

Cold milling machine W 1000 F

Technical specification



Technical specification

	Cold milling machine W 1000 F with four wheels	Cold milling machine W 1000 F with four crawlers
Milling width max.	3'3" 1,000 mm	3'3" 1,000 mm
Milling depth ^{*1}	12 1/2" 0–315 mm	12 1/2" 0–315 mm
Milling drum		
Tool spacing	5/8" 15 mm	5/8" 15 mm
Number of tools	102	102
Drum diameter with tools	3'3" 980 mm	3'3" 980 mm
Engine		
Manufacturer	KHD Deutz	KHD Deutz
Type	BF 6 M 1013 CP	BF 6 M 1013 CP
Cooling	Water	Water
Number of cylinders	6	6
Output	190 kW/255 HP/258 PS	190 kW/255 HP/258 PS
Engine speed	2,300 min ⁻¹	2,300 min ⁻¹
Displacement	436 in³ 7,140 cm ³	436 in³ 7,140 cm ³
Fuel consumption, 1/1 load	12.5 gal/h 47.2 l/h	12.5 gal/h 47.2 l/h
Fuel consumption, 2/3 load	8.4 gal/h 31.8 l/h	8.4 gal/h 31.8 l/h
Speed/gradeability		
1 st gear	0-49 ft/min 0–15 m/min	0-49 ft/min 0–15 m/min
2 nd gear	0-108 ft/min 0–33 m/min	0-108 ft/min 0–33 m/min
Travel gear	0-4.5 MPH 0–7.2 km/h	0-3.4 MPH 0–5.5 km/h
Theor. gradeability, 1 st gear	79 %	57 %
Theor. gradeability in travel gear	12.7 %	4.3 %
Transversal inclination, max.	8°	8°
Ground clearance	13" 320 mm	13" 320 mm
Weights ^{*2}		
Front axle load, full tanks	19,180 lbs 8,700 daN (kg)	20,503 lbs 9,300 daN (kg)
Rear axle load, full tanks	21,385 lbs 9,700 daN (kg)	22,928 lbs 10,400 daN (kg)
Own weight	36,376 lbs 16,500 daN (kg)	39,242 lbs 17,800 daN (kg)
Operating weight, CE ^{*3}	38,471 lbs 17,450 daN (kg)	41,337 lbs 18,750 daN (kg)
Operating weight, full tanks	40,565 lbs 18,400 daN (kg)	43,431 lbs 19,700 daN (kg)
Suspension		
Type of tyres/crawlers	Solid rubber	Crawler
Tyre/crawler size, front	Ø 26" x 11" Ø 660 x 280 mm	4'4" x 10" x 21" 1,330x260x540 mm
Tyre/crawler size, rear	Ø 26" x 11" Ø 660 x 280 mm	4'4" x 10" x 21" 1,330x260x540 mm
Tank capacities		
Fuel tank	153.2 gal 580 l	153.2 gal 580 l
Hydraulic fluid tank	29.1 gal 110 l	29.1 gal 110 l
Water tank	343.4 gal 1,300 l	343.4 gal 1,300 l
Electrical system	24 V	24 V
Conveyor system		
Belt width loading belt and discharge belt	24" 600 mm	24" 600 mm
Theor. capacity of discharge conveyor	215 yd³/h 164 m ³ /h	215 yd³/h 164 m ³ /h
Shipping dimensions/weights ^{*2}		
Dimensions of machine (L x W x H)	19'4" x 8'4" x 10'2" 5,900 x 2,550 x 3,100 mm	19'4" x 8'4" x 10'2" 5,900 x 2,550 x 3,100 mm
Dimensions of discharge conveyor (L x W x H)	26'11" x 3'11" x 4'11" 8,200 x 1,200 x 1,500 mm	26'11" x 3'11" x 4'11" 8,200 x 1,200 x 1,500 mm
Weight of machine	34,282 lbs 15,550 daN (kg)	36,927 lbs 16,750 daN (kg)
Weight of discharge conveyor	2,205 lbs 1,000 daN (kg)	2,205 lbs 1,000 daN (kg)

