

Cold milling machine W 1000 F

Technical specification



Technical specification

		Cold milling machine W 1000 F on four wheels	Cold milling machine W 1000 F on four crawler tracks
Milling width max.	mm	1,000	1,000
Milling depth/Milling depth FCS^{*1}	mm	0–315/0–300	0–315/0–300
Milling drum			
Tool spacing	mm	15	15
Number of tools		102	102
Drum diameter with tools	mm	980	980
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	kW / HP / PS	190 / 255 / 258	190 / 255 / 258
Engine speed	min ⁻¹	2,300	2,300
Displacement	cm ³	7,140	7,140
Fuel consumption, full load	l/h	47.2	47.2
Fuel consumption, 2/3 load	l/h	31.8	31.8
Speeds / Gradeability			
1 st milling gear	m/min	0–15	0–15
2 nd milling gear	m/min	0–33	0–33
Travel gear	km/h	0–7.2	0–5.5
Theoretical gradeability, 1 st milling gear	%	79	57
Theoretical gradeability, travel gear	%	12.7	4.3
Transversal inclination, max.	°	8	8
Ground clearance	mm	320	320
Weights^{*2}			
Front axle load, full tanks	daN (kg)	8,700	9,300
Rear axle load, full tanks	daN (kg)	9,700	10,400
Own weight	daN (kg)	16,500	17,800
Operating weight, CE ^{*3}	daN (kg)	17,450	18,750
Operating weight, full tanks	daN (kg)	18,400	19,700
Drive unit			
Type of tyres/crawler tracks		Solid rubber	Crawler track
Tyre/Crawler track size, front	mm	Ø 660 x 280	1,330 x 260 x 540
Tyre/Crawler track size, rear	mm	Ø 660 x 280	1,330 x 260 x 540
Tank capacities			
Fuel tank	l	580	580
Hydraulic fluid tank	l	110	110
Water tank	l	1,300	1,300
Electrical system	V	24	24
Conveyor system			
Belt width of primary and discharge conveyor	mm	600	600
Theoretical capacity of discharge conveyor	m ³ /h	164	164
Shipping dimensions/Weights^{*2}			
Dimensions of machine (L x W x H)	mm	5,900 x 2,550 x 3,100	5,900 x 2,550 x 3,100
Dimensions of discharge conveyor (L x W x H)	mm	8,200 x 1,200 x 1,500	8,200 x 1,200 x 1,500
Weight of machine	daN (kg)	15,550	16,750
Weight of discharge conveyor	daN (kg)	1,000	1,000

