

At a glance: outstanding features of the new cold milling machines

Highlights in operation (pages 4/5)

11 INTUITIVE, PRECISE LEVELING WITH LEVEL PRO PLUS

- > Easy and intuitive operation
- > Many newly added complementary and automated features
- > Fully integrated into the machine management system
- > Milling depth measurement via displacement sensors in the hydraulic cylinders of the side plates
- > Hydraulically telescoping leveling arm

21 MULTIFUNCTIONAL ARMREST BOOSTS EFFICIENCY

- > Ergonomically designed multifunctional armrest with color control screen
- > User-programmable "Favorites" keys
- > Job data are recorded and displayed on the control screen

3 OPTIMIZED VISIBILITY FOR PRECISE OPERATION

- > Unobstructed view of the right-hand side plate
- > Good rear visibility
- > High-quality camera system

4 OPERATOR COMFORT

- > Rotating, heated driver's seat
- > Electrical water tank filling level indicator
- > Convenient machine access including "Welcome" and "Go home" lights
- > Wind and weather protection elements on the operator's platform

Highlights in driving and steering (pages 6/7)

5 DYNAMIC AND QUICK MANEUVERABILITY

- > Travel speed of up to 4.7 mph (7.5 km/h)
- > Reversing with the milling drum switched on
- > Quick, precise height adjustment
- > Memory function for height adjustment
- > Electronically controlled traction drive

Highlights in performance and productivity (pages 10/11)

91 HIGH EFFICIENCY FOR TREMENDOUS PRODUCTIVITY

- > Variable supplementary weights of up to 882 lbs. (400 kg)
- > Many new automated functions
- > Automated process of lowering the milling drum into working position including relief sensors
- > Hydraulically engaging power belt tensioner
- > State-of-the-art WITOS Telematics System
- > Optimized ease of servicing

10 LOW EMISSION LEVELS

- > Engine models complying with EC Stage 3a/US Tier 3 emission standards or the stringent EC Stage 4/US Tier 4f emission standards
- > Standard diesel particulate filter for model complying with EC Stage 4/US Tier 4f
- > Three different milling drum speed options
- > Optimized soundproofing and heat insulation
- > Speed-governed fan drive



61 MAXIMUM MANEUVERABILITY

- > Highly precise steering via the fingertip steering feature integrated in the armrest
- > Swift steering using the steering wheel
- > Extremely large locking angle of the front wheels
- > Compact machine dimensions

51 SUPERIOR CUTTING TECHNOLOGY BOOSTS PERFORMANCE

- > Extremely hard-wearing HT22 quick-change toolholder system as a standard feature
- > Hydraulic tool extractor for the quick replacement of cutting tools
- > Overload sensor at the scraper blade and proactive floating position at the side plates, left and right
- > Water spray volume adjustable electrically from the operator's platform

81 HIGH LOADING CAPACITY FOR MAXIMUM PERFORMANCE

- > Hydraulic folding conveyor can be folded up quickly during operation on site
- > Wide conveyor slewing angles
- > Quick-release coupling for easy mounting and removal of the discharge conveyor

Highlights in operation

INTUITIVE LEVELING FULLY INTEGRATED LEVELING SYSTEM The new LEVEL PRO PLUS leveling A high degree of automation is enabled by the system is easy and intuitive to use, full integration of the LEVEL PRO PLUS leveling and thus guarantees exceedingly system with the machine control system. accurate milling results. Courtesy of Machine. Market

HEIGHT MEASUREMENT SENSORS

Heavy-duty displacement sensors located in the hydraulic cylinders mounted on the protective side plates accurately measure the milling depth and transfer this information onto the high-resolution LEVEL PRO PLUS control screen.

CAMERA SYSTEM

The high-quality camera system provides the operator with a high-resolution image of the milling edge or point of material discharge.

JOB DATA

Pertinent job details are provided automatically to allow the display of daily performance rates.

MULTIFUNCTIONAL ARMREST

The multifunctional, individually adjustable armrest combines innovative design and perfect user-friendliness. Important information is displayed on the color control screen.

"FAVORITES" KEYS

Four "Favorites" keys can be programmed with 20 different functions.

