

# At a glance: outstanding features of the new cold milling machine

## Highlights in operation (pages 4/5)

### 11 INTUITIVE, PRECISE LEVELING WITH LEVEL PRO PLUS

- > Simple, intuitive handling
- > Fully integrated into the machine management system
- New hydraulic cylinders at the side plates with integrated measuring sensors for leveling control
- > Hydraulic sensor scanning in front of the milling drum
- > Leveling arm including laser sensor

### 2 MULTIFUNCTIONAL ARMREST FOR INCREASED EFFICIENCY

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

### OPTIMIZED VISIBILITY FOR PRECISE OPERATION

- > Adjustable protective canopy
- > High-quality camera system comprising up to five cameras
- > Perfect visibility during night operations thanks to optimized working light arrangement and optional LED working lights

#### 4 | OPERATOR COMFORT

- > Rotating, heated driver's seat
- > Additional controls for ground staff
- > Convenient access including "Welcome" and "Go home" lights feature
- > Wind and weather protection elements on the operator's platform



#### Highlights in driving and steering (pages 6/7)

#### 51 DYNAMIC AND QUICK MANEUVERING

- > ISC electronic track control for minimized track pad wear and optimum traction
- > Travel speed of up to 4.6 mph (7.5 km/h)
- > Optimized PTS for automatic alignment of the machine parallel to the road surface
- > "Stop-and-go" system for the truck driver

#### 61 MAXIMUM MANEUVERABILITY

- > Large steering angle for small turning circles
- > Highly precise steering via fingertip steering system
- > Low-weight machine with variable ballasting weight of up to 1,984 lbs. (900 kg)
- > Additional height adjustment in increments of 0.04 in. (1 mm) or 0.2 in. (5 mm)

#### Highlights in performance and productivity (pages 10/11)

### 91 HIGH EFFICIENCY FOR TREMENDOUS PRODUCTIVITY

- > Tremendous engine power with high maximum torque
- > Three different milling drum speed options
- > Battery-operated hydraulic power pack with additional functions
- > Automatically controlled water spray system at the milling drum
- > WIDRIVE automated functions significantly reduce operator interventions

#### 10 LOW EMISSION LEVELS

- > Engine models complying with EU Stage 3a/US Tier 3 emission standards or the stringent EU Stage 4/US Tier 4f emission standards
- > Alternative engine station with additional exhaust gas purification by means of a diesel particulate filter
- > Effective soundproofing and controlled fan speed for minimized noise emission levels



#### Highlights in milling and loading (pages 8/9)

## 7 SUPERIOR CUTTING TECHNOLOGY BOOSTS PERFORMANCE

- > Extremely hard-wearing HT22 quick-change toolholder system as a standard feature
- > Milling drum turning device and hydraulic tool extractor for the quick replacement of cutting tools
- New, full FCS FB 1500 milling drum unit with easily exchangeable FB600, FB900, FB1200 and FB1500 milling drums
- > Overload sensor at the scraper blade and proactive floating position at the side plates, left and right

## HIGH LOADING CAPACITY FOR MAXIMUM PERFORMANCE

- > Extremely large conveyor slewing angle of 60° to the left and right
- > Two conveyor slewing speeds for precise loading of the milled material
- > Optimized VCS suction channel for minimum cleaning effort
- > Hydraulic folding conveyor can be folded up quickly during
- > Quick-release coupling for easy mounting and removal of the discharge conveyor

# Innovations in operation

#### **FULLY INTEGRATED LEVELING SYSTEM**

Full integration of the LEVEL PRO PLUS leveling system into the machine management system allows a high degree of automation.

#### **INTUITIVE LEVELING**

The new LEVEL PRO PLUS leveling system offers simple and intuitive operation, guaranteeing high-quality, highly precise milling results.



#### LEVELING OPERATION

The reference line is scanned by high-precision displacement sensors installed in the hydraulic cylinders of the side plates and then displayed on the high-resolution LEVEL PRO PLUS control screen.

#### **VISIBILITY**

Numerous intelligently arranged working lights - in LED design at the customer's request - provide optimum visibility during night operations.

#### **CAMERA SYSTEM**

The high-quality camera system comprising up to five high-resolution cameras shows the left machine side or the point of discharge of the milled material into the truck.

#### **SCRAPER POSITION**

The scraper position is detected by means of a displacement sensor and then displayed on the control screen.

