

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

Highlights in operation (pages 4/5)

1 INTUITIVE, PRECISE LEVELLING 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 levelling arm

21 MULTIFUNCTIONAL ARMREST BOOSTS EFFICIENCY

- > Ergonomically designed multifunctional armrest with colour control screen
- > User-programmable "Favourites" 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 MANOEUVRING

- > Travel speed of up to 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 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 MANOEUVRABILITY

- > 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

7 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



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 colour control screen.

"FAVOURITES" KEYS

Four "Favourites" 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 LEVELLING FEATURES

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

LEVELLING ARM

The telescoping levelling arm allows sensing along reference surfaces at a distance of up to 2.0 m to the side of the machine, ensuring perfect milling results even in complex levelling 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 levelling system.

Highlights in driving and steering



ELECTRONIC TRACTION DRIVE CONTROL

The electronically controlled traction drive with two transport and two milling speeds allows precise manoeuvring 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 7.5 KM/H

The machine's travel speed of up to 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



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.

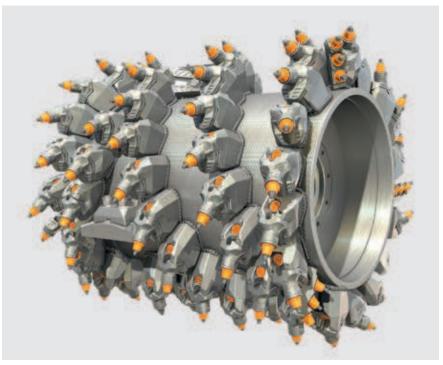
QUICK-RELEASE COUPLING

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



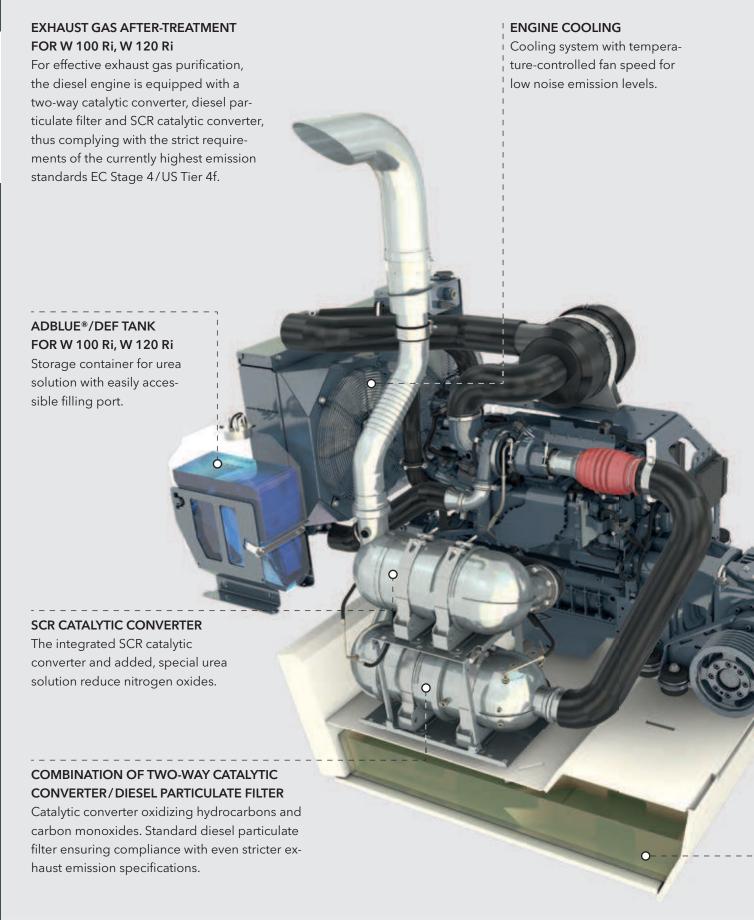
VARIOUS MILLING DRUMS

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 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.

OPTIMIZED EASE OF SERVICING

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



LARGE DIESEL TANK

vibration and noise levels, thus offering high driving comfort.

The large diesel tank enables extended machine uptimes.