REAR VISIBILITY

The compact loading conveyor suspension system permits good visibility of the milled surface at the rear of the machine.

VIEW OF THE AREA AHEAD OF THE MILLED SURFACE

The geometry of the operator's platform has been optimized to ensure an unobstructed view of the right-hand side plate.

ADDITIONAL LEVELING FEATURES

The LEVEL PRO PLUS leveling system provides many automated and supplementary features, including the automatic lowering of the milling drum to the set milling depth.

LEVELING ARM

The telescoping leveling arm allows sensing along reference surfaces at a distance of up to 6 ft. 7 in. (2.0 m) to the side of the machine, ensuring perfect milling results even in complex leveling situations.

ELECTRICAL WATER FILLING LEVEL INDICATOR

The water tank filling level can be checked conveniently via the control screen.

ERGONOMIC DRIVER'S SEAT

The driver's seat with integrated seat heating can be rotated to the left and right to offer a good view to the side and to the rear.

"WELCOME" AND "GO HOME" LIGHTS FEATURE

The access ladder and operator's platform are fully illuminated when approaching or walking away from the machine.

WEATHER PROTECTION

Additional wind and weather protection elements on the operator's platform offer protection from exposure to rain and wind.



View of the area ahead of the milled surface.



LEVEL PRO PLUS leveling system.

Highlights in driving and steering

SWIFT STEERING

The steering wheel is used for particularly quick steering.

FINGERTIP STEERING

The highly responsive hydraulic steering system enables the machine to be steered quickly and effortlessly also via the right-hand armrest.

REVERSING

Reversing with the milling drum switched on permits fast and easy maneuvering on the job site.



LARGE STEERING ANGLE

Large steering angles to the left and right guarantee small turning radius.

ELECTRONIC TRACTION DRIVE CONTROL

The electronically controlled traction drive with two transport and two milling speeds allows precise maneuvering for highly precise milling results.

COMPACT MACHINE DESIGN

Its compact design enables the small milling machine to work in narrow passages and ensures ease of transport.

MAXIMUM SPEED OF 4.7 MPH (7.5 KM/H)

The machine's travel speed of up to 4.7 mph (7.5 km/h) ensures the quick completion of construction projects.

QUICK HEIGHT ADJUSTMENT

Electro-hydraulic height adjustment enables precise adjustment of the milling depth.

MEMORY FUNCTION FOR HEIGHT ADJUSTMENT

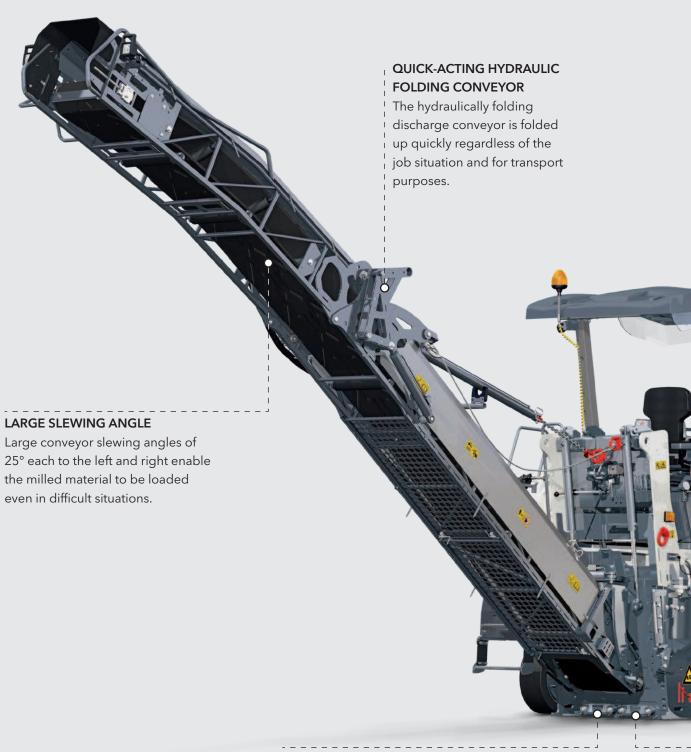
To allow quick, convenient height adjustment, three different height positions per machine side can be saved on memory buttons in the multifunctional armrest.