#### **MULTIFUNCTIONAL ARMREST**

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

#### HYDRAULIC SENSOR SCANNING IN FRONT OF THE MILLING DRUM

A hydraulic sensor detects the reference height in front of the milling drum.

#### LEVELING ARM INCLUDING LASER SENSOR

The laser sensor can be moved laterally by up to 13 ft. 1.5 in. (4 m) by means of a hydraulically operated leveling arm.

#### "FAVORITES" KEYS

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

#### **JOB DATA**

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

#### PROTECTIVE CANOPY

Protective canopy with laterally telescoping extensions and movable glass windows front and rear.

#### **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.

#### ADDITIONAL CONTROLS FOR GROUND STAFF

Convenient control functions enable the drum to be turned for the replacement of cutting tools, or scanning in front of the milling drum to be activated.

#### "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.

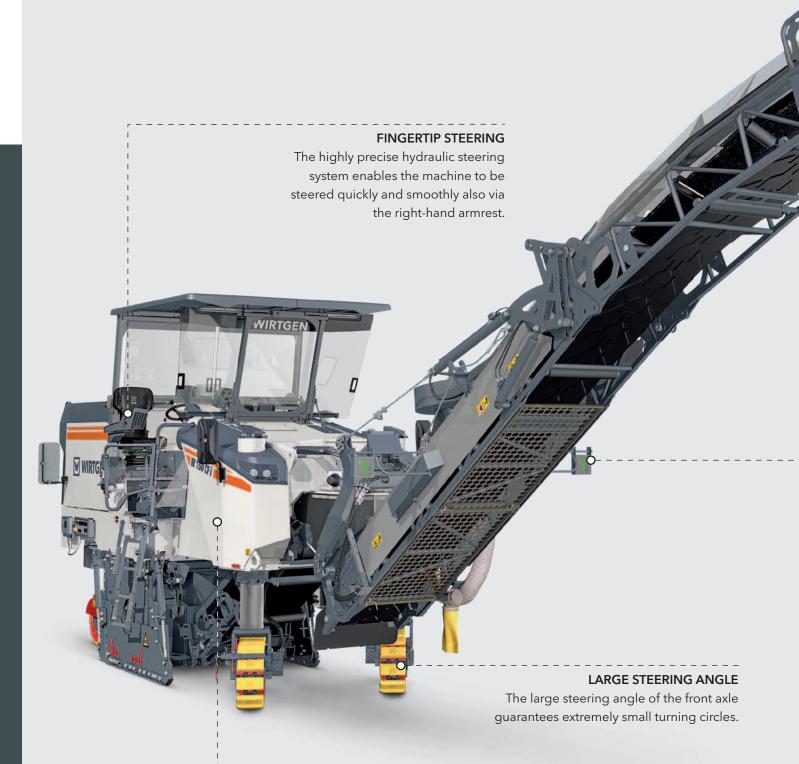


LEVEL PRO PLUS leveling system.



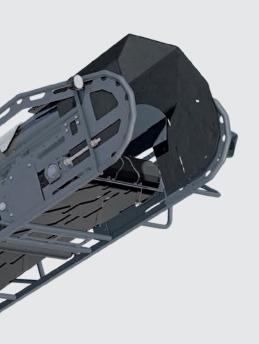
View of the area ahead of the milled surface.

# Highlights in driving and steering



#### SUPPLEMENTARY WEIGHT

The machine's low empty weight and a variable ballasting weight of up to 1,984 lbs. (900 kg) provide for high operating weight, optimum traction and ease of transport.



#### **ELECTRONIC TRACK CONTROL**

The ISC electronic track control minimizes track pad wear and ensures optimum traction regardless of ground conditions.

#### MAXIMUM SPEED OF 4.6 MPH. (7.5 KM/H)

The machine's travel speed of up to 4.6 mph. (7.5 km/h) ensures the quick completion of construction projects.

#### AUTOMATIC ALIGNMENT PARALLEL TO THE ROAD SURFACE

The PTS (Parallel to Surface) system with four-fold full-floating feature has been optimized further to ensure quick and reliable parallel alignment of the machine as well as perfect leveling results.

#### **HEIGHT ADJUSTMENT IN INCREMENTS**

A new feature on the left control console enables precise adjustment of the milling depth in increments of 0.04 in. (1 mm) or 0.2 in. (5 mm) respectively.