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

Technical specification

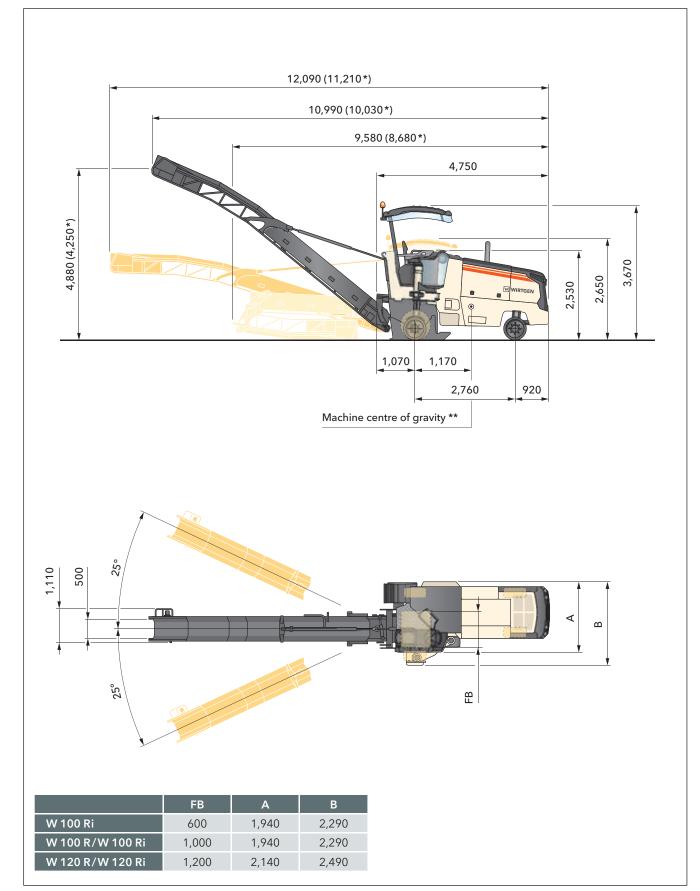
| | W 100 R | W 120 R | W 100 Ri | W 120 Ri | |
|--|--------------------------------|-------------|-----------------------|-------------|--|
| Milling drum | | | | | |
| Milling width standard | 1,000 mm | 1,200 mm | 1,000 mm | 1,200 mm | |
| Milling width optional | - | - | 600 mm | - | |
| Milling depth*1 | | 0 to 30 | 00 mm | | |
| Drum diameter with tools | | 930 | mm | | |
| Engine | | | | | |
| Engine manufacturer | | De | utz | | |
| Туре | TCD 201 | 2 L06 2V | TCD | TCD 6.1 L6 | |
| Cooling | | wa | ter | | |
| Number of cylinders | | 6 | 5 | | |
| Rated power at 2,300 min ⁻¹ | 155 kW/208 | 3 HP/211 PS | 160 kW/21 | 5 HP/218 PS | |
| Maximum power at 2,300 min ⁻¹ | 155 kW/208 | 3 HP/211 PS | 160 kW/21 | 5 HP/218 PS | |
| Displacement | | 6,100 | cm ³ | | |
| Fuel consumption at rated power | 42 | l/h | 44 l/h | | |
| Fuel consumption in field mix | 17 | l/h | 18 l/h | | |
| Emission standards | EC Stage 3 | a/US Tier 3 | EC Stage 4/US Tier 4f | | |
| Electrical system | | | | | |
| Electrical power supply | | 24 | V | | |
| Tank capacities | | | | | |
| Fuel tank | | 48 | 0 | | |
| AdBlue®/DEF tank | - | | 32 | | |
| Hydraulic oil tank | | 86 | 5 l | | |
| Water tank | 825 l | | | | |
| Driving properties | | | | | |
| Max. milling speed | 0 to 33 m/min (0 to 2 km/h) | | | | |
| Max. travel speed | 0 to 126 m/min (0 to 7.5 km/h) | | | ٦) | |
| Tyres | | | | | |
| Tyre size front ($\emptyset \times W$) | 620 x 230 mm | | | | |
| Tyre size rear (Ø x W) | 620 x 255 mm | | | | |
| Loading of the milled material | | | | | |
| | 500 mm | | | | |
| Belt width of discharge conveyor | | 500 | mm | | |

