



# Cold milling machines W 1000 F and W 1200 F

The flexible ones in the 1-metre class



## Cold milling machines W 1000 F and W 1200 F: the flexible ones in the 1-metre class



The W 1000 F and W 1200 F have proved their value for removing complete carriageway constructions in a single pass. When operating a machine equipped capacity.

## The world's most successful cold milling machine in the 1-metre class

With several hundred units sold throughout the world, the cold milling machines W 1000 F and W 1200 F from Wirtgen belong to the most successful series in the 1-metre class. Their revolutionary design, including the drum drive, front-end loading and compact size have made them allrounders on road milling sites around the world.

The machines are used wherever individual asphalt courses or complete carriageway constructions have to be removed.

#### **High productivity**

The W 1000 F and W 1200 F mainly owe their immense productivity to the following factors, in addition to numerous others:

- High engine rating of 185 kW/252 PS
- Front-end loading of the reclaimed asphalt pavement
- A maximum milling depth of 31.5 cm
- The fact that the machines can be fitted with wheels or crawler tracks
- The FCS (Flexible Cutter System) for varying the milling width between 30 cm and 1 m (or 1.2 m in the case of the W 1200 F).

#### Complete with automatic level control

It goes without saying that the machines are equipped with the integrated automatic level control system using proportional action which is a standard feature of Wirtgen machines. Sensors at various points on the machine scan a reference area, for example, or a grade line and transmit the momentary measured values to the automatic level control system within a split second. Any changes in the reference area are compensated quickly, precisely and without overshooting, even on rough carriageways.



with crawler tracks, the driver can count on good traction, straight running and stability, even when moving on loose ground of limited load-bearing

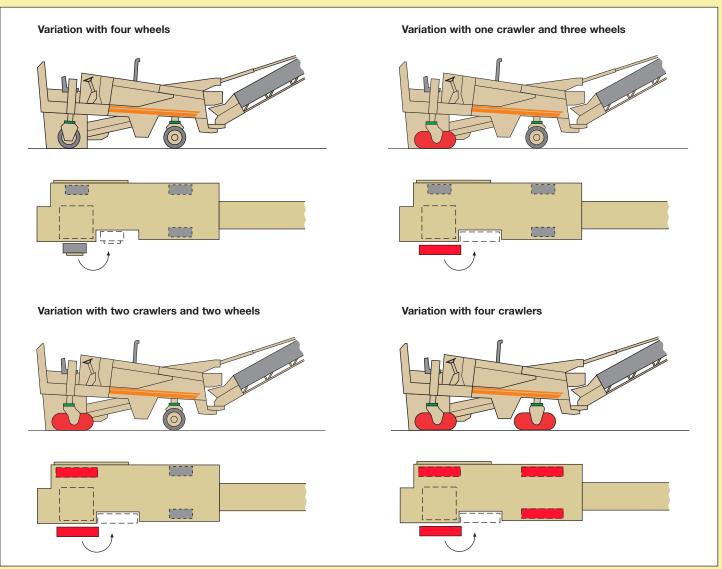


The wheel-mounted W 1000 F or W 1200 F is ideal for removing individual asphalt courses, for instance when rehabilitating stretches of road within towns and cities.

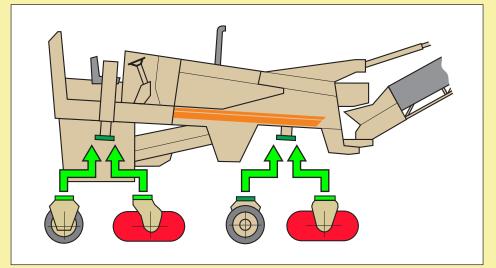
### Different milling drums for different applications

Wirtgen's core competence – cutting technology – is also evident in the cold milling machines W 1000 F/W 1200 F. The possible milling drums range from standard units with a working width of 1 m resp. 1.2 m and fine milling drums through to special drums for the FCS (Flexible Cutter System) with which working widths from 30 cm to 1.2 m can be realized on the W 1000 F/W 1200 F (see page 8). The number of possible uses is consequently larger than ever and directly boosts the machine's cost-efficiency.

