.

RAPID MILLING DRUM CHANGES

The hinged MCS side panel on the right and intelligent installation tools allow milling drums to be changed in a short period of time.

1 | Numerous different milling drums make a wide range of applications possible.

THREE DIFFERENT MILLING DRUM SPEEDS

Three different milling drum speeds make it possible to achieve unparalleled milling performance in a wide range of applications.

MILLING POWER CONTROL FOR MAXIMUM ADVANCE SPEED

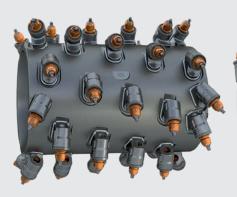
The electronic load limitation regulator that can be activated as required adjusts the advance rate as a function of the engine load so that the small milling machine always operates at the ideal milling speed.















Efficient Loading of Milled Material

Anyone who has the arduous task of manually removing milled material from the milled surface will immediately appreciate the W 35 Ri rear loader's height-adjustable discharge conveyor that can swing in both directions. It transports the milled material effectively and safely into a wheel loader bucket, for instance.

HEIGHT-ADJUSTABLE DISCHARGE CONVEY-OR THAT CAN SWING IN BOTH DIRECTIONS

The height-adjustable discharge conveyor that can swing in both directions ensures that the milled material can be easily loaded, even in difficult job site conditions. In this process, the angle can be conveniently adjusted using a cable winch.

HYDRAULICALLY RAISABLE CONVEYOR MOUNTING

The hydraulically raisable conveyor mounting, combined with the hydraulic scraper, not only ensures that the milled material is loaded cleanly, but also makes it possible to load only part of the milled material, if required.

RAPID MOUNTING AND DEMOUNTING OF THE DISCHARGE CONVEYOR

The intelligent design ensures that the discharge conveyor can be mounted / demounted quickly by just one person. Thanks to the roller unit, the demounted discharge conveyor can be moved effortlessly around the job site.

1 The variably adjustable discharge conveyor makes it possible to reliably load a wheel loader bucket or mini-dumper.





Small cold milling machines like WIRTGEN's W 35 Ri are capable of delivering outstanding results. Responsive and powerful - thanks to electronic engine control. Efficient in operation - thanks to innovative technologies like WIDRIVE and WITOS FleetView. Environmentally friendly - thanks to state-of-the-art engine technology. The W 35 Ri is the small milling machine that makes a big impact.

High Productivity with Low Environmental Emissions

The W 35 Ri equips contractors with sophisticated technology - a key factor in ensuring consistently high operational safety and daily output rates. The machine is even perfect for job sites that only allow minimal exhaust emissions.

HIGH-PERFORMANCE DIESEL ENGINE THAT MEETS EU STAGE 5 EMISSION STANDARD

The powerful diesel engine with temperature-dependent fan speed guarantees quiet, economical operation and high power reserves for fast milling at any milling depth. The engine also meets the stringent requirements of the EU Stage 5, currently the highest emission standard.

BUILT-IN DIESEL PARTICULATE FILTER

The built-in diesel particulate filter that comes standard meets even more stringent emission requirements, e.g. for indoor milling operations.

VARIABLE ADDITIONAL WEIGHTS

The wide ballasting range consists of individually removable weight plates up to a total of 1,400 kg, increasing the machine's range of applications.

WITOS FLEETVIEW TELEMATICS SYSTEM

WIRTGEN's efficient WITOS FleetView telematics system supports fleet management, position and status monitoring, as well as maintenance and diagnostic processes.

LED WORK LIGHTS

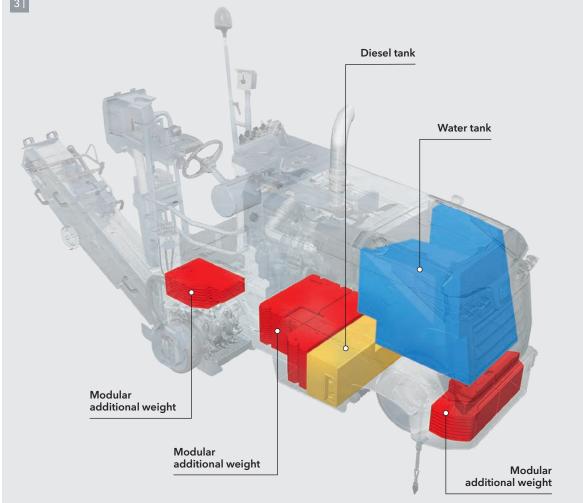
The ideal arrangement of the LED work lights ensures that the entire machine environment is brightly illuminated.



- 1 Excellent access to components makes servicing the machine easy.
- 2 LED headlights offer excellent visibility and safety in the dark.
- 3 Additional weights ensure that the machine has excellent traction in any application and without the additional weights, the machine can also be used for milling in buildings with limited load capacity, for example.







