

High Performance and Tremendous Maneuverability in Any Application

W 155 CF COLD MILLING MACHINE



HIGH PERFORMANCE AND TREMENDOUS MANEUVERABILITY IN ANY APPLICATION

With a milling width of 1.5 m, the W-155 CF represents an optimum balance of working width, daily production rate, and maximum maneuverability in the compact milling machine class.

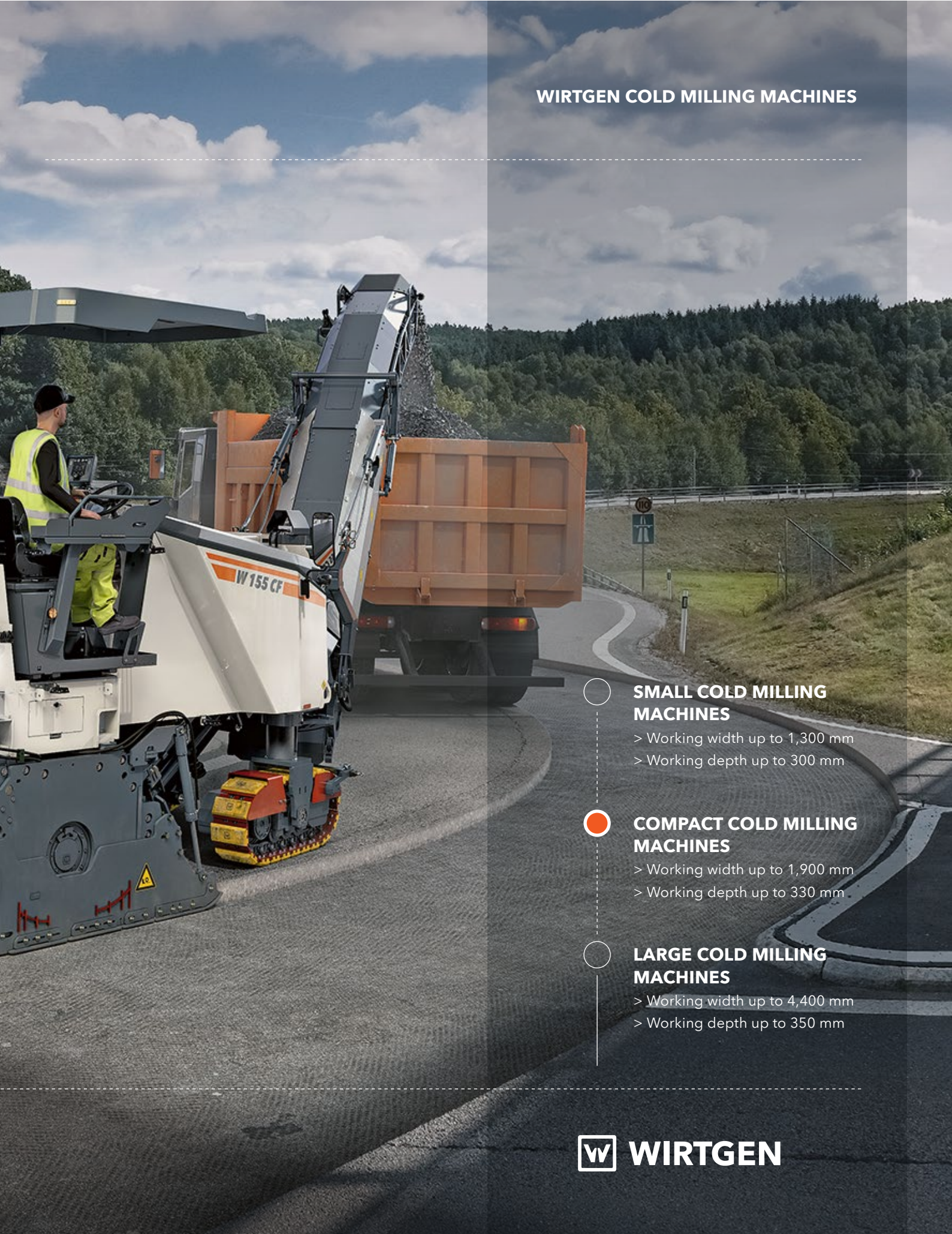
This all-rounder is ideal for a wide range of applications, from surface layer rehabilitation and partial removal to removal of material at large milling depths.

Wide conveyor slewing angles of 60° to both sides enable material loading even in difficult site situations such as traffic circles or intersections.

One-man operation allows efficient work in all on-site situations.

The favorable machine weight enables easy transportation without the need for a special permit.





WIRTGEN COLD MILLING MACHINES

SMALL COLD MILLING MACHINES

- > Working width up to 1,300 mm
- > Working depth up to 300 mm

COMPACT COLD MILLING MACHINES

- > Working width up to 1,900 mm
- > Working depth up to 330 mm

LARGE COLD MILLING MACHINES

- > Working width up to 4,400 mm
- > Working depth up to 350 mm

HIGHLIGHTS AT A GLANCE

Perfectly Equipped



OPERATION

01 Ease of Operation

- > Proven one-man operating concept featuring operator's platform with ergonomic multi-functional armrest
- > Informative, full-color control panel in different languages
- > Wide range of automated functions for reduced operator's workload and fatigue
- > Optimized LED headlights and "Go home" lighting for maximum visibility at night

02 Maximum Precision with LEVEL PRO PLUS

- > Universal LEVEL PRO PLUS leveling system as standard equipment of WIRTGEN cold milling machines
- > Integrated LEVEL PRO PLUS with numerous sensors
- > Single-handed operation of LEVEL PRO PLUS
- > Milling depth measurement via displacement sensors installed in the hydraulic side plate cylinders
- > Optional high-precision RAPID SLOPE sensor

DRIVING AND STEERING

03 Highest Traction with High-Speed Crawler Tracks

- > PTS – automatic machine alignment parallel to surface
- > Up to 7.5 km/h travel speed
- > ISC – Intelligent Speed Control system for optimum traction and low track pad wear
- > Automatic load control system for optimum working speed