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

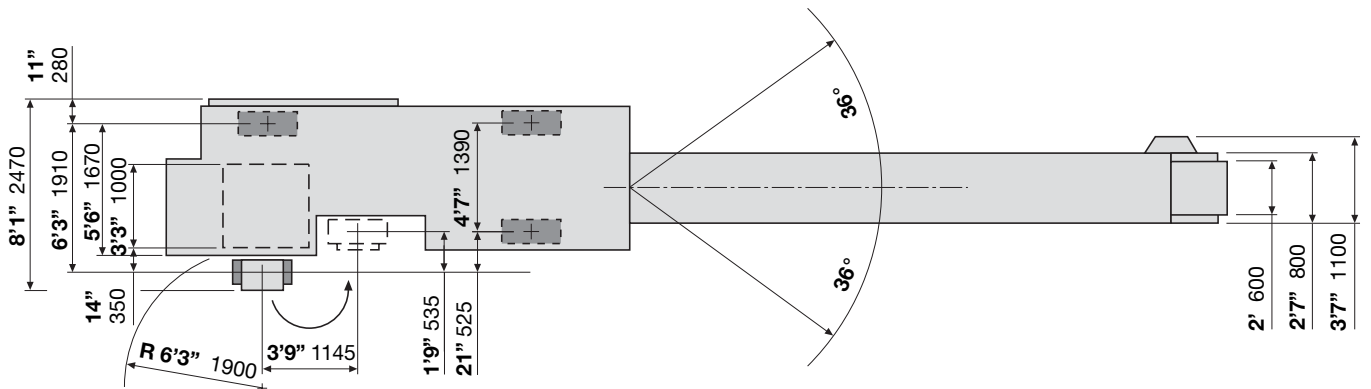
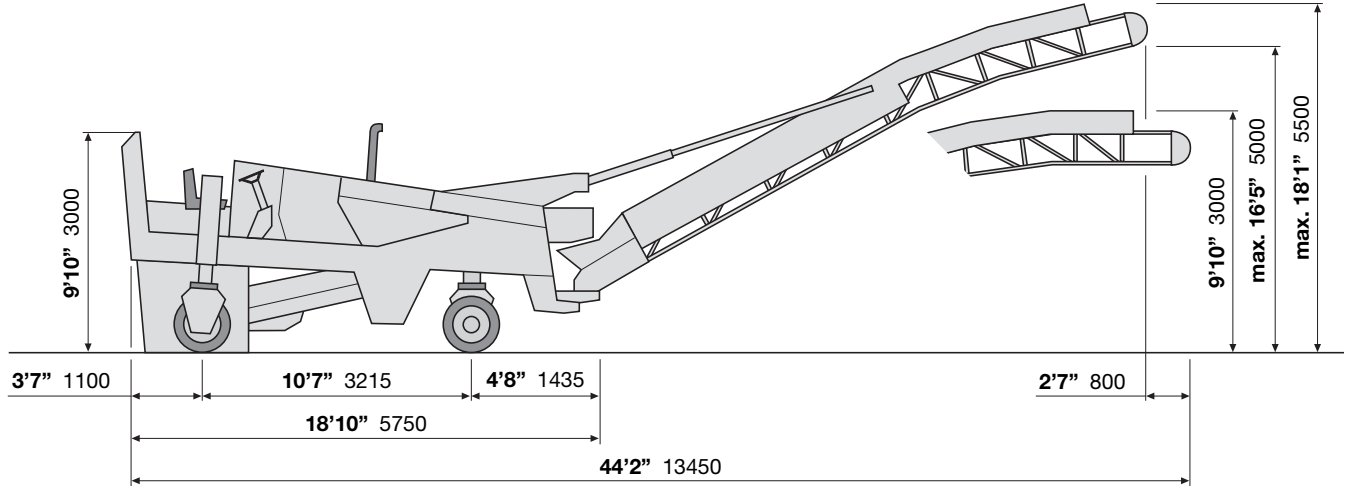
*2 = All weights refer to basic machine without any additional equipment.