Technical Specifications

W 35 Ri

	Standard FB350	Optional FB500
Milling Drum		
Milling width	350 mm	500 mm
Milling depth*1	0 - 110 mm	
Cutting diameter	460 mm	
Engine		
Manufacturer	Deutz AG	
Туре	TCD 2.9 L4	
Cooling	Water	
Number of cylinders	4	
Rated power at 2,300 rpm	45 kW / 60 HP / 61 PS	
Maximum power at 2,300 rpm	45 kW / 60 HP / 61 PS	
Displacement	2,925 cm ³	
Fuel consumption at rated power during a mixture of job site operations	13.2 l/h 8.8 l/h	
Sound power level in accordance with DIN EN 500-2 engine operator's platform	≤ 100 dB(A) ≥ 80 dB(A)	
Emissions standard	EU Stage 5	
Electrical System		
Power supply	24	1 V
Tank Capacities		
Fuel	70	
Hydraulic oil	321	
Water	275	
Driving Performance		
Max. milling speed	0 - 25 m/min (0 - 1.5 km/h)	
Max. travel speed	0 - 100 m/min (0 - 6 km/h)	
Tires		
Tire size, front (D x W)	500 x 250 mm	
Tire size, rear (D x W)	405 x 130 mm	
Loading of Milled Material		
Belt width of primary conveyor	250 mm	
Theoretical capacity of discharge conveyor	33 m³/h	

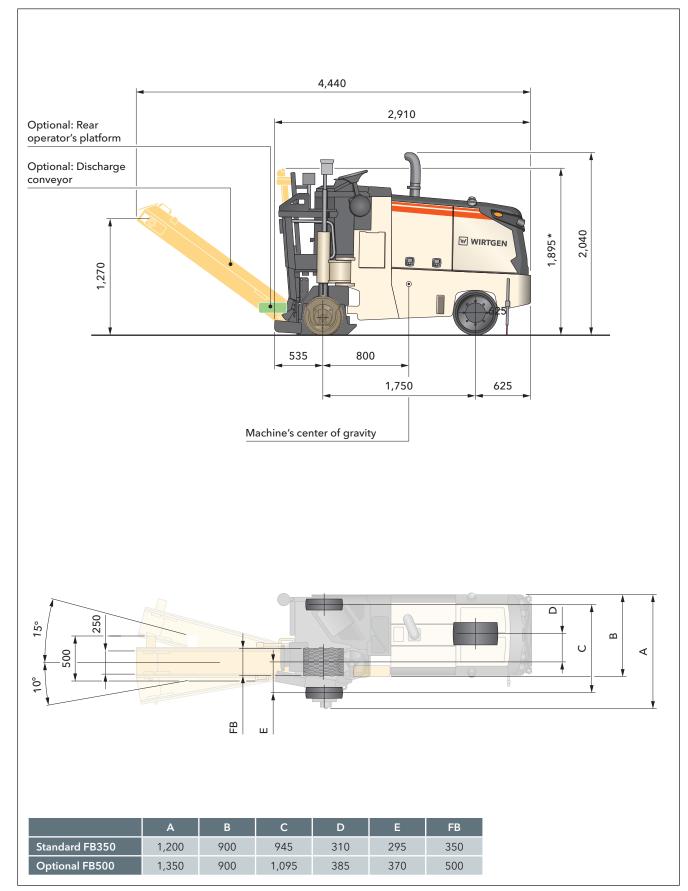
 $[\]star^1$ = The maximum milling depth may deviate from the value indicated due to tolerances and wear.