04 New Level of Agility with Tightest Turning Radii

- > Large steering angles for maximum agility and tightest turning radii
- > High-precision conveyor control via joystick in multifunctional armrest
- > Intelligent speed adjustment of the inner and outer crawler tracks for low track pad wear when maneuvering in bends
- > High-quality camera system with two cameras for monitoring important working areas

MILLING AND LOADING

05 Impressive Milling Performance in a Wide Range of Applications

- > Heavy-duty milling drum housing with FB1500 for a broad spectrum of cutting depths
- > Excellent milling drum design with high performance cutting tool positioning
- > Best-in-class highly wear-resistant HT22 toolholder system
- > Milling drum rotation device for rapid pick replacement

06 High Loading Volume with Maximum Flexibility

- > Front-loading conveyor with slewing angles of 60° to left and right
- > Hydraulically folding conveyor reduces machine length for transportation
- > Performance-optimized, adjustable conveyor belt speed
- > Optional VCS vacuum cutting system



PERFORMANCE AND EFFICIENCY

07 Environmental Friendliness and Sustainability

- > High-performance engine with state-of-the-art speed control for low diesel consumption and reduced CO₂ emissions
- > Load-dependent water consumption for drier RAP and optimized CO₂ balance
- > Minimized noise emissions through effective noise insulation and dual fan concept
- > Efficient servicing and maintenance concept

08 Maximum Efficiency for Tremendous Productivity

- > Impressive engine performance with high maximum torque
- > Three different milling drum speeds for maximum efficiency in all applications
- > Automatic engine idle mode for reduced diesel consumption and CO₂ emissions

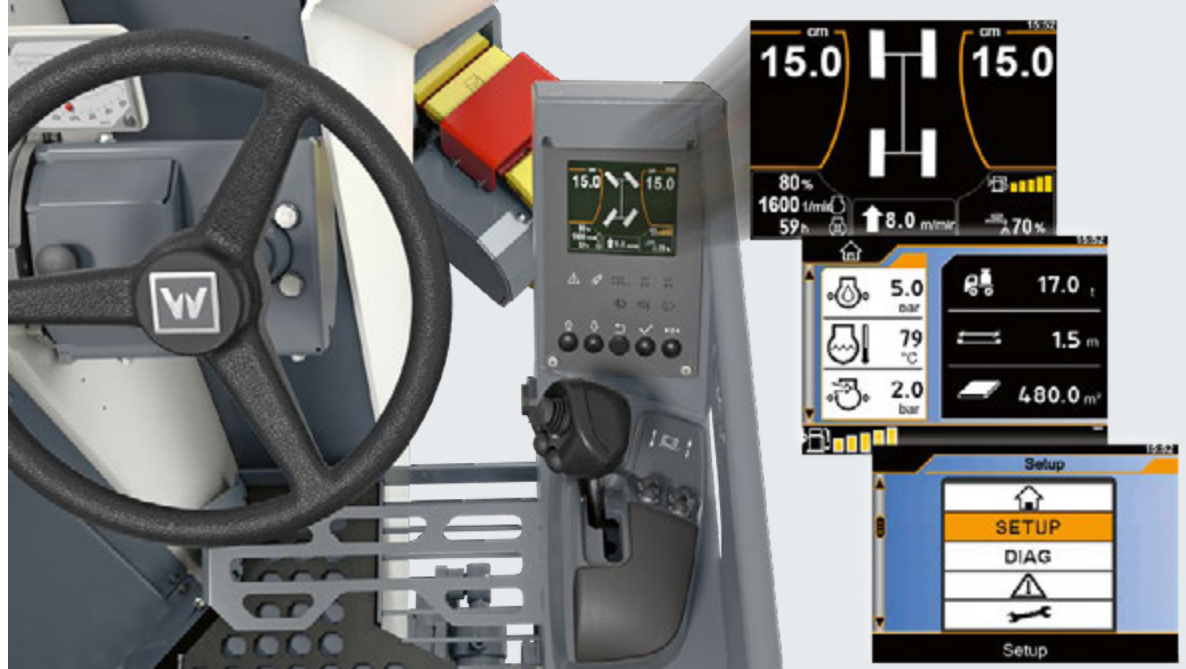
OPERATION

Always Makes the Grade
LEVEL PRO PLUS

Everything under Control
Ergonomic multifunctional armrest

O = Option





01 Clearly structured color control screens provide important machine and operation parameters. The operator has everything under control with just one hand.

01 Proven One-Man Operating Concept featuring Operator's Platform with Ergonomic Multifunctional Armrest

The operator's platform ensures efficient one-man operation, because the ergonomic, easy-to-handle controls are arranged in a clear pattern and in line with application requirements. The right armrest with integrated robust colored control display combines innovative design with perfect user-friendliness. Many important machine features are aligned together intelligently on the ergonomically designed multifunctional joystick and can therefore be used with effortless ease.

02 Informative, Full-Color Control Panel in Different Languages

Important data such as travel speed and working pressure are displayed in many different languages.

03 Wide Range of Automated Functions for Reduced Operator's Workload and Fatigue

Many automatic and additional functions make the operator's job easier. This also speeds up work processes.

04 Optimized LED Headlights and "Go Home" Lighting for Maximum Visibility at Night

Perfectly arranged working lights make sure that the machine's entire surroundings are fully lit and the operator always has a perfect view. In addition, the access ladder and operator's platform can be brightly illuminated when walking away from the machine.

05 Universal LEVEL PRO PLUS Leveling System as Standard Equipment of WIRTGEN Cold Milling Machines

LEVEL PRO PLUS leveling system stands out due to its precise milling results. It is used in many current series of WIRTGEN cold milling machines.

06 Integrated LEVEL PRO PLUS with Numerous Sensors

LEVEL PRO PLUS is fully integrated into the machine control system. Different sensors are available to meet the wide range of accuracy requirements of the surfaces being processed.

07 Single-Handed Operation of LEVEL PRO PLUS

LEVEL PRO PLUS combines easy and intuitive single-handed operation. The menu can be configured as desired.