*3 = Weight of machine with half-full water tank, half-full fuel tank, driver (75 kg) and tools.

Cold milling machine W 1000 F with four wheels

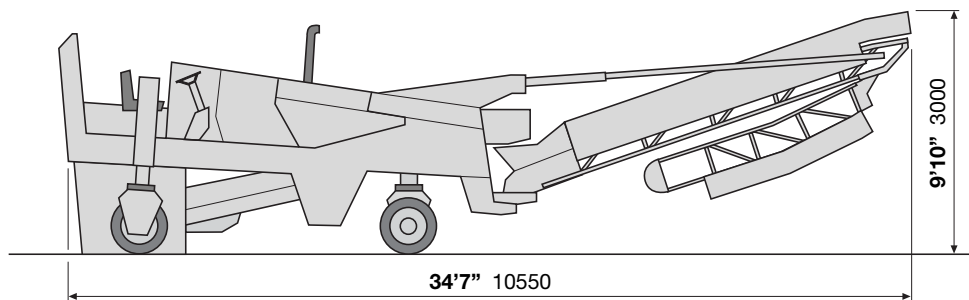
Cold milling machine W 1000 F with wheels

Dimensions in American standard and mm



Special equipment: hinged discharge conveyor

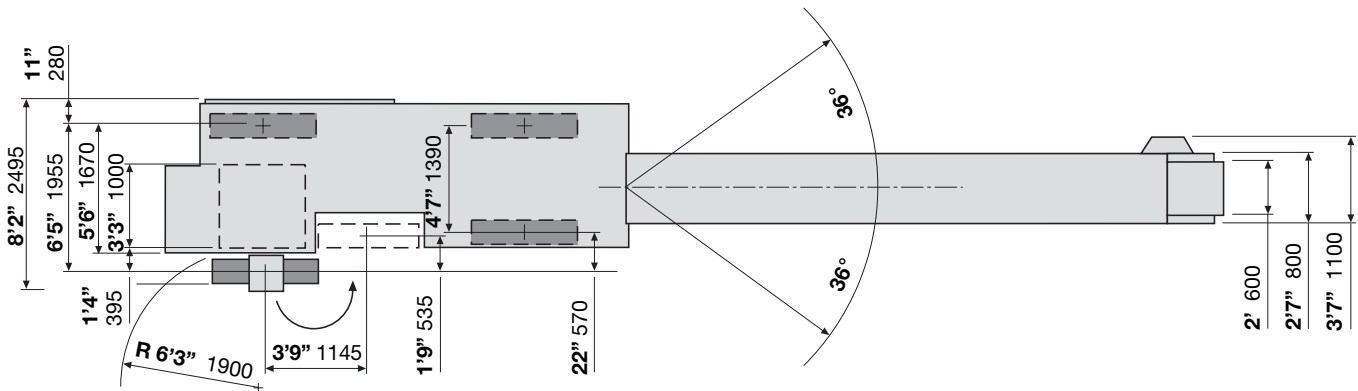
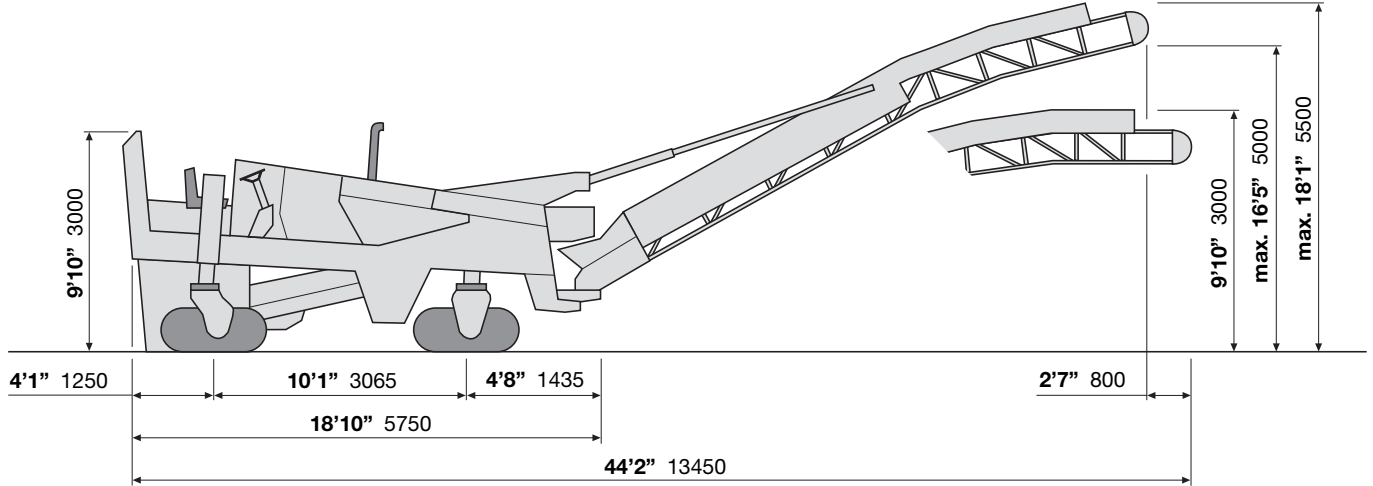
Dimensions in American standard and mm