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

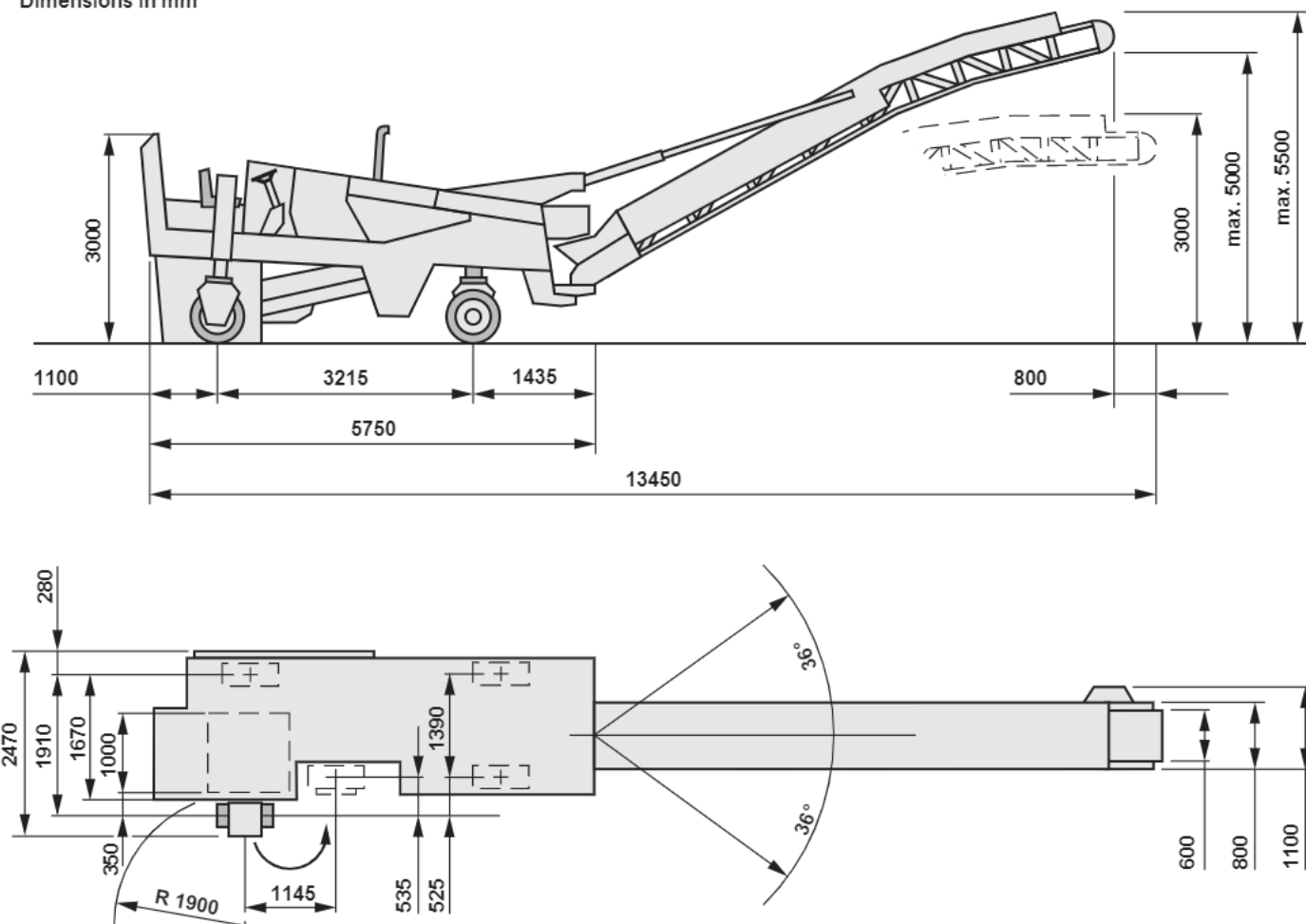
^{*2} = All weights refer to basic machine without any additional equipment.