#### STOPLIGHT SYSTEM

The "stop-and-go" system folds out hydraulically and enables visual, silent communication with the truck driver driving in front.



Large steering angle at the front.

## Highlights in milling and loading

## FULL FCS FOR DIFFERENT MILLING WIDTHS

FB600, FB900, FB1200 and FB1500 milling drums are available as part of the full FCS option. The milling drums are exchanged quickly thanks to the side door on the right offering ready access.

#### QUICK-RELEASE COUPLING

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



#### 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 FOLDING CONVEYOR

The hydraulically folding discharge conveyor is folded up quickly and easily regardless of the job situation and for transport purposes.



#### **EXTREMELY LARGE SLEWING ANGLE**

Large conveyor slewing angles of 60° 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.

#### **VARIABLE SLEWING SPEED**

Slewing the discharge conveyor at slow speed or high speed to ensure precise loading of the milled material optimizes the entire milling process.

#### MILLING DRUM TURNING DEVICE

The hydraulically operated milling drum turning device and cutting tool extractor make easy work of tool replacement even with the engine switched off.

#### OVERLOAD SENSORS AND ACTIVE FLOATING POSITION

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

#### **OPTIMIZED VCS SUCTION CHANNEL**

The suction channel of the Vacuum Cutting System has undergone a redesign to reduce the cleaning effort.

#### WEAR PROTECTION SEGMENTS

The durability of the side plates has been improved by bolt-on wear protection segments.

#### MILLING DEPTH OF 12 IN. (330 MM)

The new cold milling machine achieves a maximum milling depth of 12 in. (330 mm).

#### **INCREASED LOADING PERFORMANCE**

The conveyor belt speed has been increased by 15% and the cleat profile enlarged by 28% in comparison with the predecessor model to enable significantly higher loading performance.



The highly effective WIRTGEN milling drums deliver excellent milling performance.

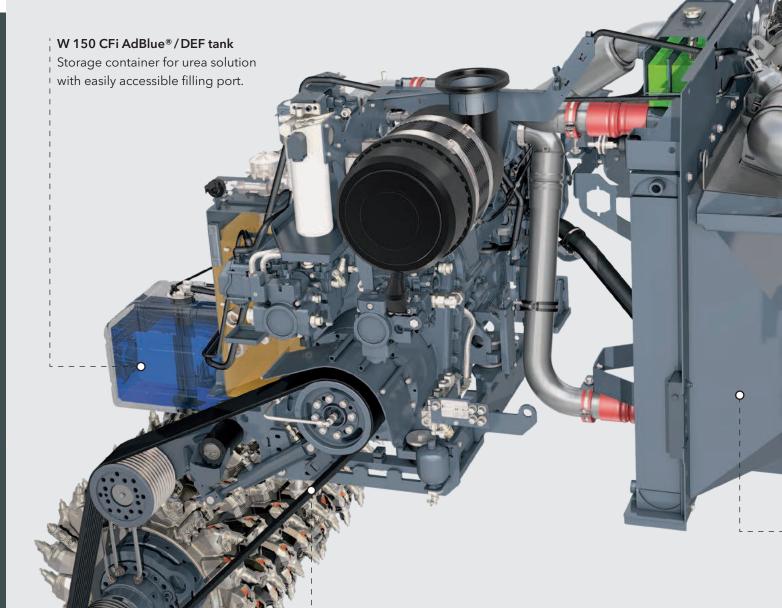
## Highlights in performance and productivity

#### W 150 CFi EXHAUST GAS AFTER-TREATMENT

For effective exhaust gas purification, the diesel engine is fitted with both a two-way catalytic converter and SCR catalytic converter, thus complying with the strict requirements of the currently highest emission standards EU Stage 4/US Tier 4f.

#### TWO-WAY CATALYTIC CONVERTER

Catalytic converter oxidizing hydrocarbons and carbon monoxides.



#### **MECHANICAL MILLING DRUM DRIVE**

Highly efficient belt drive for reduced fuel consumption.

#### SCR catalytic converter

The integrated SCR catalytic converter and added, special urea solution reduce nitrogen oxides.



#### **ENGINE COOLING**

Cooling system with temperature-controlled fan speed for low noise emission levels.

#### HIGH ENGINE POWER

High engine power and optimum torque curve guarantees fast operation and high production rates even at the maximum milling depth.