Cold milling machine W 1000 F with four crawlers

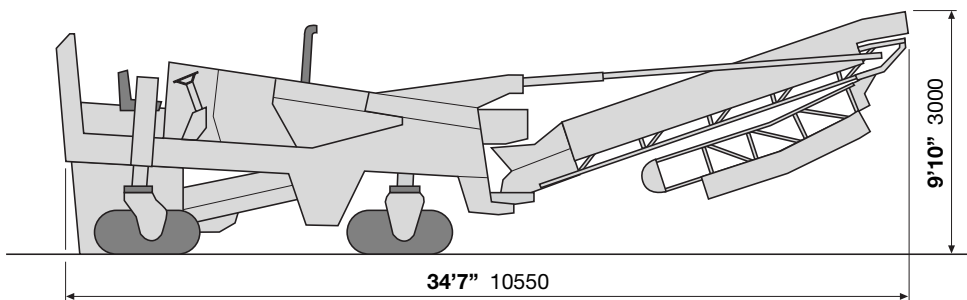
Cold milling machine W 1000 F with crawlers

Dimensions in American standard and mm



Special equipment: hinged discharge conveyor

Dimensions in American standard and mm



Technical description

Basic design

Road milling machine with mechanically driven milling drum and two-part front-end loading conveyor. The machine is equipped with a permanent all-wheel drive as a standard feature.

Chassis

Robust welded construction with mounts for the individual units and superstructures, as well as integrated tanks for diesel fuel and water. All components can easily be reached for maintenance and service purposes.

Operator's platform

The operator's platform is located at the rear of the machine. The comfortable sitting position, compact design and clear overview of the machine make it easy to operate. The seat and steering wheel can be optimally adjusted to meet each operator's personal needs.

The modern operating and control elements are located within easy reach and within the driver's field of vision. The speed selector and the most important controls are optimally integrated into the right-hand armrest. The operator's platform is reached via a ladder at the rear right when looking in the direction of travel.

Drive unit

The cold milling machine is driven by a six-cylinder turbo-diesel engine with integrated cooling system and inter-cooler. The engine is serviced from only one side and has a very low noise level. It meets both the EPA exhaust standards in the US and the EU exhaust standards.

Soundproofing

Noise levels are reduced by the standard soundproofing which also protects both the operators and the surroundings against any nuisance due to noise.

Milling drum drive

The milling drum is driven mechanically. A power belt with automatic hydraulic tensioning unit transmits the

engine power to the milling drum with high efficiency.

Milling drum

The milling drum is located between the rear suspensions and operates in an up-milling direction. Toolholders accommodating the round-shank cutters are welded onto the drum body. The cutters are optimally arranged to ensure smooth operation of the machine. Special edge segments ensure a clean sharp cut at the edges.