08 Milling Depth Measurement via Displacement Sensors Installed in the Hydraulic Side Plate Cylinders

The reference line is scanned via heavy-duty displacement sensors built into the hydraulic side plate cylinders and displayed directly on the high-resolution LEVEL PRO PLUS control panel.

09 High-Precision RAPID SLOPE Sensor

The electronic RAPID SLOPE sensor developed in house ensures that the cross-slope profile is extremely precise. The cross-slope sensor enables 100% higher working speeds compared to similar sensors while maintaining the same leveling quality.

DRIVING AND STEERING

01 PTS – Automatic Machine Alignment Parallel to Surface

The intelligent automatic PTS system aligns the machine parallel to the road surface in a dynamic process without requiring manual intervention by the machine operator. In addition, the fourfold full-floating axle quickly and reliably compensates for any irregularities transverse to the

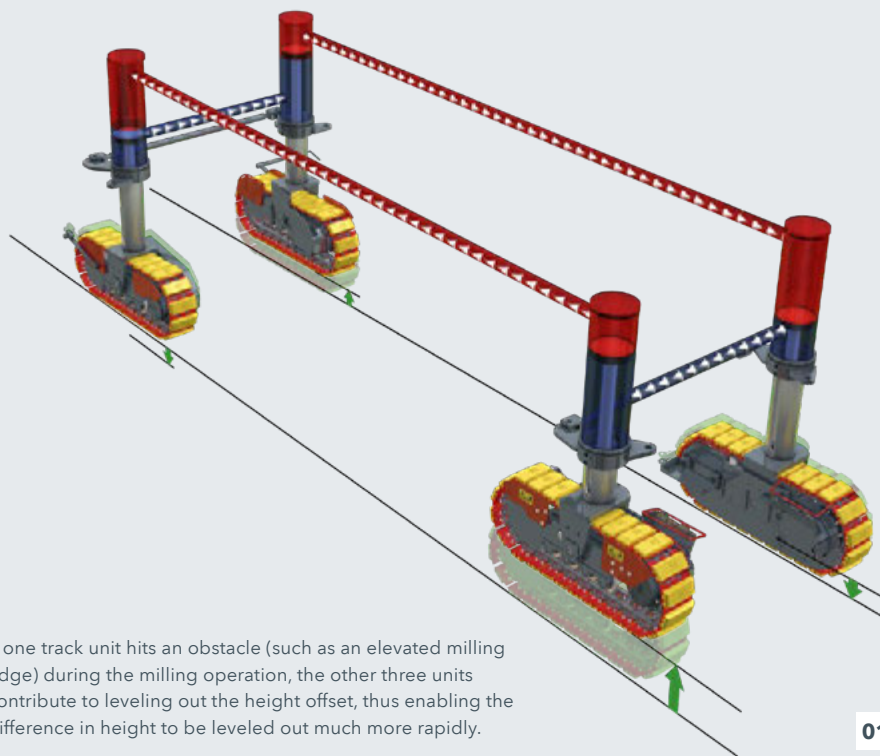
direction of travel. Surface irregularities are leveled out by the machine's four hydraulically interlinked lifting columns. This guarantees significantly improved machine stability compared to a double floating axle.



PTS
Automatically parallel to the surface

Fourfold Full-Floating System
High machine stability

01 Surface irregularities are leveled out by the machine's four hydraulically interlinked lifting columns.



If one track unit hits an obstacle (such as an elevated milling edge) during the milling operation, the other three units contribute to leveling out the height offset, thus enabling the difference in height to be leveled out much more rapidly.

02 Up to 7.5 km/h Travel Speed

High travel speeds of up to 7.5 km/h permit fast transport between two job locations.

03 ISC – Intelligent Speed Control System for Optimum Traction and Low Track Pad Wear

The ISC electronic speed control system prevents the slip of individual track units in case of insufficient grip, reduces track pad wear to a minimum, and ensures optimum traction on any surface.

04 Automatic Load Control System for Optimum Working Speed

The electronic engine load control integrated into the machine control system constantly keeps the machine at maximum working speed. This ensures optimum milling performance depending on load changes.

05 Large Steering Angles for Maximum Agility and Tightest Turning Radii

Symmetrically large steering angles to the left and right guarantee tight turning radii and thus rapid maneuvering in any job situation, even in tight spaces.

06 High-Precision Conveyor Control via Joystick in Multifunctional Armrest

The highly responsive hydraulic steering system allows the operator to steer the front-loading conveyor precisely and smoothly via joystick positioned in the multifunctional armrest.

07 Intelligent Speed Adjustment of the Inner and Outer Crawler Tracks for Low Track Pad Wear when Maneuvering in Bends

The computer-controlled speed adjustment regulates the speed difference of the inner and outer track units when maneuvering in bends to keep track pad wear to a minimum.

08 High-Quality Camera System with Two Cameras for Monitoring Important Working Areas

The camera/monitor system consists of two cameras and a rugged monitor. The monitor displays the high-resolution images of the area behind the machine and the left side of the machine.



MILLING AND LOADING

01 Heavy-Duty Milling Drum Housing with FB1500 for a Broad Spectrum of Cutting Depths

The milling drum housing has been manufactured from highly wear resistant steel plates for an extended service life. The righthand, hydraulically height-adjustable side plate can be raised by 330 mm. Milling flush to curb is thus possible also at large working depths.

02 Excellent Milling Drum Design with High-Performance Cutting Tool Positioning

The innovative, specially designed edge rings are equipped with fewer cutting tools while at the same time producing even more accurate milling edges.