 $[\]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 | 14,000 kg | 14,650 kg | 14,100 kg | 14,750 kg | |
| Operating weight, CE* | 14,650 kg | 15,300 kg | 14,750 kg | 15,400 kg | |
| Operating weight, max, (full tanks, full range of equipment) | 15,600 kg | 17,650 kg | 15,700 kg | 17,750 kg | |
| Weights of tank contents | | | | | |
| Water tank filling | | 825 | 5 kg | | |
| Diesel tank filling (0.83 kg/l) | | 400 |) kg | | |
| AdBlue®/DEF tank filling (1.1 kg/l) | | - | 35.2 | 2 kg | |
| Additional add-on weights | | | | | |
| Driver and tools | | | | | |
| Driver | | 75 | kg | | |
| Weight of 2 cutting tool containers | | 50 | kg | | |
| On-board tools | | 30 | kg | | |
| Optional milling drum assemblies in lieu of standard | | | | | |
| Milling drum housing FB600 FCS | - | - | -30 kg | - | |
| Milling drum housing FB1000 FCS-L | 200 kg | - | 200 kg | - | |
| Milling drum housing FB1200 FCS-L | - | 300 kg | - | 300 kg | |
| Optional milling drums in lieu of standard | | | | | |
| Milling drum FB600 HT22 LA15 with 75 picks | - | - | -180 kg | - | |
| FCS-Milling drum FB1000 HT22 LA15 with 100 picks | 20 kg | - | 20 kg | - | |
| FCS-Milling drum FB1000 HT22 LA18 with 90 picks | -40 kg | - | -40 kg | - | |
| FCS-Milling drum FB1200 HT22 LA15 with 100 picks | - | -90 kg | - | -90 kg | |
| FCS-Milling drum FB1000 HT22 LA8 with 148 picks | 360 kg | - | 360 kg | - | |
| FCS-Milling drum FB1200 HT22 LA8 with 173 picks | - | 400 kg | - | 400 kg | |
| FCS-Milling drum FB1000 HT5 LA5 with 340 picks | 300 kg | - | 300 kg | - | |
| FCS-Milling drum FB1200 HT5 LA6x2 with 406 picks | - | 360 kg | - | 360 kg | |
| Optional supplementary weights | | | | | |
| Supplementary weight for flexible use | | 400 kg | | | |
| Optional additional equipment | | | | | |
| Discharge conveyor 7,350 mm long, 500 mm wide, with hydraulic folding device | 170 kg | | | | |
| Discharge conveyor 6,500 mm long, 500 mm wide, with hydraulic folding device | | 100 kg | | | |
| Canopy | 150 kg | | | | |

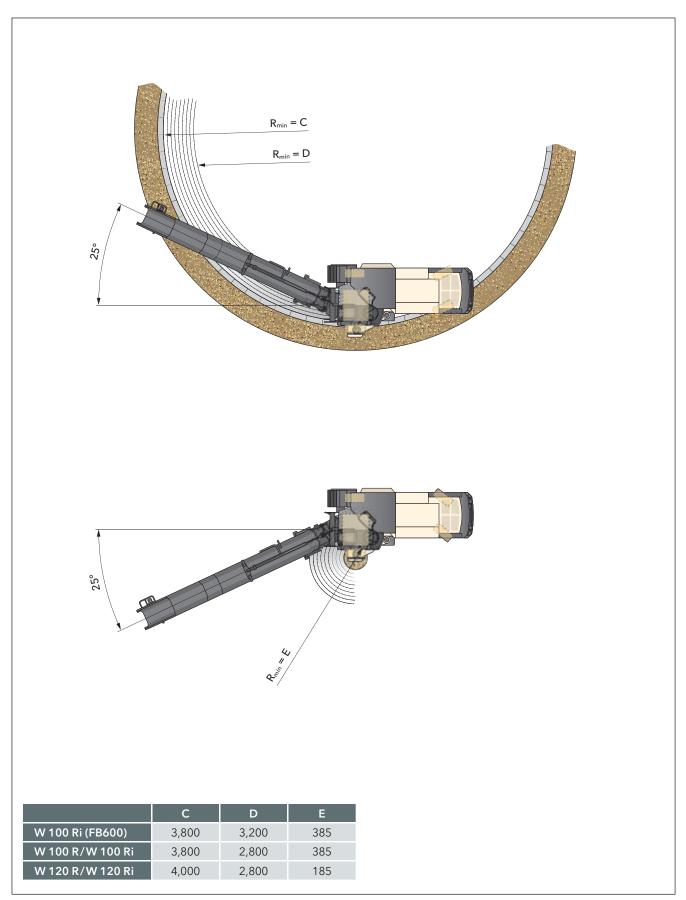
 $[\]star^2$ = Weight of machine with half-full water tank, half-full fuel tank, driver (75 kg) and on-board tools, excluding optional equipment