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

Cold milling machine W 1000 F on four wheels

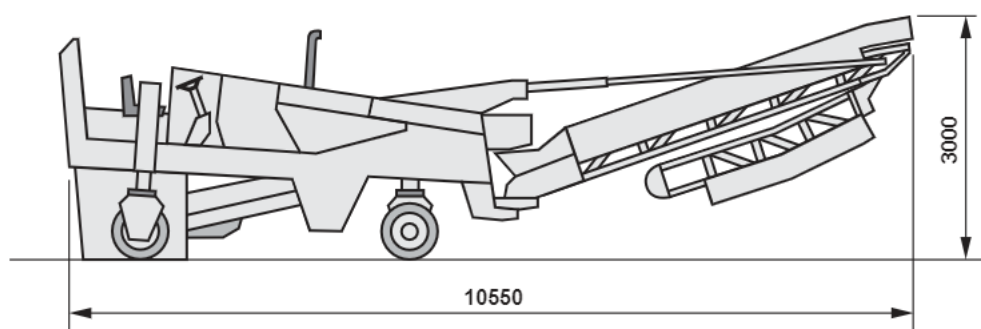
Cold milling machine W 1000 F on wheels

Dimensions in mm



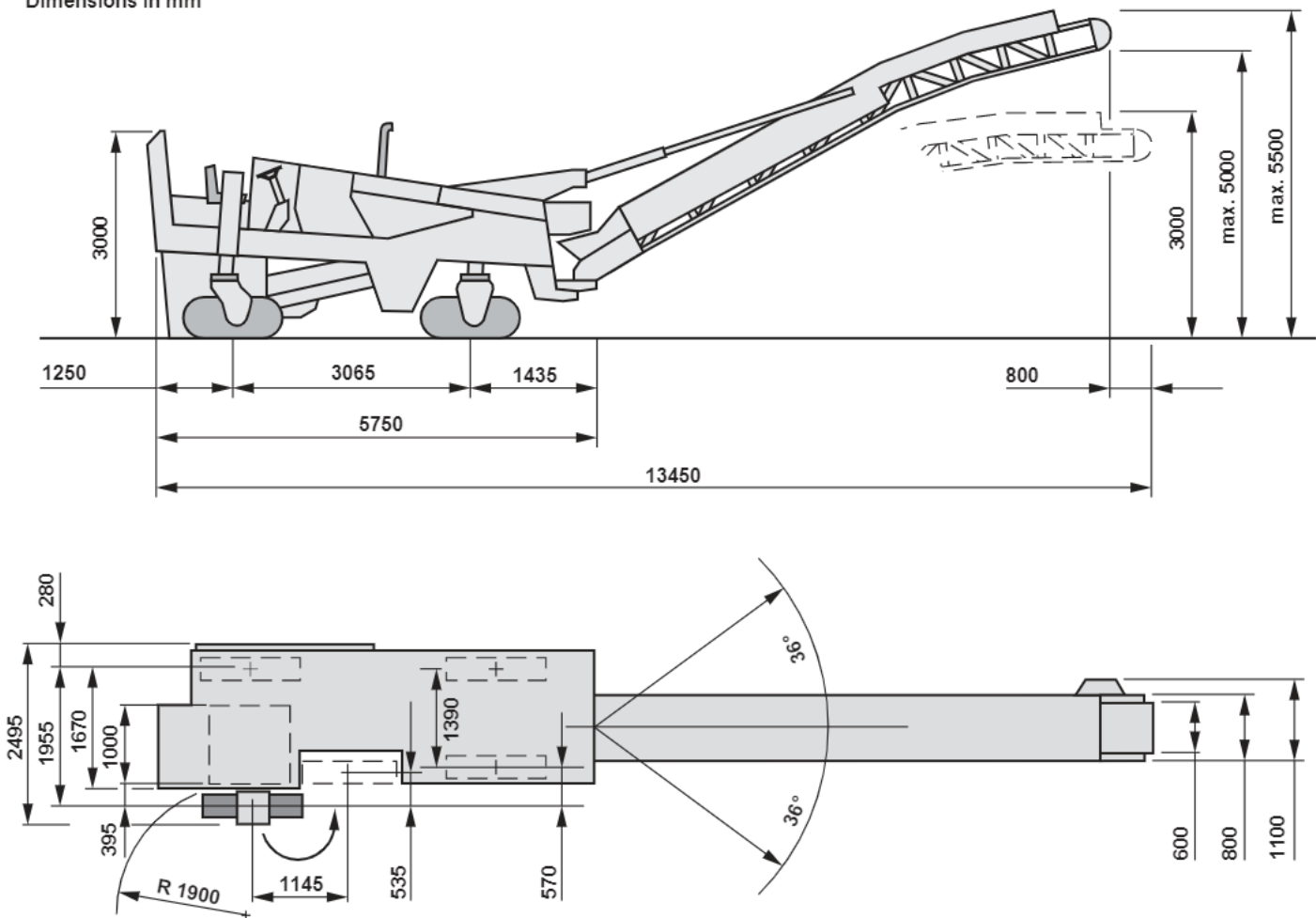
Special equipment: Folding discharge conveyor

Dimensions in mm

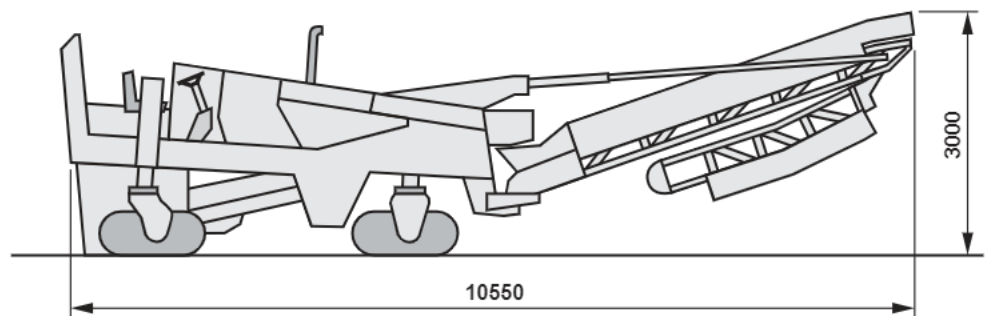


Cold milling machine W 1000 F on four crawler tracks

Cold milling machine W 1000 F on crawler tracks
Dimensions in mm



Special equipment: Folding discharge conveyor
Dimensions in mm



Basic design

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

Chassis

Robust welded construction with mounts for the individual units and superstructures. The tanks for diesel fuel and water are integrated into the chassis. All components are easily accessible for maintenance and servicing.