Extended Service Life

HT22

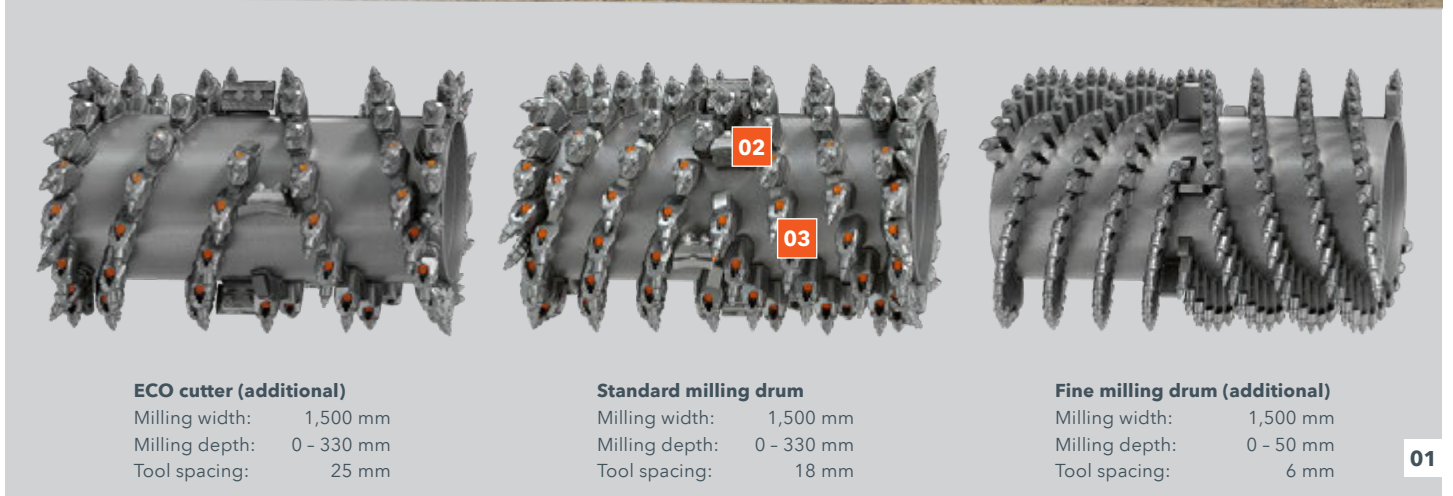
Quickly Clear Away the Milled Material

High-performance loading



○ = Option

Slewing angles of 60° to the left and right



03 Best-in-Class, Highly Wear-Resistant HT22 Toolholder System

The HT22 toolholder system optimizes the cutting process for less cutting resistance and wear to minimize machine downtime and increase the service life of the entire milling drum.

04 Milling Drum Rotation Device for Rapid Pick Replacement

The hydraulically operated milling drum rotation device makes it easier and quicker to change picks.

05 Front-Loading Conveyor with Slewing Angles of 60° to Left and Right

Wide conveyor swing angles of 60° to both sides allow material loading even in difficult situations, e.g. in traffic intersections or in restricted space conditions.

06 Hydraulically Folding Conveyor Reduces Machine Length for Transportation

The hydraulically folding conveyor can be folded away quickly for easy transport and to adapt to site conditions.

07 Performance-Optimized, Adjustable Conveyor Belt Speed

The conveyor belt speed can be adjusted in line with requirements: from slow, low wear operation to maximum loading capacity at high conveying speed to load even oversize trucks.

0 Optional VCS Vacuum Cutting System

VCS improves air quality and visibility in the machine operator's and ground crew's working area. In addition, the optimized design of the VCS suction channel reduces the amount of cleaning required.

01 The milling drum unit features a variety of valuable, innovative features, and can achieve milling depths of up to 330 mm. The standard milling drum is part of the standard equipment, ECO cutter and fine milling drum are additionally available.

MILLING AND LOADING



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. The centering imprint on the HT22 PLUS upper part (optional) optimizes the rotary behavior of the **GENERATION X²** pick and ensures a maximum toolholder service life.

01 The compact W 155 CF is ideally suited e. g. for surface layer rehabilitation, partial removal, or removal of material at large milling depths.



HT22 Toolholder System in Detail

01 Innovative centering marks on the tool contact surface in combination with **GENERATION X²** picks for maximum toolholder service life right from the start

02 Significantly larger, more durable, and self-centering contact surfaces on the top and bottom parts significantly extend the service life of the milling drum

03 Increased wear volume in the shoulder section improves protection of the toolholder base when milling abrasive materials

04 Reduced maintenance requirements due to longer intervals between torque inspections of the quick-change toolholder bolts (every 500 hours)

05 Optimized shaft geometry with additional improved thermal processing to withstand extreme stress

06 Protective plug prevents bolt head from getting dirty

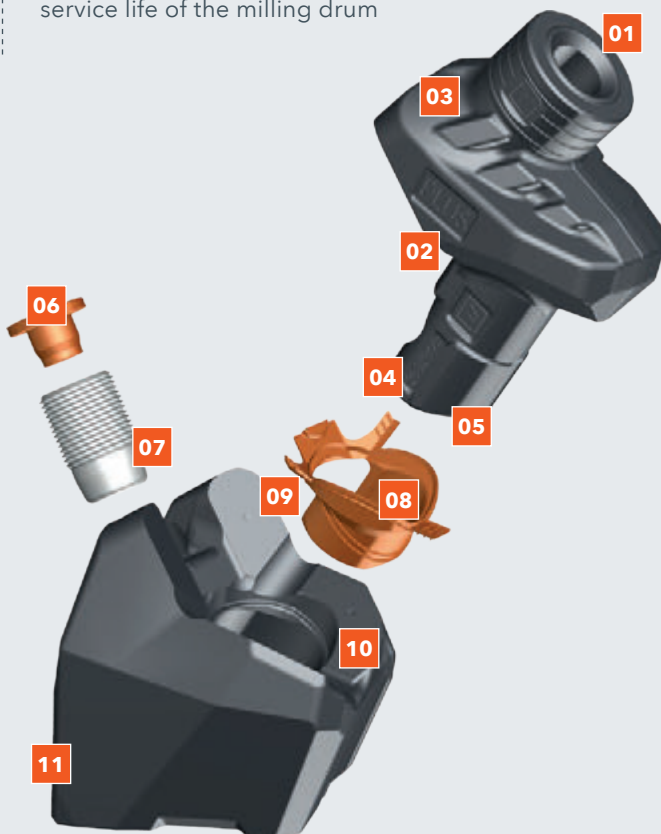
07 Heavy-duty retaining bolt

08 Seal between top and bottom part allows top part to be easily removed / inserted

09 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



PERFORMANCE AND EFFICIENCY

01 High-Performance Engine with State-of-the-Art Speed Control for Low Diesel Consumption and Reduced CO₂ Emissions

The engine speed is governed in accordance with the activated features, thus minimizing diesel consumption and CO₂ emissions regardless of the job to be completed.