Large steering angle at the front.

Highlights in milling and loading



ALTERNATIVE MILLING WIDTHS

Milling widths FB600 and FB1000 are available for the W 100 R/W 100 Ri. Milling width FB1200 is available for the W 120 R/W 120 Ri.

OVERLOAD SENSORS AND ACTIVE FLOATING POSITION

These smart, automated functions prompt the scraper blade or side plates to be raised briefly, for example, to prevent sinking in on soft ground.

HT22 HEAVY-DUTY QUICK-CHANGE TOOLHOLDER SYSTEM

The extremely hard-wearing HT22 quick-change toolholder system (standard) minimizes breaks in operation and increases the lifespan of the entire milling drum.

HYDRAULIC TOOL EXTRACTOR

The hydraulically operated tool extractor assists the machine operator in replacing the cutting tools.

ELECTRICALLY ADJUSTABLE WATER SPRAY VOLUME

The water spray volume can be adjusted from the operator's platform to ensure reliable tool cooling, prevent dust development and enable extended uptimes.

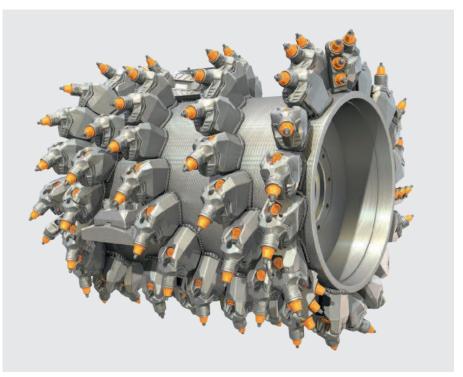
QUICK-RELEASE COUPLING

The innovative quick-release coupling ensures easy plugging and unplugging of the hydraulic connections when mounting or removing the discharge conveyor.



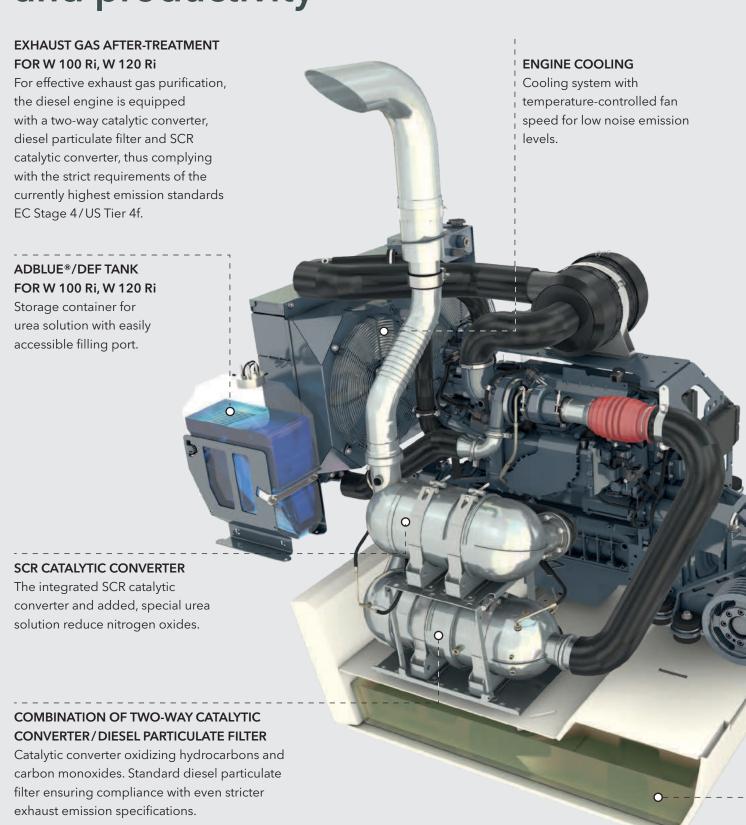
VARIOUS MILLING DRUMS

A vast array of original WIRTGEN standard and special milling drums is on offer to cater to a wide range of applications.