#### **DIFFERENT MILLING DRUM SPEEDS**

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

#### **BATTERY-OPERATED HYDRAULIC POWER PACK**

The extended electro-hydraulic power pack caters to functions such as the milling drum turning device, cutting tool extraction with the engine switched off, or emergency functions, thus increasing the machine's flexibility on site.

#### LOAD-CONTROLLED WATER SPRAY SYSTEM

The amount of water injected to cool the cutting tools increases automatically relative to the increase in engine load. Water consumption can also be directly adjusted electrically from the operator's platform.

#### FEWER OPERATOR INTERVENTIONS

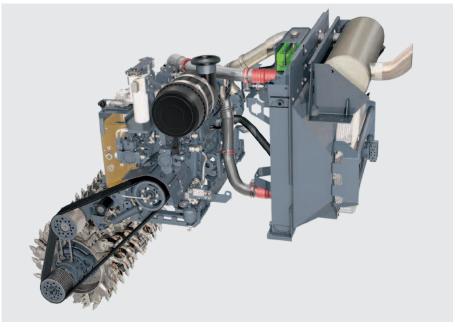
The WIDRIVE machine management system includes many new automated features relieving the operator from part of his workload.

#### **OPTIONAL DIESEL PARTICULATE FILTER**

The diesel particulate filter is optionally available as original equipment, ensuring compliance with even stricter emission requirements.

#### MINIMUM NOISE LEVELS

Optimized machine settings and even more effective soundproofing significantly reduce noise emissions.



W 150 CF for EU Stage 3a/US Tier 3: high-performance, fuel-efficient engine technology.

## **Technical specification**

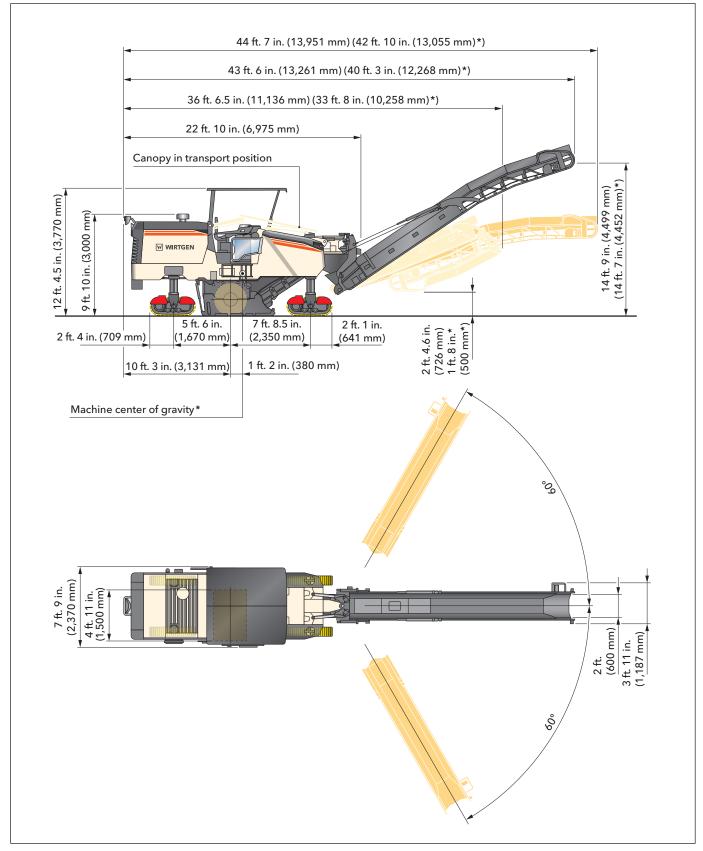
	W 150 CF	W 150 CFi	
Milling drum			
Milling width	4 ft. 11 in. (1,500 mm)		
Milling depth*1	0-12 in. (0	1-330 mm)	
Drum diameter with tools	3 ft. 2 in.	(980 mm)	
Engine			
Engine manufacturer	CUMMINS	CUMMINS	
Туре	QSL 9	QSL 9	
Cooling	water	water	
Number of cylinders	6	6	
Rated power at 2,100 min <sup>-1</sup>	261 kW/350 HP/355 PS	283 kW/380 HP/385 PS	
Maximum power at 1,900 min <sup>-1</sup>	276 kW/370 HP/375 PS	298 kW/400 HP/405 PS	
Operating power at 1,600 min <sup>-1</sup>	250 kW/335 HP/340 PS	270 kW/362 HP/367 PS	
Displacement	2.35 gallons (8.9 l)	2.35 gallons (8.9 l)	
Fuel consumption at rated power	19 US gph. (72 l/h)	19.8 US gph. (75 l/h)	
Fuel consumption in field mix	7.6 US gph. (29 l/h)	7.9 US gph. (30 l/h)	
Emission standards	EU Stage 3a/US Tier 3	EU Stage 4/US Tier 4f	
Electrical system			
Electrical power supply	24 V		
Tank capacities			
Fuel tank	214 gallons (810 l)		
AdBlue®/DEF tank	- 13.2 gallons (50 l)		
Hydraulic oil tank	126.8 gallons (120 l)		
Water tank	594 gallons (2,250 l)		
Driving properties			
Max. milling speed	0-131 ft./min (2.4 km/h)	0-131 ft./min (2.4 km/h)	
Max. travel speed	0-410 ft./min (7.5 km/h)	0-410 ft./min (7.5 km/h)	
Crawler units			
Crawler units, front and rear (L x W x H)	52 in. x 10 in. x 21 in. (1,330 x 260 x 550 mm)		
Loading of the milled material			
Belt width of primary conveyor	25 in. (650 mm)		
Belt width of discharge conveyor	23.6 in. (600 mm)		
Theoretical capacity of discharge conveyor	280 tons/h (233 m³/h)		