02 Load-dependent Water Consumption for Drier RAP and Optimized CO₂ Balance

The amount of water injected to cool the picks increases automatically relative to the increase in engine load. Less moist milled material due to automatically reduced water spraying increases energy efficiency and saves CO₂ during further processing into recycled mix.

03 Minimized Noise Emissions through Effective Noise Insulation and Dual Fan Concept

Effective noise insulation significantly reduces noise emissions. Two separate speed-controlled and intelligently positioned fans cool the diesel engine and hydraulic system as required. As a result, the cooling system also helps efficiently reduce noise emissions and diesel consumption.

04 Efficient Servicing and Maintenance Concept

All points of maintenance and inspection have been arranged together in a few locations and offer excellent access to enable quick and easy completion of the maintenance procedures.

Environmentally Friendly Technologies

Lower CO₂ emissions

Powerful Engine

High productivity

Central Milling Drum Design
The machine's center of gravity, which is designed close to the milling drum, ensures high milling performance and high traction of the crawler tracks.



05 Impressive Engine Performance with High Maximum Torque

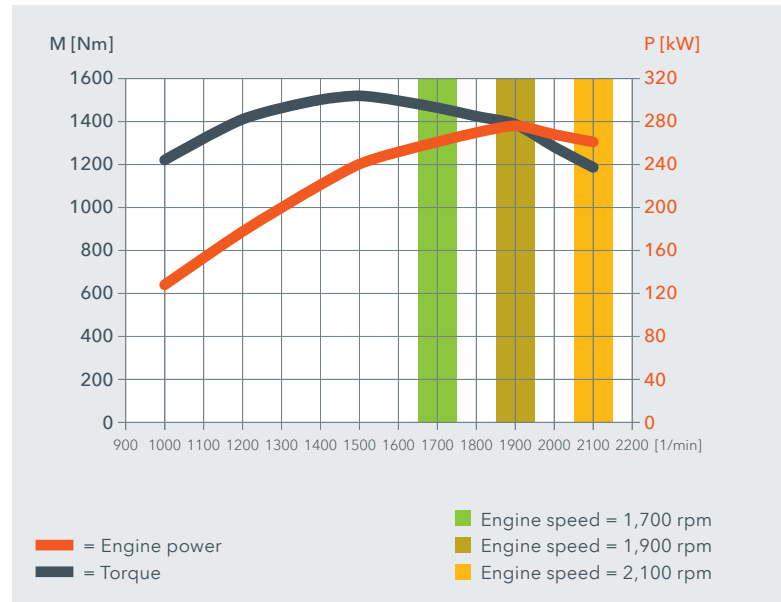
The state-of-the-art diesel engine offers tremendous engine power with high maximum torque. This guarantees rapid, productive operations in every application, even at maximum milling depth.

06 Three Different Milling Drum Speeds for Maximum Efficiency in all Applications

Three different milling drum speeds ensure unparalleled milling performance in a wide range of applications. Speed one is selected for low diesel and cutting tool consumption, speed two for maximum milling performance, speed three for the best milling surface quality.

07 Automatic Engine Idle Mode for Reduced Diesel Consumption and CO₂ Emissions

In case of low engine performance requirements during downtime or waiting times, the diesel engine is automatically switched to idle mode to save diesel and CO₂ emissions.



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



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.

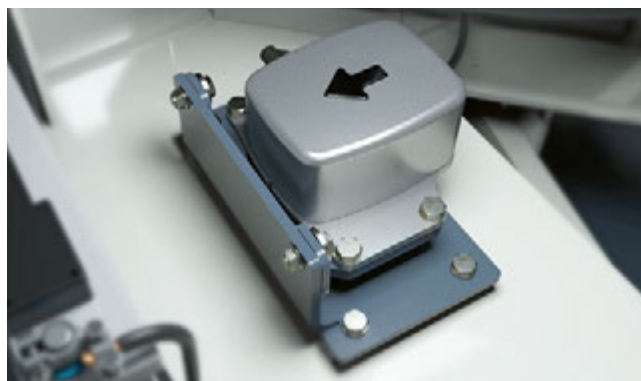
01 Multiplex 3-Way

The multiplex system package consists of two ultrasonic sensors attached on right or left side of the machine. Using the average value of the sensors, the current milling depth is calculated with high precision.



02 RAPID SLOPE Sensor

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



03 Water Filling Pump

The powerful, hydraulically operated filling pump allows water tank filling with 6.0 m suction hose from the rear of the machine.



04 VCS Vacuum Cutting System

Vacuum cutting system on the discharge conveyor for the extraction of fine material particles and water vapor from the sealed milling drum unit.



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.

01 Multiplex 3-Way Retrofit Kit



02 RAPID SLOPE Sensor Retrofit Kit



03 Water Filling Pump Retrofit Kit



04 VCS Vacuum Cutting System Retrofit Kit



ENVIRONMENTALLY FRIENDLY MACHINE TECHNOLOGY





Minimized Diesel Consumption

Speed-regulated engine, automatic engine idle mode, and three different milling drum speeds for minimized CO₂-emissions



Minimized Water Consumption

Load-dependent water consumption for less moist milled material and minimization of CO₂-emissions during subsequent materials processing



Minimized Pick Consumption

High-performance cutting technology with extremely wear-resistant milling tools minimizes usage of valuable natural resources



Minimized Noise

Effective sound insulation plus intelligent dual fan concept minimizes noise emissions



Improved CO₂ Balance

Minimizing exhaust fumes and noise on job sites while maintaining maximum performance and productivity is more important than ever. Innovative WIRTGEN technologies play an extremely active role in protecting the environment, conserving natural resources, and reducing harmful CO₂ emissions.

With a milling width of 1.5 m, the W 155 CF represents an optimum balance of working width, daily production rate and maximum maneuverability in the compact milling machine class. This all-rounder is ideal for a wide range of applications, from surface layer rehabilitation and partial removal to removal of material at large milling depths. One-man operation enables efficient work in all on-site situations.