The highly effective WIRTGEN milling drums deliver excellent milling performance.

Highlights in performance and productivity



SUPPLEMENTARY WEIGHTS

Supplementary weights of up to 882 lbs (400 kg) altogether provide for high operating weight, optimum traction and effortless transport.

DIFFERENT MILLING DRUM SPEEDS

Three different milling drum speeds enable tremendous milling outputs in a wide range of applications.

SOUNDPROOFING AND HEAT INSULATION

Effectively optimized soundproofing and heat insulation significantly reduce noise emission levels.

HYDRAULIC POWER BELT TENSIONER

The automatically engaging, hydraulically operated power belt tensioner enables efficient and reliable transmission of power.

STATE-OF-THE-ART WITOS TELEMATICS SYSTEM

The efficient WIRTGEN WITOS FleetView telematics system supports fleet management, machine position and status monitoring, as well as maintenance and diagnostic procedures.

AUTOMATED LOWERING OF THE DRUM INTO WORKING POSITION

The integrated, automated feature of lowering the milling drum into working position uses relief sensors to significantly facilitate machine operation.

MANY NEW AUTOMATED FUNCTIONS

The WIDRIVE machine management system greatly improves operator comfort and increases performance by controlling the engine speed and travel speed or switching the water spray system on and off.



W 100 R, W 120 R for EC Stage 3a/US Tier 3: high-performance, fuel-efficient engine technology.

OPTIMIZED EASE OF SERVICING

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



The anti-vibration mounted engine station ensures low vibration and noise levels, thus offering high driving comfort.

LARGE DIESEL TANK

The large diesel tank enables extended machine uptimes.

Technical specification

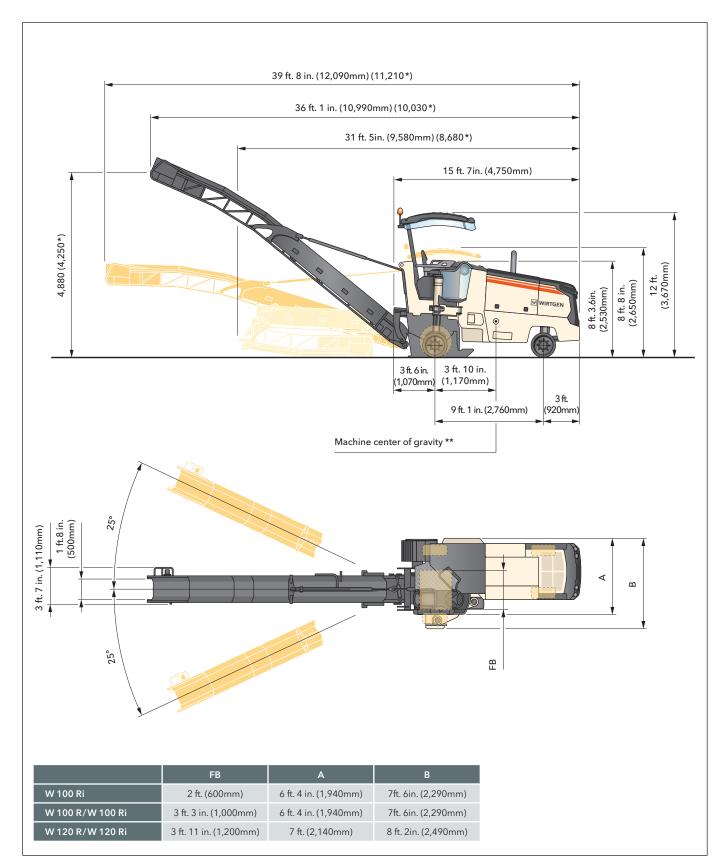
	W 100 R	W 120 R	W 100 Ri	W 120 Ri	
Milling drum					
Milling width standard	3 ft. 3 in. (1,000 mm)	3 ft. 11in. (1,200 mm)	3 ft. 3 in. (1,000 mm)	3 ft. 11in. 1,200 mm	
Milling width optional	-	-	23 in. (600 mm)	-	
Milling depth*1		0 to 11.8 in	n. (300 mm)		
Drum diameter with tools		3 ft. (9	30 mm)		
Engine					
Engine manufacturer		De	eutz		
Туре	TCD 201	2 L06 2V	TCD (5.1 L6	
Cooling		Wa	ater		
Number of cylinders			6		
Rated power at 2,300 min ⁻¹	155 kW/208	3 HP/211 PS	160 kW/215	160 kW/215 HP/218 PS	
Maximum power at 2,300 min ⁻¹	155 kW/208	3 HP/211 PS	160 kW/215 HP/218 PS		
Displacement		6.	1 L		
Fuel consumption at rated power	11 gallon	s (42 l/h)	11.25 gallons (44 l/h)		
Fuel consumption in field mix	4 gallons (17 l/h)		4.5 gallons (18 l/h)		
Emission standards	EC Stage 3	a/US Tier 3	EC Stage 4/US Tier 4f		
Electrical system					
Electrical power supply		24	4 V		
Tank capacities					
Fuel tank		126.5 gal	lons (480 l)		
AdBlue®/DEF tank	- 8 gallons		ns (32 l)		
Hydraulic oil tank		22 gallo	ons (86 I)		
Water tank	217 gallons (825 I)				
Driving properties					
Max. milling speed	0 to 108 ft. (33 m)/min (0 to 2 km/h)				
Max. travel speed	0 to 413 ft. (126 m)/min (0 to 7.5 km/h)			h)	
Tyres					
Tyre size front (Ø x W)	2 ft. X 9 in. (620 x 230 mm)				
Tyre size rear (Ø x W)	2 ft. X 10 in. (620 x 255 mm)				
Loading of the milled material					
Belt width of discharge conveyor	19 in. (500 mm)				
Theoretical capacity of discharge conveyor	150 tons / hr				