Operator's platform

The operator's platform is located at the rear of the machine and is reached via an access ladder at the rear right. The comfortable sitting position, compact machine design and clear overview allow an easy operation of the machine. The seat and steering wheel can be individually adjusted to meet each operator's personal needs. The modern control and operating elements are located within easy reach and within the operator's field of vision. The advance drive lever and other important controls are integrated into the right-hand armrest.

Power unit

The cold milling machine is driven by a modern six-cylinder turbo diesel engine with electronic controller as well as integrated cooling system and intercooler. The engine is serviced from the left machine side (in direction of travel). It complies with the stringent requirements of the exhaust emission standards stipulated by the US Environmental Protection Agency (EPA, Tier II) and the EU (Stage II).

Soundproofing

Noise levels are reduced by the standard soundproofing which protects both the operating personnel and the environment against any nuisance due to noise.

Milling drum drive

The milling drum is driven mechanically. A power belt with automatic hydraulic belt tensioner efficiently transmits the engine power to the milling drum.

Milling drum

The milling drum is located between the rear drive units and operates in up-milling direction. Toolholders accommodating the point-attack cutting tools are welded onto the drum body. An optimum arrangement of the cutting tools ensures the smooth operation of the machine. Special edge segments ensure a clean sharp cut at the edges.

As an option, the milling drum can be equipped with the patented and established Wirtgen quick-change toolholder system HT11. With this system, the bottom parts of the toolholders are welded onto the drum body in such a way that their sides form a continuous conveying helix. The upper parts, which accommodate the point-attack cutting tools, are simply inserted into the bottom parts and locked in position by retaining bolts.

The W 1000 F can, as an option, also be equipped for use with the Flexible Cutter System (FCS). This system allows the swift replacement of milling drums so that the W 1000 F can operate with different working widths between 30 cm and 1.00 m. All FCS drums have a maximum milling depth of 30 cm. The use of fine milling drums is equally possible.

Cutting tool replacement

The hydraulically opening scraper blade and position of the milling drum permit easy access to the drum for the replacement of cutting tools.

Drive unit

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 to allow milling flush to kerb. The hydraulically suspended full floating front axle can be adjusted in height. Each wheel can be replaced by a crawler track. The right-hand rear crawler track can also be hydraulically swivelled in front of the milling drum to allow milling flush to kerb.

Milling depth control

The milling depth is set via the rear hydraulic height adjustment. 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 scales, even with the supporting wheel/crawler track swivelled in front of the drum. This feature permits the simple and accurate production of wedged cuts.

Travel drive

Each wheel/crawler track 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 lock and ensures uniform traction.

Automatic power control

The machine is equipped with an automatic power control which governs the advance speed in accordance with the engine load. The power control can be deactivated to allow manual adjustment of the advance speed.

Steering

The machine has a finger-light hydraulic steering system. The front wheels/crawler tracks are steered and have a large steering lock.

Brake system

Braking is achieved by the self-locking hydrostatic transmission. The road milling machine is additionally equipped with an automatic spring-loaded braking system in the four travel drive gearboxes.

Loading the milled material

Loading of the milled material from the milling chamber on trucks is effected to the front (front loading) by means of a conveyor system which consists of a primary conveyor and a discharge conveyor.

Efficient loading of the milled material is ensured by means of a scraper blade, which can be locked at the required height with variable contact pressure when milling right down to the gravel course. Carbide segments on the edge of the scraper blade provide additional protection. In addition, the scraper blade can be adjusted in

such a way that part of the reclaimed material can be loaded on trucks. The milled material is picked up at the milling drum by the primary conveyor and loaded on trucks by the discharge conveyor. The discharge conveyor can be adjusted in height and slewed to both sides. The material is transported reliably and safely by the V-ribbed belts. The discharge conveyor is covered to prevent clouds of dust being blown away by the wind and causing a nuisance. The conveyor belt speed is infinitely variable.

Hydraulic system

The hydraulic systems for travel drive, discharge conveyor and setting functions with ultra-fine filters and cooler

are mutually independent. The entire hydraulic system is filtered via a return-flow suction filter. The oil for the setting functions (cylinders) is additionally passed through a pressure filter.