TECHNICAL SPECIFICATIONS W 155 CF

Milling Drum

Standard milling width	1,500 mm
Milling depth ¹⁾	0 - 330 mm
Cutting diameter	980 mm

Engine

Manufacturer	CUMMINS
Type	QSL 8.9
Cooling	Water
Number of cylinders	6
Rated power at 2,100 rpm	261 kW / 350 hp / 355 PS
Maximum power at 1,900 rpm	276 kW / 370 hp / 375 PS
Operating power at 1,600 rpm	250 kW / 335 hp / 340 PS
Displacement	8.9 l
Fuel consumption at rated power at mix of job site operations	72 l/h 29 l/h
Emissions standard	EU Stage 3a / US EPA Tier 3 / CN Stage 3

Electrical System

Power supply	24 V
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Tank Capacities

Fuel tank	750 l
Hydraulic oil	120 l
Water	2,250 l

Driving Performance

Max. milling speed	0 - 40 m/min (2.4 km/h)
Max. travel speed	0 - 125 m/min (7.5 km/h)

Crawler Units

Track chains front / back (L x W x H)	1,330 x 260 x 550 mm
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Loading of Milled Material

Belt width of primary conveyor	650 mm
Belt width of discharge conveyor	600 mm
Theoretical capacity of discharge conveyor	233 m ³ /h

TECHNICAL SPECIFICATIONS W 155 CF

Weight of Basic Machine

Empty weight of machine without fluids, including weather canopy	19,100 kg
Operating weight, CE ²⁾	20,650 kg
Maximum operating weight (full tanks, full range of equipment)	22,650 kg

Weight of Tank Contents

Water	2,250 kg
Fuel (0.83 kg/l)	620 kg

Additional Weight

Operator and Tools

> Machine operator	75 kg
> 5 pick containers	125 kg
> Vehicle tool kit	30 kg

Optional Milling Drums Instead of Standard

> Milling drum FB1500 HT22 LA25 with 104 picks	-130 kg
> Fine milling drum FB1500 HT5 LA6 with 254 picks	-230 kg

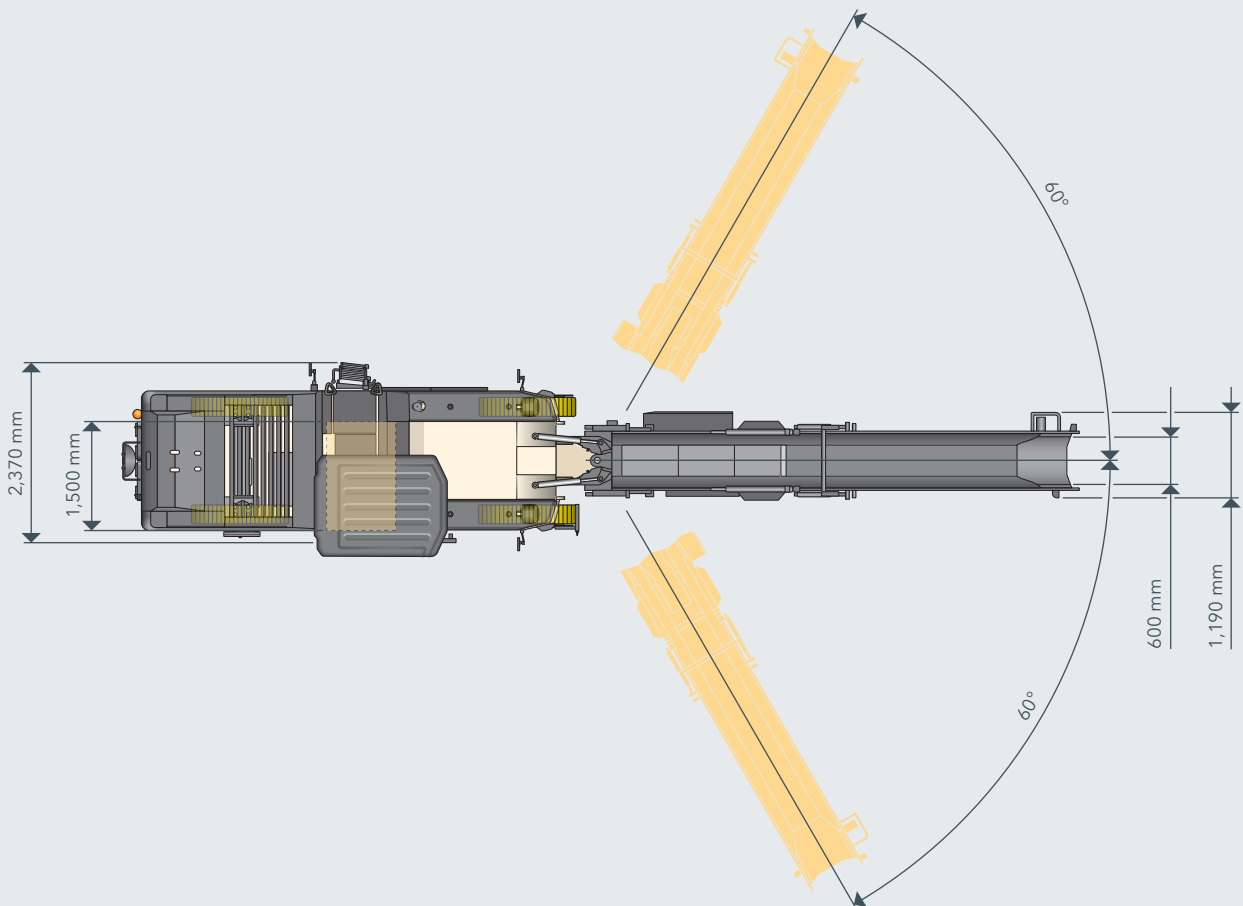
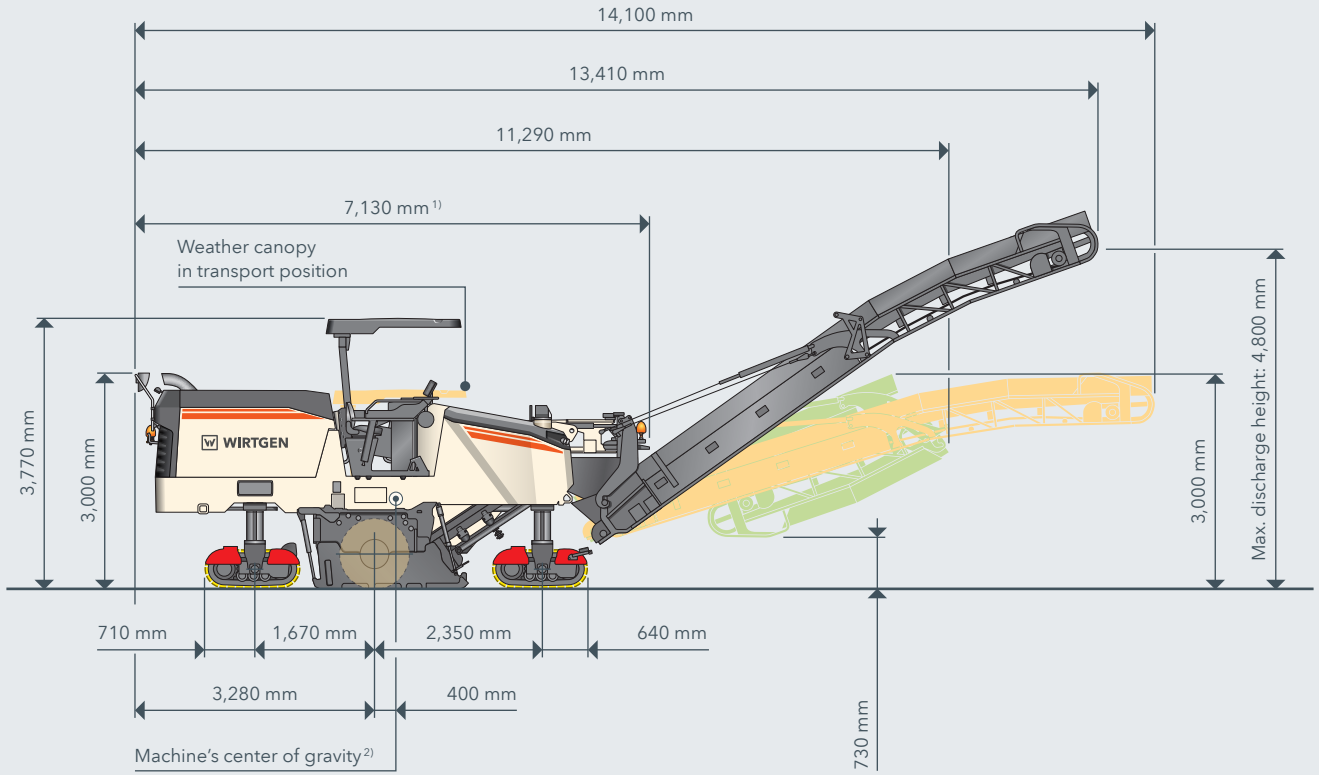
Optional Additional Equipment