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

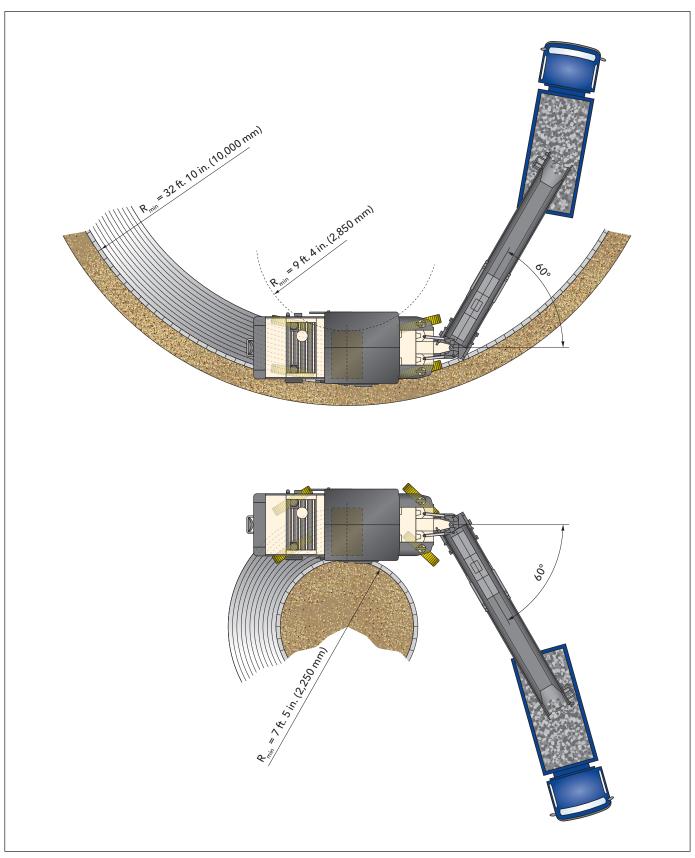
	W 150 CF	W 150 CFi	
Weight of base machine		1	
Empty weight of machine without tank contents	41,667 lbs. (18,900 kg)	42,328 lbs. (19,200 kg)	
Operating weight, CE*2	45,085 lbs. (20,450 kg)	45,856 lbs. (20,800 kg)	
Maximum operating weight (full tanks, full range of equipment)	54,344 lbs. (24,650 kg)	55,115 lbs. (25,000 kg)	
Weights of tank contents			
Water tank filling	4,960 lbs. (2,250 kg)	4,960 lbs. (2,250 kg)	
Diesel tank filling (0.83 kg/l)	1,477 lbs. (670 kg)	1,477 lbs. (670 kg)	
AdBlue®/DEF tank filling (1.1 kg/l)	-	121 lbs. (55 kg)	
Additional add-on weights			
Driver and tools			
Driver	165 lbs	165 lbs. (75 kg)	
Weight of 5 cutting tool containers	275 lbs.	275 lbs. (125 kg)	
On-board tools	66 lbs.	66 lbs. (30 kg)	
Optional milling drum assemblies in lieu of standard			
Milling drum housing, FB1500 mm, FCS-L	595 lbs.	595 lbs. (270 kg)	
Milling drum housing, FB1500, FCS	838 lbs.	838 lbs. (380 kg)	
Optional milling drums in lieu of standard			
Milling drum, FB1500 mm, HT22, LA 15, FCS	44 lbs.	44 lbs. (20 kg)	
Milling drum, FB1500 mm, HT22, LA 18, FCS	-154 lbs	-154 lbs. (-70 kg)	
Milling drum, FB1500 mm, HT22, LA 8, FCS	838 lbs.	838 lbs. (380 kg)	
Milling drum, FB1500 mm, HT5, LA 6x2, FCS	992 lbs.	992 lbs. (450 kg)	
Milling drum, FB1500 mm, HT22, LA 25, FCS	-882 lbs.	-882 lbs. (-400 kg)	
Optional additional equipment			
Canopy in lieu of standard	992 lbs.	992 lbs. (450 kg)	
Hydraulic folding conveyor, short, in lieu of standard	99 lbs.	99 lbs. (45 kg)	
Hydraulic folding conveyor, long, in lieu of standard	265 lbs.	265 lbs. (120 kg)	
VCS - Vacuum Cutting System	276 lbs.	276 lbs. (125 kg)	
Leveling arm	551 lbs.	551 lbs. (250 kg)	
Supplementary weight at the rear	1,984 lbs	1,984 lbs. (900 kg)	