Basic Machine Weight			
Net weight of machine without fluids	2,97	'0 kg	
Operating weight, CE*2, including additional weights	4,650 kg		
Maximum operating weight (full tanks, full range of equipment)	5,200 kg		
Weight of Tank Contents			
Water	275	5 kg	
Fuel (0.83 kg/l)	58	kg	
Additional Weight			
Operator and Tools			
Machine operator	75 kg		
2 pick containers	50 kg		
Vehicle tool kit	30	kg	
Optional Milling Drum Units Instead of Standard	Absolute Weight	Additional / Reduced Weight	
Attachments for milling drum housing FB350 - for operation with discharge conveyor	51 kg	29 kg	
Attachments for milling drum housing FB500 - for operation without discharge conveyor	100 kg	78 kg	
Attachments for milling drum housing FB500 - for operation with discharge conveyor	161 kg	139 kg	
Optional Milling Drums Instead of Standard			
Milling drum FB350 HT5 LA6 with 57 picks	108 kg	18 kg	
Milling drum FB350 HT4 LA3 with 117 picks	103 kg	13 kg	
Milling drum FB500 HT08 LA15 with 39 picks	123 kg	33 kg	
Milling drum FB500 HT5 LA6 with 82 picks	160 kg	70 kg	
Micro fine milling drum with gutter profile, FB150+2x25 (lateral discharge) HT4 LA3 with 67 picks	97 kg	7 kg	
Milling drum FB200+2x25 HT4 LA3 with 83 picks	98 kg	8 kg	
Milling drum FB250+2x25 HT4 LA3 with 99 picks	100 kg	10 kg	
Milling drum FB300+2x25 HT4 LA3 with 117 picks	100 kg	10 kg	
Milling drum FB450+2X25 HT4 LA3 with 166 picks	143 kg	53 kg	
Saw blade FB14 for rail milling	10 kg	-80 kg	
Saw blade FB19 for rail milling	13 kg	-77 kg	
Rail milling attachments Ri59N	57 kg	57 kg	
Milling drum FB25 with 6 picks for rail milling	17 kg	-73 kg	
Milling drum FB45 with 24 picks for rail milling	28 kg	-62 kg	
Milling drum FB80 HT02 FT110 with 12 picks	26 kg	-64 kg	
Optional Additional Weights			
Modular additional weight	1,400 kg	1,400 kg	
Optional Additional Equipment			
Discharge conveyor, 1,870 mm long, conveyor belt width 250 mm	125 kg	125 kg	
Additional scraper flap FB350 as prerequisite for footboard unit	18 kg	0 kg	
Additional scraper flap FB500 as prerequisite for footboard unit	22 kg	0 kg	
Lowered operator's platform behind the machine	51 kg	51 kg	
Mounting for side milling wheel FB80, FT180, complete	196 kg	84 kg	
Hydraulic jack hammer with 10 m connection hose	37 kg	37 kg	

 $^{^{\}star 2} = \text{Machine weight, half-full tanks, vehicle tool kits, machine operator, excluding optional equipment}$