> VCS extraction system	125 kg
> Additional weight	1.000 kg

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

²⁾ Machine weight, half-full tanks, vehicle tool kits, machine operator, excluding optional equipment

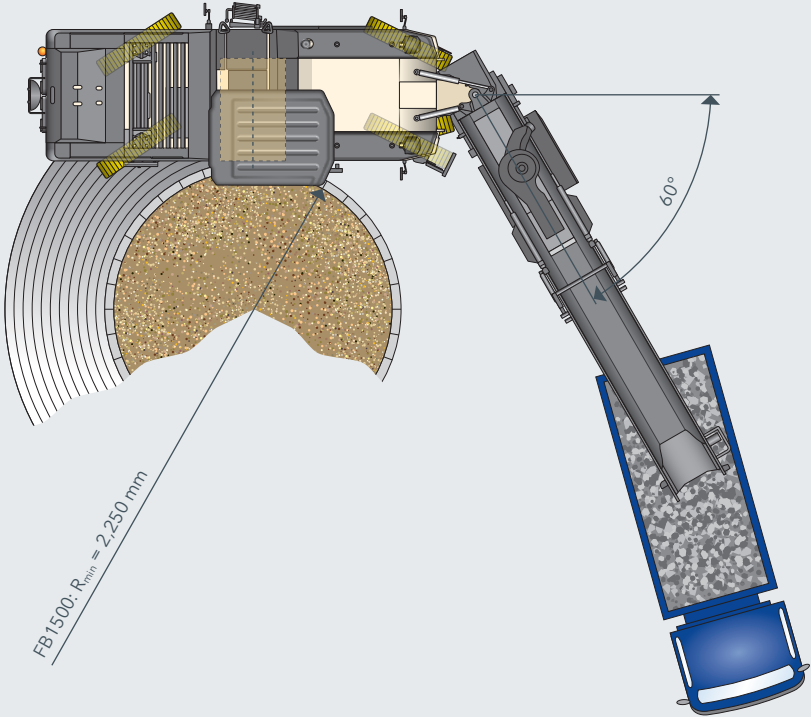
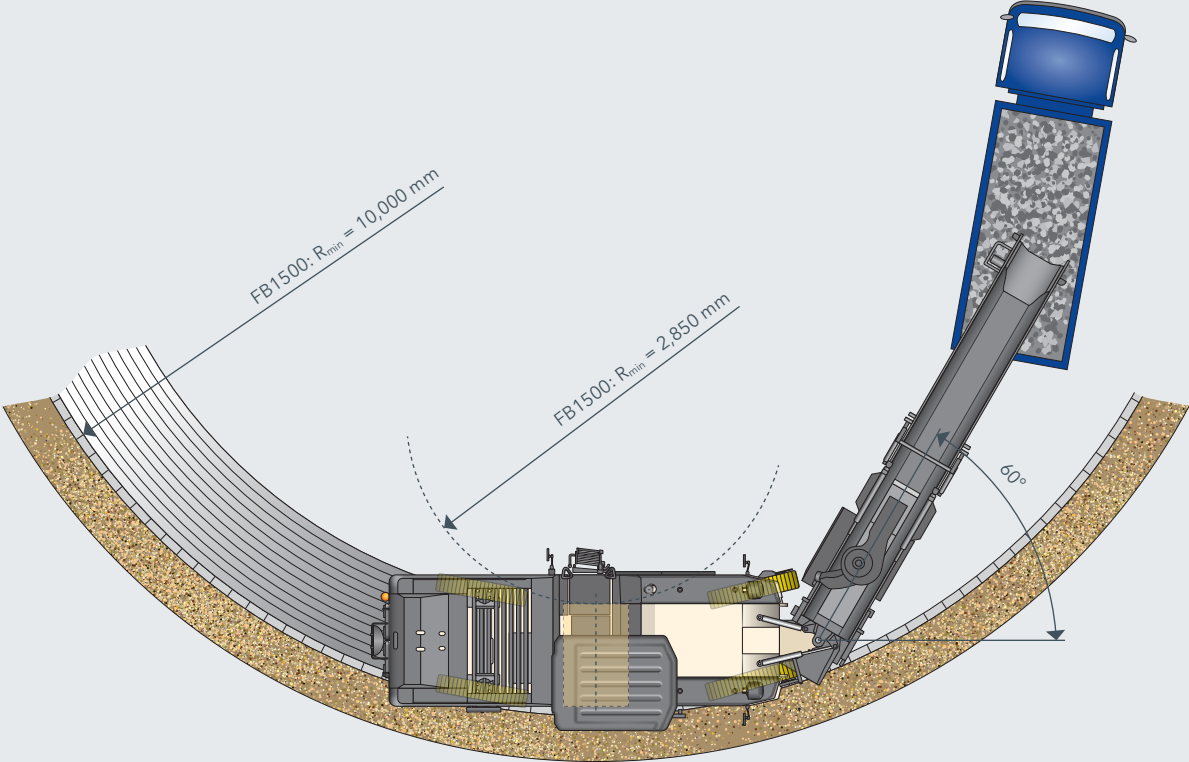
SIDE VIEW / TOP VIEW W 155 CF