## The variable 1 metre milling machine: wheels or crawlers



The operator can equip the W 1000 F / W 1200 F with wheels and crawlers entirely as required. The rear suspension unit can be folded inwards with equal ease, regardless of whether wheels or crawlers have been fitted.



The changeover from crawlers to wheels and vice versa is made in no time at all.

#### Full traction, even on sandy soils

Milling machine operators are repeatedly faced with the situation that they must manoeuver their complete machine or at least one side of it on sandy or non-cohesive soils. Such situations can easily arise both when removing complete pavements and when milling verges.

The W 1000 F/W 1200 F is the ideal machine for such situations, for this cold milling machine can run not only on wheels, but also on crawlers.

## Ready for all loading situations



The slewing discharge belt allows the milling machine operator and truck driver to adjust precisely to the conditions prevailing on site.

#### Flexible loading of the RAP

The W 1000 F/W 1200 F is equipped with a flexible RAP loading system for different applications. The discharge belt can be slewed to both sides so that the trucks can also travel beside or in front of the milling machine. The speed of the discharge belt is infinitely variable so that the truck can be fully and uniformly loaded with the reclaimed material. Last but not least, the optionally available hinged discharge belt considerably reduces the machine's overall length when transported to the next site.



Another possibility: the RAP can also remain on the milled surface.

### The RAP is optimally taken up at all working depths

The lower deflection roller of the loading belt is mounted in a robust sliding block which runs over the unmilled surface regardless of the milling depth. This ensures that the reclaimed asphalt pavement is optimally transferred to the conveying system. The sliding block can be hydraulically lifted together with the loading belt when driving over obstacles.

The transition from loading belt to discharge belt is covered to minimize the formation of dust clouds.

#### Optional: hinged discharge belt



The discharge belt can be fitted or dismantled within minutes when required.



It can also be folded up just as easily to reduce the overall machine length.



Shorter trailers can be used to transport the machine when the belt is folded up.

The belt can be folded up and down by only one person.

## High milling performance and milling depths of over 30 cm

### Technical sophistication ensures maximum cost-efficiency

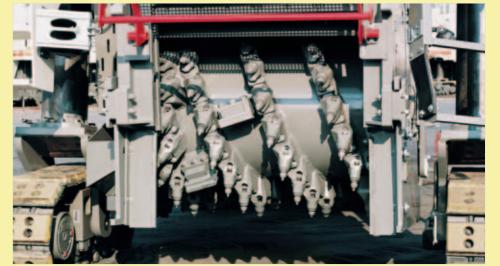
The impressive performance of the W 1000 F/W 1200 F when removing complete carriageway pavements is due to its carefully matched design features:

- Powerful 185 kW diesel engine
- Hydraulic all-wheel/all-track drive with differential lock
- Optimized machine weight with low centre of gravity
- Mechanical milling drum drive with automatic, hydraulically operated belt tensioner
- Maximum milling depth of 31.5 cm
- Two-part RAP loading system with detachable, slewing discharge belt
- · Large tanks for diesel and water
- Suitable for operation on wheels or crawlers, therefore optimum traction at all times
- Rear right-hand wheel/crawler can be folded inwards as usual.

All these features of the W 1000 F/W 1200 F assure the high daily performance and hence the great cost-efficiency of the cold milling machine.



The entire pavement is removed by the W 1000 F, track for track. The crawlers ensure good traction and safe operation on the loose substrate, as well as a rapid rate of advance.



The milling drum is located at the rear so that the machine can be positioned right up to the kerb. The position of the milling drum also ensures good access for tool changes.

#### The patented and established toolholder system HT3

The toolholder system from Wirtgen has been used with great success by milling machine operators throughout the world. When a toolholder becomes worn, only one screw need be loosened and a new toolholder inserted in its place. The entire change can be undertaken with standard tools and within a very short space of time.

The durability of the system is another practical advantage enhancing the cost-efficiency of the Wirtgen milling machine.



W 1200 F milling off the surface course of an urban road in the USA. The machine leaves a neat milled surface, despite its considerable rate of advance.