Electrical system

24 V electrical system with 3-phase alternator and two 12 V batteries, starter, socket outlet and horn, easily accessible emergency stop buttons and comprehensive working and safety lights.

Water spray system

The formation of dust clouds during the milling operation is largely prevented by a water spray system which also reduces wear and tear of the point-attack

cutting tools, thus considerably extending their service life. The spray nozzles are easily removed for cleaning.

Filling

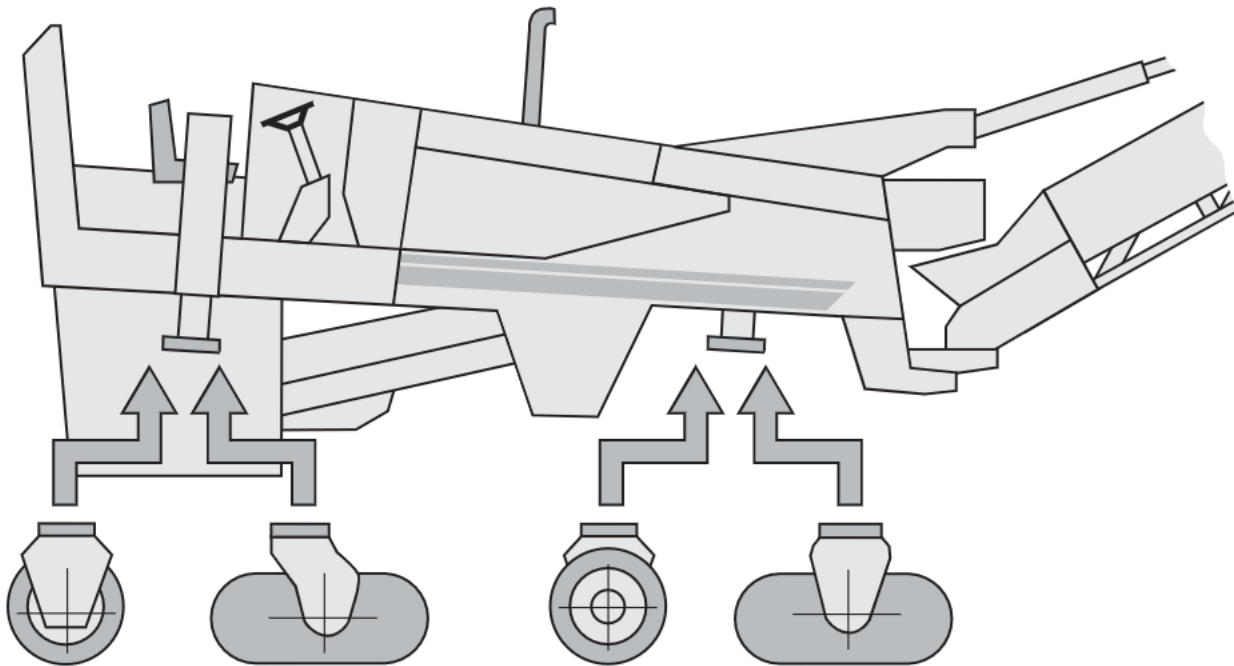
Water is filled via a C-pipe connection or a large filling port. Diesel fuel is filled via a large filling port.

Safety features

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

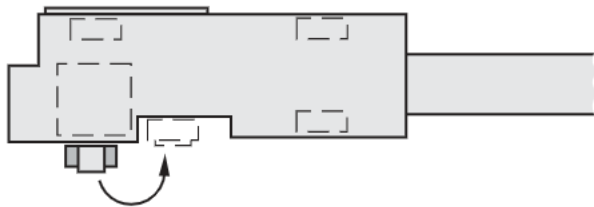
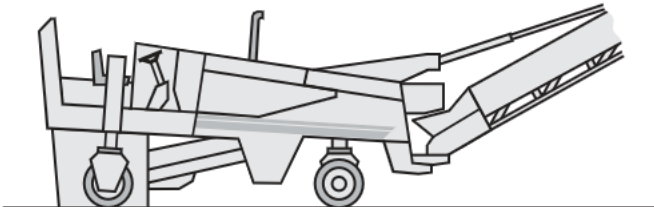
The machine features both the GS label (Geprüfte Sicherheit = Tested Safety) of the Employer's Liability Insurance Association and the CE label.