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

	W 100 R	W 120 R	W 100 Ri	W 120 Ri
Weight of base machine				
Empty weight of machine without tank contents	30,865 lbs. 14,000 kg	32,298 lbs.	31,085 lbs.	32,518 lbs.
Operating weight, CE*	32,298 lbs.	14,650 kg 33,731 lbs.	14,100 kg 32,518 lbs. 14,750 kg	14,750 kg 33,951 lbs.
Operating weight, max, (full tanks, full range of equipment)	14,650 kg 34,392 lbs. 15,600 kg	15,300 kg 38,912 lbs.	34,613 lbs.	15,400 kg 39,132 lbs.
Weights of tank contents	15,600 kg	17,650 kg	15,700 kg	17,750 kg
Water tank filling		1,818 lbs	s. (825 kg)	
Diesel tank filling (0.83 kg/l)		881 lbs.	. (400 kg)	
AdBlue®/DEF tank filling (1.1 kg/l)		_	77 lbs. (35.2 kg)
Additional add-on weights				
Driver and tools				
Driver		165 lbs	s. (75 kg)	
Weight of 2 cutting tool containers		110 lbs	s. (50 kg)	
On-board tools		66 lbs.	. (30 kg)	
Optional milling drum assemblies in lieu of standard				
Milling drum housing FB600 FCS	-	-	66 lbs. (30 kg)	-
Milling drum housing FB1000 FCS-L	440 lbs. (200 kg)	-	440 lbs. (200 kg)	-
Milling drum housing FB1200 FCS-L	-	661 lbs. (300 kg)	-	661 lbs. (300 kg)
Optional milling drums in lieu of standard				
Milling drum FB600 HT22 LA15 with 75 picks	-	-	396 lbs. (180 kg)	-
FCS-Milling drum FB1000 HT22 LA15 with 100 picks	44 lbs. (20 kg)	-	44 lbs. (20 kg)	-
FCS-Milling drum FB1000 HT22 LA18 with 90 picks	88 lbs. (40 kg)	-	88 lbs. (40 kg)	-
FCS-Milling drum FB1200 HT22 LA15 with 100 picks	-	198 lbs. (90 kg)	-	198 lbs. (90 kg)
FCS-Milling drum FB1000 HT22 LA8 with 148 picks	794 lbs. (360 kg)	-	794 lbs. (360 kg)	-
FCS-Milling drum FB1200 HT22 LA8 with 173 picks	-	882 lbs. (400 kg)	-	882 lbs. (400 kg)
FCS-Milling drum FB1000 HT5 LA5 with 340 picks	661 lbs. (300 kg)	-	661 lbs. (300 kg)	-
FCS-Milling drum FB1200 HT5 LA6x2 with 406 picks	-	794 lbs. (360 kg)	-	794 lbs. (360 kg)
Optional supplementary weights				
Supplementary weight for flexible use	882 lbs. (400 kg)			
Optional additional equipment				
Discharge conveyor 24 ft. 1 in. (7,350 mm) long, 1 ft. 8 in. (500 mm) wide, with hydraulic folding device	375 lbs. (170 kg)			
Discharge conveyor 21 ft. 4 in. (6,500 mm) long, 1 ft. 8 in. (500 mm) wide, with hydraulic folding device	220 lbs. (100 kg)			
Canopy	331 lbs. (150 kg)			