¹⁾ Discharge conveyor in folding design

²⁾ Based on operating weight, CE with conveyor folded out

MILLING RADIUS W 155 CF, MILLING DEPTH 150 MM



STANDARD EQUIPMENT W 155 CF

Basic Machine

- > Base machine with engine ■
- > Machine chassis with wasp waist on the right side (zero edge) ■
- > Hydraulically opening, soundproof engine cowling ■
- > Two cooling fans to minimize power consumption of the cooling system ■
- > Elastically mounted engine station with low vibration and low noise ■
- > Three milling drum rotation speeds with electric on/off function 106 rpm - 96 rpm - 86 rpm ■

Milling Drum Unit

- > The right-hand side of the milling drum housing can be easily opened for maintenance or 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 rotation device ■
- > Milling drum FB1500 HT22 LA18 with 118 picks ■

Loading of the Milled Material

- > Discharge conveyor 7,350 mm long, 600 mm wide, with hydraulic folding device ■
- > Hydraulically folding discharge conveyor with an adjustable conveying speed for precise loading ■
- > Discharge conveyor slewing angle left 60 degrees - right 60 degrees ■

Machine Control and Leveling System

- > LEVEL PRO PLUS leveling system right and left ■
- > Load-dependent advance control ■
- > Automatic water management ■
- > Automatic engine speed control ■

Operator's Platform

- > Convenient control panel with practical switches ■
- > Multifunctional armrest including color operating display for one-handed operation of most machine functions ■
- > 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 ■
- > Convenient folding access ladder on the left ■
- > Three mirrors front, one mirror middle and one mirror in rear area of the machine ■
- > Canopy fiberglass manually lowering ■
- > Monitor system with 2 cameras and an additional color screen ■

Track Unit and Height Adjustment

- > 4-track drive with manually activated, electronic anti-slip control ■
- > 4 selectable steering modes ■
- > Fourfold full-floating axle for high machine stability ■
- > PTS - automatic alignment of the machine parallel to the pavement surface ■
- > ISC - intelligent track speed control including hydraulic four-track drive ■
- > Reversing with the milling drum rotating; simple and fast maneuvering ■
- > Equipped with extremely wear-resistant 2-piece polyurethane track pads ■

STANDARD EQUIPMENT W 155 CF

Miscellaneous

> Large tool package	<input checked="" type="checkbox"/>
> Generously sized water and diesel tanks	<input checked="" type="checkbox"/>
> Total of 3 EMERGENCY STOP switches at sensible positions on the machine	<input checked="" type="checkbox"/>
> "Go-Home-Light" feature including LED lighting in the area of the operator's platform and access	<input checked="" type="checkbox"/>
> Standard painting in RAL 9001 (cream)	<input checked="" type="checkbox"/>
> Job data acquisition in the control display	<input checked="" type="checkbox"/>

OPTIONAL EQUIPMENT W 155 CF

Milling Drums

> Milling drum FB1500 HT22 LA25 with 104 picks	<input type="checkbox"/>
> Fine milling drum FB1500 HT5 LA6 with 254 picks	<input type="checkbox"/>

Loading of the Milled Material

> VCS extraction system	<input type="checkbox"/>
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Machine Control and Leveling System

> Additional control panel LEVEL PRO PLUS	<input type="checkbox"/>
> Multiplex pre-fitting comprising 4 sensor sockets and holder	<input type="checkbox"/>
> 3-way multiplex system, right, including 2 ultrasonic sensors	<input type="checkbox"/>
> 3-way multiplex system, right and left, including 4 ultrasonic sensors	<input type="checkbox"/>
> RAPID SLOPE cross-slope sensor for LEVEL PRO PLUS leveling system	<input type="checkbox"/>

Operator's Platform

> Control panel for ground crew	<input type="checkbox"/>
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Miscellaneous

> Additional weight 1,000 kg	<input type="checkbox"/>
> Hydraulic filling pump for water tank	<input type="checkbox"/>

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

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