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

## **Dimensions**



\*Folding conveyor, short



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

## Standard equipment

	W 150 CF	W 150 CFi
Base machine		
Basic machine with engine		
Machine chassis with wasp waist on the right side (zero edge)		
Electrohydraulically opening engine cover		
Radiator with temperature-dependent fan speed		
Additional operating switches for lower scraper on the right		
Elastically mounted engine station with low vibration and low noise		
Three milling drum rotation speeds with electric on/off function 127 r.p.m 109 r.p.m 97 r.p.m.		
Air compressor system		
Exhaust post-treatment diesel oxidation catalyst DOC	-	
Milling drum unit		
The right side of the milling drum housing can easily be folded down for maintenance or milling drum change	•	-
Hydraulic material depressor with conveyor lifting function		
Hydraulically opening scraper plate with convenience locking		
Exchangeable wearing segments on the side plate		
Milling drum housing FB1500		
Milling drums		
Milling drum FB1500 HT22 LA15 with 136 picks		
Milled-out material loading		
Discharge conveyor slewing angle left 60 degrees - right 60 degrees		
Discharge conveyor with adjustable conveyor speed and 2 slewing speeds for precise loading		
Machine with hydraulic standard coupling for the discharge conveyor		
Discharge conveyor, 26 ft. 8 in. (8,150mm) long, 23 in. (600 mm) wide, without folding device		
Machine control and leveling system		
Load-dependent advance control		
4-track drive with manually activated, electronic anti-slip control		
4 selectable steering modes		
Automatic engine speed control		
Operator's stand		
Convenient operating panel with practical switches		
Multi-function armrest including color operating display for one-handed operation of most machine functions	-	-

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

	W 150 CF	W 150 CFi
Operator's stand		
Digital multi-function display for all important operating conditions		
Operating panel nighttime lighting		
Robust anti-vandalism protection for the controls		
Adjustable steering wheel position		
Optimally positionable operator's seat		•
Footstep right and left with conveniently folding ladder		
Two mirrors front, one mirror middle and one mirror in rear area of the machine		
Standard operator's seat		
Under-carriage and height adjustment		
LEVEL PRO PLUS leveling system. Measurement by travel measuring sensors in the side plate cylinder. The milling depth is displayed and set intuitively on the LEVEL PRO PLUS operating display. Including preliminary equipment for additional sensors.	•	-
Jog mode for height adjustment		
High machine stability due to quadruple pendulum axle		
PTS - machine automatically guided parallel with the road surface		
ISC - intelligent track speed control with hydraulic four chain drive		
Scraper height is shown on the display		
Reversing with the drum rotating; simple and fast maneuvering		
Equipped with extremely wear-resistant 2-piece polyurethane track pads		
Others		
Automatic water management		
Large tool package		
Large water and diesel tanks		
Total of 3 EMERGENCY STOP switches at sensible positions on the machine		
Machine preparation for installing the control unit for WITOS FleetView	-	
"Welcome" and "Go home" lights feature including LED lighting in the area of the operator's access and platform	•	•
European type test certificate and CE conformity		
Paint standard cream white RAL 9001		
Halogen/LED lighting package including rotating beacon		
Electrohydraulic unit		