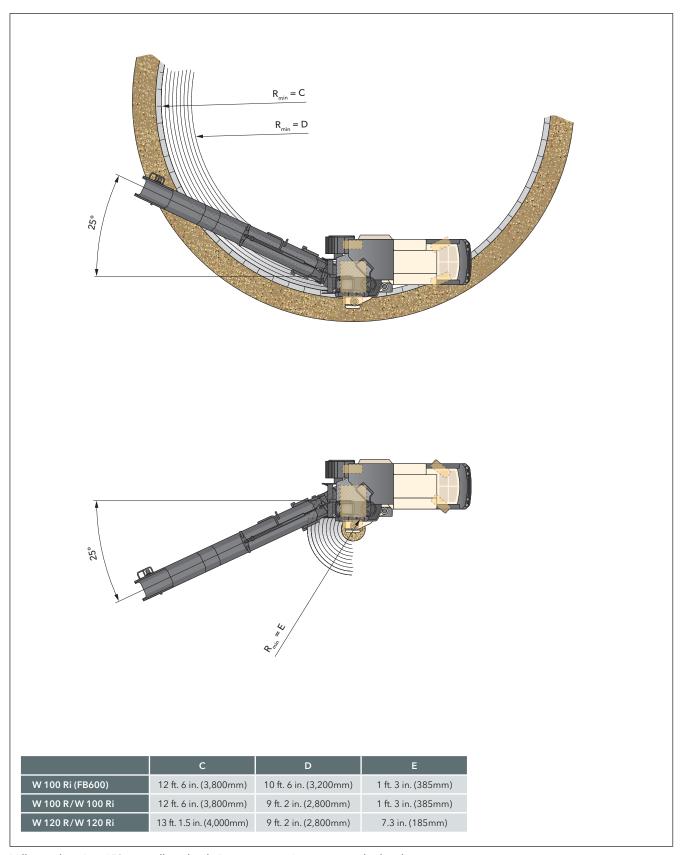
 $[\]star^2$ = Weight of machine with half-full water tank, half-full fuel tank, driver (75 kg) and on-board tools, excluding optional equipment

Dimensions



Dimensions in American standard and mm

- * = Folding conveyor, short
 ** = Based on operating weight, CE with conveyor folded out



Milling radius, 6 in. 150 mm milling depth, Dimensions in American standard and mm