Versatile: Cold milling machine W 1000 F on wheels or crawler tracks

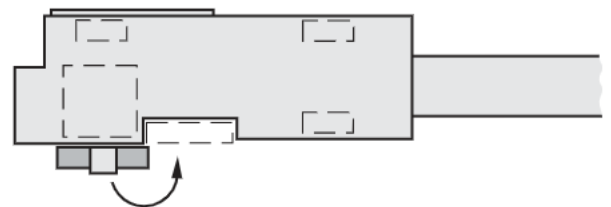
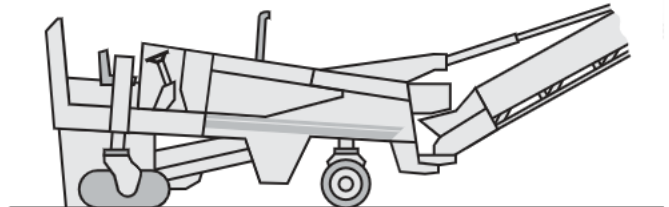


Possible combinations of crawler tracks and wheels

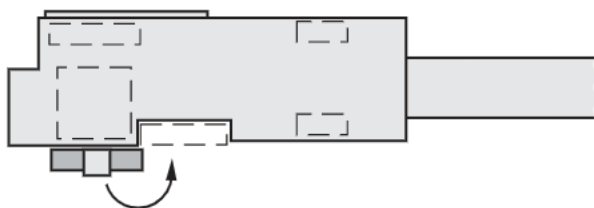
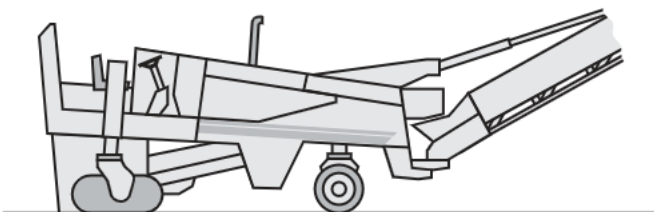
Option: Cold milling machine W 1000 F on four wheels



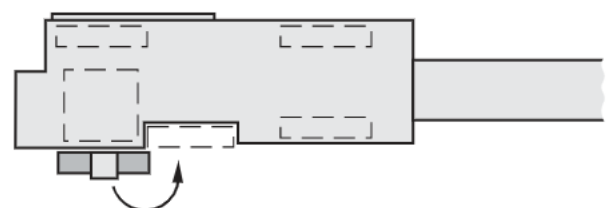
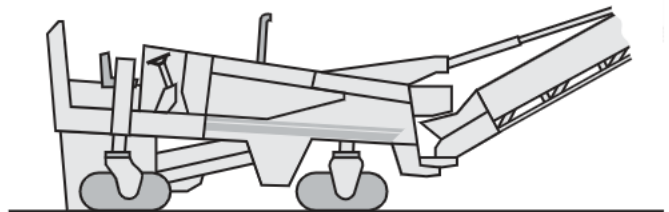
Option: Cold milling machine W 1000 F on one crawler track and three wheels



Option: Cold milling machine W 1000 F on two crawler tracks and two wheels



Option: Cold milling machine W 1000 F on four crawler tracks



○ Standard ● Option

Equipment	Cold milling machine W 1000 F
Frame/Operator's platform	
Special painting	●
Canopy	●
Exterior rear view mirror, right	●
Machine control and levelling system	
Automatic levelling system, right	●
Automatic levelling system, left and right	●
Slope control sensor	●
Milling drum assembly	
Quick-change toolholder system HT11	●
Additional lock-valve for scraper blade	○
Hydraulically lifting side plates	●
Equipment for FCS	●
Loading the milled material	
Conveyor belts to load the milled material, 600 mm wide	○
Adjustable discharge conveyor belt speed	○
Hydraulically lifting primary conveyor	○
Folding discharge conveyor	●
Travel drive	
Basic model on four wheels, all-wheel drive	○
Model on 1–4 crawler tracks	●
Additional steering at the rear right (for crawler track option 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 stop buttons	○
Hydraulically operated pump for water refilling	●
Safety certificate by the Employer's Liability Insurance Association	○
CE label	○



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