Dimensions



Dimensions in mm

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



Milling radius, 150 mm milling depth, dimensions in 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, 7,350 mm long, 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 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 centre 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
□ = Standard equipment, replaceable with optional equipment
□ = Optional equipment

Optional equipment

| | W 100 R | W 120 R | W 100 Ri | W 120 Ri |
|---|---------|---------|----------|----------|
| Milling drum unit | | | | |
| Milling drum housing FB600 FCS | - | - | | - |
| Milling drum housing FB1000 FCS-L | | _ | | - |
| Milling drum housing FB1200 FCS-L | - | | _ | |
| Manually adjustable front milling drum unit seal FB600 | - | - | | - |
| Hydraulically adjustable front milling drum unit seal FB600, incl. overload sensor | - | - | | - |
| Hydraulically adjustable front milling drum unit seal FB1000, incl. overload sensor | | - | | - |
| Hydraulically adjustable front milling drum unit seal FB1200, incl. overload sensor | - | | _ | |
| Overload sensor on the scraper FB600 | - | - | | - |
| Overload sensor on the scraper FB1000/1200 | | | | |
| Active floating position for the right and left side plates | | | | |
| Milling drums | | | | |
| FCS-Milling drum FB1000 HT22 LA15 with 100 picks | | - | | - |
| FCS-Milling drum FB1000 HT22 LA18 with 90 picks | | _ | | _ |
| FCS-Milling drum FB1200 HT22 LA15 with 100 picks | - | | _ | |
| FCS-Milling drum FB1000 HT22 LA8 with 148 picks | | - | | - |
| FCS-Milling drum FB1200 HT22 LA8 with 173 picks | - | | _ | |
| FCS-Milling drum FB1000 HT5 LA5 with 340 picks | | - | | - |
| FCS-Milling drum FB1200 HT5 LA6x2 with 406 picks | - | | - | |
| Milling drum FB80 HT02 MD250 with 30 picks | | - | | - |
| Milling drum FB600 HT22 LA15 with 75 picks | - | _ | | - |
| FCS milling unit FB400 HT22 | - | - | | - |
| FCS milling unit FB500 HT22 | - | - | | - |
| Milled-out material loading | | | | |
| Machine with hydraulic preliminary equipment for a discharge conveyor - quick-change coupling | | | | |
| Machine with belt device without discharge conveyor (FB600) | _ | - | | - |
| Machine with belt device without discharge conveyor (FB1000/1200) | | | | |
| Discharge conveyor 7,350 mm long, 500 mm wide, with hydraulic folding device | | | | |
| Discharge conveyor 6,500 mm long, 500 mm wide, with hydraulic folding device | | | | |
| Hydraulic connection adapter screw coupling for additional discharge conveyor | | | | |
| Hydraulic connection adapter quick-change coupling for additional discharge conveyor | | | | |
| = Standard equipment | | | | |

= 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 levelling system | | | | |
| Increased travelling speed (up to 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 levelling system right and left | | | | |
| RAPID SLOPE sensor for LEVEL PRO PLUS levelling system | | | | |
| Levelling boom including sensor for LEVEL PRO PLUS levelling system | | | | |
| Others | | | | |
| Paint in one special colour (RAL) | | | | |
| Paint in two special colours (RAL) | | | | |
| Paint in maximum two special colours with substructure in special colour (RAL) | | | | |
| High-performance LED lighting package including rotating beacon. | | | | |
| Additional weight 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 equipment, replaceable with optional equipment
 □ = Optional equipment



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