Standard equipment

	W 100 R	W 120 R	W 100 Ri	W 120 Ri
Base machine				
Engine cover with noise insulation and flexibly decoupled engine mounting for especially quiet running and low noise emissions	-	•	•	
Milling drum unit				
Automatically activating, hydraulic drive belt tensioner for reliable power transmission to the milling drum	•	-	•	•
Hydraulically lifting side plate right and left				
The right side of the milling drum housing can easily be folded down for maintenance or milling drum change	-	•	-	•
With automatic electrical safety shut-off for the milling drum				
Milling drum housing FB1000		-		-
Milling drum housing FB1200	-		-	
Manually adjustable front milling drum unit seal FB1000		-		-
Manually adjustable front milling drum unit seal FB1200	-		-	
Milling drums				
Milling drum FB1000 HT22 LA15 with 100 picks		-		-
Milling drum FB1200 HT22 LA15 with 115 picks	-		-	
Milled-out material loading				
Machine prepared for optional material loading by discharge conveyor				
Conveyor speed continuously variable				
Conveyor slewing angle right/left 25 degrees each for significantly improved loading procedures	•	•	•	•
Machine with hydraulic preliminary equipment for a discharge conveyor - screw coupling				
Discharge conveyor, 24 ft. 1 in. (7,350 mm) long, 1 ft. 6 in. (500 mm) wide				
Operator's stand				
Operator's stand with ergonomically arranged operator's seat, control panel arranged on the right and digital milling depth indicator in the control display		•	•	•
Steering console with adjustable rake and reach for ideal adaptation of the operator's stand to the operator	•	•	-	•
3 rear-view mirrors				
Slender machine design permits unobstructed view of the milled edge as well as the working area in front of the milling drum on the right	•	•	•	•
Conveniently accessible ladder/footstep to the operator's stand with night-time lighting and especially low, folding bottom edge of the latter/footstep	•			

■ = Standard equipment
□ = Standard equipment, replaceable with optional equipment
□ = Optional equipment

	W 100 R	W 120 R	W 100 Ri	W 120 Ri
Operator's stand				
Robust anti-vandalism protection for the controls				
Standard operator's seat				
Operator's stand without roof				
Under-carriage and height adjustment				
Precise machine height adjustment in 0.04 or 0.12 in. (1 or 5 mm) steps from the machine control panel	•	•	•	•
Infinitely variable, hydraulic all-wheel drive with three speed ranges				
Digital load control, manual engageable, hydraulic differential lock (by flow distributor)	•	•	•	•
Particularly wide solid rubber tyres for the lowest ground pressures and optimum traction	•	•	•	•
For milling along kerb edges, the rear right support wheel can be swivelled hydraulically from the operator's stand in front of the milling drum	-	•	-	•
Hydraulic spring-loaded brake				
Proportional height adjustment at rear				
Digital milling depth indicator in the control display				
Others				
Flexible weight concept by optional additional weights				
Particularly low machine center of gravity for high stability of the machine				
Robust and easily maintained machine chassis with optimum ground clearance and short overhangs	•	•	•	•
Device for towing away				
Reversing horn				
Large tool package with lockable tool box and additional storage space for two pick buckets	•	•	•	•
European type test certificate, Euro Test-mark and CE conformity				
Paint standard cream white RAL 9001				
Halogen/LED lighting package including rotating beacon.				

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

Optional equipment

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= Standard equipment

= Standard equipment, replaceable with optional equipment

= Optional equipment

	W 100 R	W 120 R	W 100 Ri	W 120 Ri
Machine control and leveling system		7		
Increased travelling speed up to 4.6 mph (7.5 km/h)				
Precision steering by pushbuttons				
Job data acquisition in the control display	-	-		
Operator's stand				
Comfort operator's seat including seat heating				
Operator's stand with weather canopy and lateral weather protection elements				
Under-carriage and height adjustment				
LEVEL PRO PLUS leveling system right and left				
RAPID SLOPE sensor for LEVEL PRO PLUS leveling system				
Leveling boom including sensor for LEVEL PRO PLUS leveling system				
Others				
Paint in one special color (RAL)				
Paint in two special colors (RAL)				
Paint in maximum two special colors with substructure in special color (RAL)				
High-performance LED lighting package including rotating beacon.				
Additional weight 882 lbs. (400 kg) for four-wheel machine, removable				
Milling drum assembly trolley to FB1300				
Assembly aid for the milling drum change				
Electric preheating of the fuel filter	_	_		
Hydraulically driven water filler pump				
Hydraulic pick ejector drift				
Monitor system with 2 cameras and screen				
WITOS FleetView telematics system incl. 3-year operating period (EU)	-	-		
WITOS FleetView telematics system incl. 3-year operating period (USA)	_	-		

= Standard	equipment
- Standard	equipinent

⁼ Standard equipment, replaceable with optional equipment
= Optional equipment



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