The milling drum can also be equipped with the patented and established quick-change toolholder system HT3 Plus as an optional extra. In this case, the bottom part of the toolholder is welded to the drum body so that the flanks form a continuous delivery screw. The upper parts, which accommodate the round-shank cutter, are simply inserted in the bottom parts and locked in position by a retaining bolt.

The W 1000 F can also be optionally equipped for work with the FCS (Flexible Cutter System). This system enables milling drums to be changed quickly, so that the W 1000 F can operate with working widths of between 12" (30 cm) and 39" (1.00 m). All FCS drums have maximum milling depths of 30 cm. Work with fine milling drums is equally possible.

Tool changes

The hydraulically opening scraper blade and the drum arrangement ensure easy access to the milling drum for tool changes.

Suspension

The rear wheels of the basic machine are designed as individually suspended supporting wheels. The right-hand rear wheel can be hydraulically swivelled in front of the milling drum so that the machine can mill right up to the edge. The height of the hydraulically floating front axle can be adjusted.

Each wheel can be replaced by a crawler track. Even when working with crawlers, the rear right-hand crawler can be swivelled inwards hydraulically

so that the machine can mill along the edge.

Milling depth adjustment

The milling depth is set via hydraulic height adjustment at the rear. It can be conveniently adjusted on either side from the driver's seat, where the set values can be read off and monitored on large indicators, even when the supporting wheel/crawler has been swung inwards. This feature permits simple and accurate production of wedged cuts.

Travel drive

Each wheel/crawler is driven by a hydraulic motor. The travel drive motors are fed by a common hydraulic variable displacement pump. The travel speed can be infinitely varied from zero to maximum speed in both milling gears and in travel gear. A switchable hydraulic flow divider acts as differential gear ensuring uniform traction.

Automatic power control

The machine is equipped with automatic power control which adjusts the feed rate in accordance with the load on the engine. Power control can be deactivated so that the feed rate can also be set by hand.

Steering

The machine has a fingerlight hydraulic steering system. The front wheels/crawlers are steered and have a large steering lock.

Brake system

Braking is achieved by drag from the hydrostatic transmission. The road milling machine is additionally equipped with an automatic spring braking system with disc brakes in the transmission mechanisms of all four wheels/crawlers.

Loading the RAP

The reclaimed asphalt pavement (RAP) is transported from the milling chamber to the truck at the front of the machine (front-end loading) by a system of conveyors comprising a loading belt and a discharge belt.

A scraper blade ensures that the reclaimed asphalt pavement (RAP) is taken up neatly. The scraper blade can be locked at the required height with variable contact pressure when milling right down to the gravel course. The scraper blade is additionally protected by carbide segments along the edges. In addition, the scraper blade can also be adjusted so that only part of the reclaimed material is loaded onto trucks.

The RAP is picked up at the milling drum by the loading conveyor and loaded onto trucks by the discharge belt. The discharge conveyor can be adjusted in height and slewed to both sides. The material is transported reliably and safely by the V-ribbed belt. The discharge conveyor is covered to prevent clouds of dust causing a nuisance. The belt speed is infinitely variable.

Hydraulic system

The hydraulic systems for travel drive, discharge conveyor and control functions are mutually independent with ultrafine filter and coolers.

All the oil in the system is filtered by a return-flow suction filter. The oil for the control functions (cylinders) is additionally filtered by a pressure filter.

Electrical system

24 V electrical system with 3-phase alternator and two 12 V batteries, starter, socket outlet and horn, readily accessible Emergency OFF switches and the complete working and safety lights.

Water spray system

The formation of dust clouds during the

milling process is largely prevented by a water spray system which also reduces wear on the round-shank cutters, thus considerably extending their service life. The spray nozzles can be removed without difficulty for cleaning.