 <sup>■ =</sup> Standard equipment
 □ = Standard equipment, replaceable with optional equipment
 □ = Optional equipment

## **Optional equipment**

	W 150 CF	W 150 CFi
Base machine		
Exhaust post-treatment diesel oxidation catalyst DOC with diesel particulate filter DPF	_	
Milling drum unit		
Milling drum housing FB1500 FCS-L		
Milling drum housing FB1500 FCS		
Overload sensor on the scraper		
Active floating position for the right and left side plates		
Milling drums		
Milling drum FB1500 HT22 LA15 FCS with 136 picks		
Milling drum FB1500 HT22 LA18 FCS with 120 picks		
FCS milling unit FB600 HT22		
FCS milling unit FB900 HT22		
FCS milling unit FB1200 HT22		
Milling drum FB1500 HT22 LA8 FCS with 210 picks		
Milling drum FB1500 HT5 LA6X2 FCS with 512 picks		
Milling drum FB1500 HT22 LA25 FCS with 102 picks		
Milled-out material loading		
Machine with hydraulic quick-change coupling for the discharge conveyor		
Discharge conveyor, 26 ft. 9 in. (8,150 mm) long, 2 ft. (600 mm) wide, with hydraulic folding device		
Shortened discharge conveyor, 23 ft. 9 in. (7,250 mm) long, 2 ft. (600 mm) wide, with hydraulic folding device		
VCS extraction system		
Machine control and leveling system		
Increased travelling speed up to 4.6 mph (7.5 km/h)		
Precision steering by pushbuttons		
Sonic-Ski sensor for scanning in front of the milling drum right or left		
Leveling boom for scanning up to 13 ft. (4 m) to the side of the machine		
Scanning in front of the milling drum unit		
Operating display LEVEL PRO PLUS additionally		
Multiplex preliminary equipment comprising 4 sensor sockets and holders		
Multiplex 3-way right with 2 ultrasonic sensors		
Multiplex 3-way right + left with 4 ultrasonic sensors		
Level control 3D leveling pre-equipment		
Basic equipment laser leveling without laser transmitter		
RAPID SLOPE sensor for LEVEL PRO PLUS leveling system		
Milling depth measurement and display in the LEVEL PRO PLUS display		
Job data acquisition in the control display		

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

	W 150 CF	W 150 CFi
Operator's stand		
Comfort operator's seat including seat heating		
Operator's stand with weather canopy and lateral weather protection elements		
Additional control unit for ground operation of the machine on the left		
Heating operator's stand		
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.		
Expanded electro-hydraulic unit		
Additional weight 1,984.2 lbs (900 kg)		
Milling drum assembly trolley to FB1500		
Electric preheating of the fuel filter	-	
Signal lights truck stop-and-go, folding		
Powerful alternator for LED lighting balloons		
Hydraulically driven water filler pump		
High-pressure water cleaner, 150 bar 4 gallons/min (15 l/min)		
Milling drum rotation device		
Pneumatic hammer with pick ejector/inserter		
Hydraulically driven pick ejector drift		
Additional folding seat for pick change with storage compartment		
Diesel tank filling pump with 16 ft. 5 in. (5.00 m) suction hose		
WITOS FleetView telematics system incl. 3-year operating period (EU)	-	
WITOS FleetView telematics system incl. 3-year operating period (USA)	_	
WITOS FleetView telematics system incl. 3-year operating period - PROMOTION	-	
Monitor system with 2 cameras and screen		
Monitor system with 5 cameras and 2 screens		
LED illumination balloon, 24 volt		
Large storage compartment on rear of machine		

_	: Standard	equipment

<sup>■ =</sup> Standard equipment

= Standard equipment, replaceable with optional equipment

= Optional equipment



WIRTGEN AMERICA 6030 Dana Way · Antioch, TN 37013 Phone: (615) 501-0600 · Fax: (615) 501-0691 www.wirtgen-group.com/america