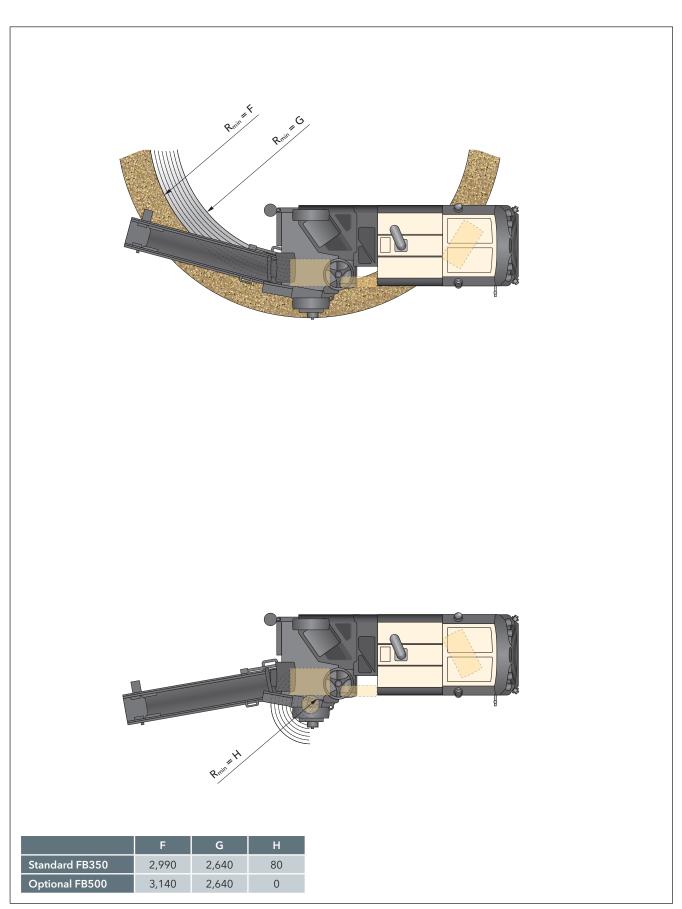
Dimensions

W 35 Ri



Dimensions in mm

^{* =} Maximum machine height with exhaust pipe removed



Standard Equipment

W 35 Ri

Basic Machine	
Base machine with engine	
Robust machine chassis	
Wide opening engine cowlings, with gas spring support and highly effective noise insulation	•
Radiator with temperature-dependent fan speed	-
Integrated 72 gal water tank	•
Integrated 18 gal diesel tank	-
Loading and tie-down points integrated in the chassis	-
Exhaust after-treatment diesel oxidation catalyst DOC with diesel particulate filter DPF	-
Milling Drum Assembly	
Water sprayingstrip with on/off function for pick cooling with water pump with load-dependent control	-
Wide opening milling drum door with automatic electrical safety shut-down	-
Right side plate in hinged configuration in conjunction with centering pin system on the milling drum holder for quick and easy change of milling drums	-
The right-hand side plate can be easily lifted using the foot pedal on the operator's stand	-
Ancillary parts for milling drum housing FB350 - for operation without discharge conveyor	
Milling Drums	
Milling drum FB350 HT08 LA15 with 31 picks	
Machine Control and Level ling System	
WIDRIVE machine controller to reduce operator workload and increase performance	-
Mechanical milling depth display right and left	
Operator's Platform	
Flexibly mounted operator's platform on the top of the machine	-
Multi-function armrest on right with up / down and front/back adjustment with joystick and various controls ergonomically arranged	•
Display for important machine parameters on the left control panel	-
Convenient operating console with practical switches	-
Convenient footstep to the operator's platform	
Operator's platform with vibration damping	-
Steering console with adjustable inclination	
Lockable control panel covers	

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

Track Unit and Height Adjustment	
Hydraulic 3-wheel all-wheel drive with hydraulic flow distributor	
Two manually engageable milling speeds as well as one traveling gear	
Hydraulic, easy front wheel steering	-
Hydraulic spring-loaded multi-disc brake	-
Hydraulic height adjustment with two speeds at the rear track units	-
Manually folding-in rear right wheel	
Miscellaneous	
Lockable toolbox with toolkit for maintenance and servicing	
Additional mount for a pick container	-
Device for towing away for releasing the spring-loaded multi-disc brake	•
Reversing horn	
Extensive safety package with EMERGENCY STOP switch	-
Pre-fitting for installing the WITOS FleetView control unit	
European type certification, EuroTest mark and CE conformity	-
Machine without additional hydraulic drive	
Standard painting in RAL 9001 (cream)	
WITOS FleetView - professional telematics solution for machine operation and service optimisation	
Halogen lighting system including rotating beacon	

Optional Equipment

W 35 Ri

Milling Drum Assembly	
Ancillary parts for milling drum housing FB350 - for operation with discharge conveyor	
Ancillary parts for milling drum housing FB500 - for operation without discharge conveyor	
Ancillary parts for milling drum housing FB500 - for operation with discharge conveyor	
Milling Drums	
Milling drum FB500 HT08 LA15 with 39 picks	
Side milling ring FB80, milling depth 180 mm complete	
Ancillary parts rail milling Ri59N	
Milling drum FB25 with 6 picks rail milling	
Milling drum FB45 with 24 picks rail milling	
Saw blade FB14 rail milling	
Saw blade FB19 rail milling	
Adapter with saw blade FB14, MD100	
Adapter with saw blade FB19, MD100	
Fine milling drum FB350 HT5 LA6 with 57 picks	
Microfine milling drum FB350 HT4 LA3 with 117 picks	
Microfine milling drum gutter profile, FB150+2x25 (lateral taper) HT4 LA3 with 67 picks	
Milling drum FB200+2x25 HT4 LA3 with 83 picks	
Milling drum FB250+2x25 HT4 LA3 with 99 picks	
Milling drum FB300+2x25 HT4 LA3 with 117 picks	
Milling drum FB80 HT02 MD110 with 12 picks	
Fine milling drum FB500 HT05 LA6 with 82 picks	
Milling drum FB450+2X25 HT4 LA3 with 166 picks	
Loading of the Milled Material	
Discharge conveyor, 1,870 mm long, conveyor belt width 250 mm, includes rope winch height adjustment	
Connection pipe Ø 120 mm for dust extraction	

⁼ Standard equipment

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

⁼ Optional equipment

Machine Control and Leveling System	
LEVEL PRO PLUS leveling system right and left	
Pre-fitting for laser levelling with two laser receiver - without laser transmitter	
RAPID SLOPE cross-slope sensor for LEVEL PRO <i>ACTIVE</i> leveling system	
Pre-programmable height positions with automatic positioning	
Operator's Platform	
Equipment of the operator's platform with a stand-up seat	
Additional scraper plate FB350 required for footboard unit. (For machine with discharge conveyor).	
Additional scraper plate FB500 required for footboard unit. (For machine with discharge conveyor).	
Operator's platform in lowered position behind the machine	
Miscellaneous	
Hydraulic drive for discharge conveyor or hydraulic jack hammer	
Painting in one special color (RAL)	
Painting in two special colors (RAL)	
Model without WITOS FleetView	
High-power lighting system LED including rotating beacon	
Modular additional weight 1,400 kg	
Hydraulic hammer including 10-m connecting hose	
License plate holder with LED lighting	

 ^{■ =} Standard equipment
□ = Standard equipment, can be replaced with optional equipment if desired
□ = Optional equipment



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