Filling

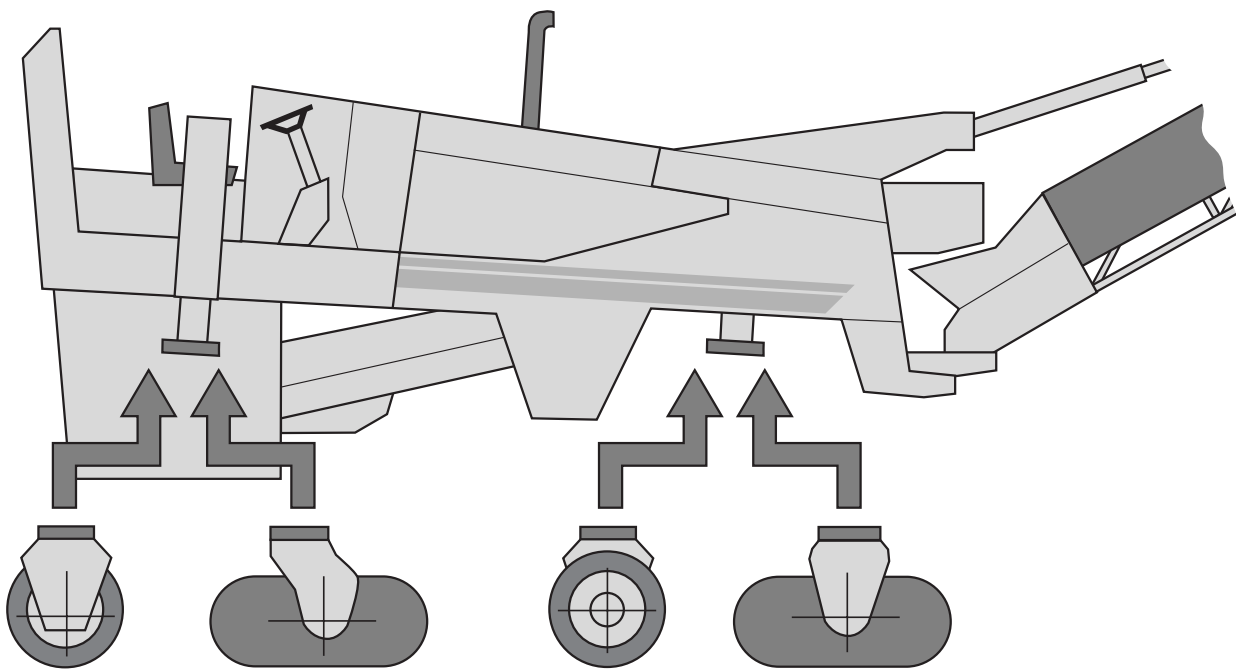
Water is filled via a C-pipe connection or large filling port. Diesel fuel is filled via a large filling port.

Safety

The machine can be securely lashed onto a low-bed trailer or loaded by crane with the aid of sturdy lashing lugs.

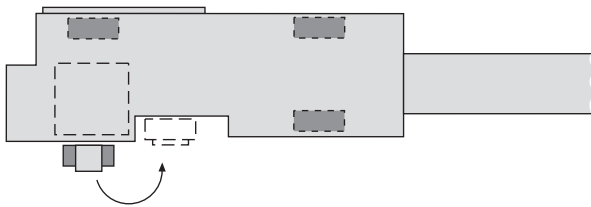
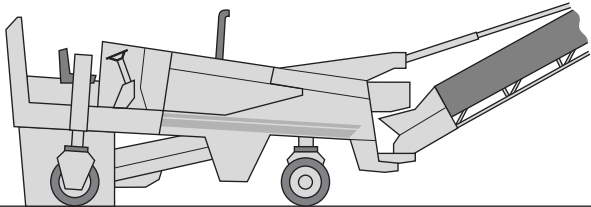
The machine features both the GS (safety tested) mark of the employers' liability insurance association and the CE mark.

Variable: Cold milling machine W 1000 F on wheels or crawlers

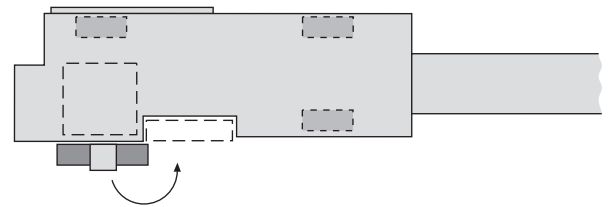
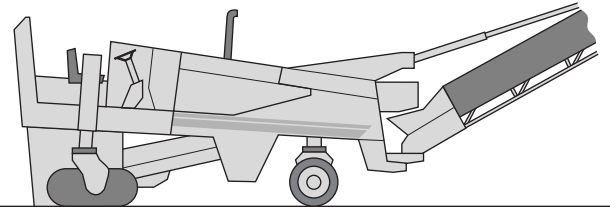


Possible combinations of crawlers and wheels

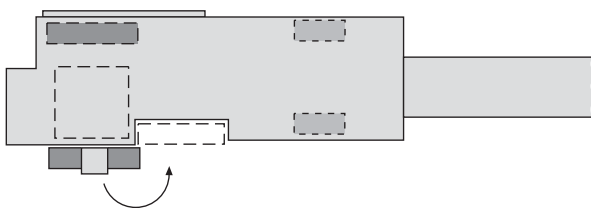
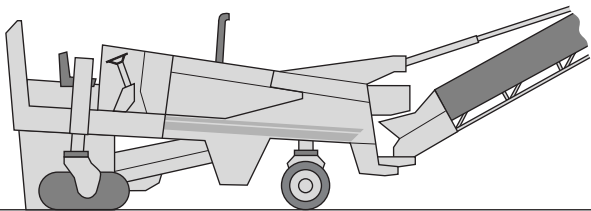
**Version: Cold milling machine W 1000 F
with four wheels**



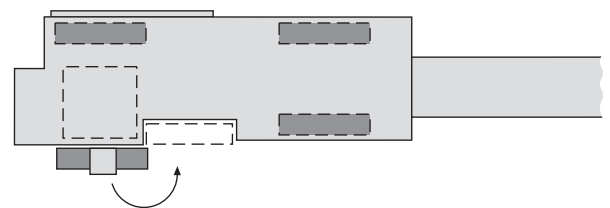
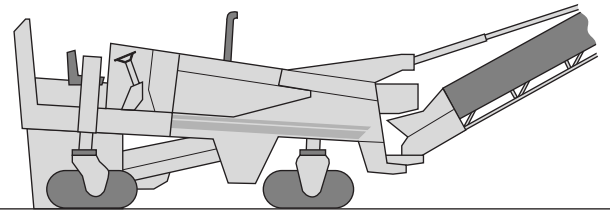
**Version: Cold milling machine W 1000 F
with one crawler and three wheels**



**Version: Cold milling machine W 1000 F
with two crawlers and two wheels**



**Version: Cold milling machine W 1000 F
with four crawlers**



○ Standard ● Optional

Equipment	Cold milling machine W 1000 F
Frame/operator's platform	
Special painting	●
Canopy roof	●
Wing mirror	●
Machine control/level control	
Automatic level control on the right	●
Automatic level control on both sides	●
Slope sensor	●
Milling unit	
Quick-change tool holder system HT3 Plus	●
Additional lock-valve for the scraper blade	○
Hydraulic side plate lifters	●
Equipment for FCS	●
RAP loading	
RAP discharge belts, 2' (600 mm) wide	○
Variable discharge belt speed	○
Hydraulically raised loading belt	○
Hinged discharge conveyor	●
Travel drive	
Version with four wheels, all-wheel drive	○
Version with 1-4 crawler tracks	●
Additional steering for rear right hand side (crawler version only)	●
Miscellaneous	
Soundproofing	○
Working lights (detachable)	○
Warning lights	○
High pressure water wash-down	●
Reversing horn	●
Towing device	●
Loading and lashing lugs	○
Comprehensive tool kit	○
Comprehensive safety package with Emergency-OFF switches	○
Hydraulic operated filling pump for water tank	●
Safety certificate by the employer's liability insurance association	○
CE-mark	○



WIRTGEN AMERICA

Wirtgen America Inc.
6030 Dana Way
Nashville, TN 37013, USA

Phone: (615) 501-0600

Fax: (615) 501-0691

Internet: www.wirtgenamerica.com