Little noise in spite of the powerful engine: soundproofing is a standard feature of the W 1000 F/W 1200 F, so that they can even be used without difficulty in residential areas.

#### Compact and highly manoeuvrable

Despite the large tanks for water and diesel, the cold milling machines W 1000 F and W 1200 F are so compact that the operator always has a clear view of the entire machine.

The machines' impressive manoeuvrability is another advantage, particularly when working on urban sites. An inner turning radius of just 1.90 m leaves plenty of space for manoeuvering on any site.

## FCS – Flexible Cutter System: Flexibility that pays off

#### Larger range of uses yields additional benefits

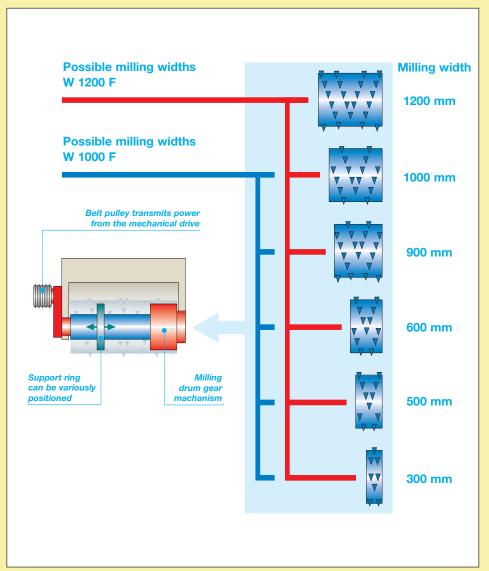
Thanks to the FCS, contractors can now use their machines for many new applications. In a world first, the system now permits use of the compact crawler-mounted W 1000 F and W 1200 F for jobs requiring a minimum milling width of 30 cm.

With the FCS, the machines can now even be used without difficulty for jobs requiring them to run on ground of limited load-bearing capacity, such as when digging trenches.

#### Maximum flexibility in milling width

The system is designed in such a way that the change can be carried out by skilled personnel using standard tools in no more than two or three hours. As a result, contractors can now take on milling jobs outside their previous performance range.

The range of drums available goes far beyond the standard range illustrated in the diagram alongside. Drums with special milling widths and fine milling drums with various spacings are available for the FCS on request.



FCS drums for W 1000 F and W 1200 F: only the outer drum tube – fitted with toolholders – and the scraper are replaced when changing the milling width.



Milling unit of a W 1200 F with 60 cm wide milling drum digging a trench for cables. The left-hand crawler is travelling on ground of limited bearing capacity.

The central part of the FCS is a unit on which drums of various working widths can be fitted. All FCS drums have the convenient quick-change toolholder system HT3.

Regardless of the machine's momentary working width, the zero edge is always located on the right-hand side of the machine. Even when using the FCS, this means that the machine can work right up to the kerb or other obstacles. Another interesting feature: milling depths of up to 30 cm can be achieved with all drums.

# Neat milled surfaces even when working with different milling widths



Nothing could be simpler: open the hinged side panel and remove the drum – only the outer drum tube with the toolholders is actually replaced.



Once the drum has been pulled off the shaft, it can be conveniently laid on the drum carriage.

### The right scraper blade for every working width

Together with the various milling drums, the scraper plate for variable working widths is another essential part of the FCS unit.

The underlying principle is simple: the right-hand section of the two-part scraper blade is located behind the drum and seals the working area as usual, while the left-hand part simply runs over the existing pavement during the milling work. The scraper blade is adjusted to the different working width when using another milling drum from the Flexible Cutter System.

The system is designed in such a way that the two parts of the scraper blade can be hydraulically lifted independently of one another. This makes it possible to load part of the material, as when milling with a standard milling unit. It goes without saying that the entire milled material can also be left in the trench in this way.

Last but not least, the accessible cutters on the drum can be changed just as easily and conveniently as when using the standard unit.



W 1200 F, ready for milling, here equipped with milling drum and scraper blade for a milling width of 60 cm.



Both scraper parts are in the milling trench when milling over the complete working width.

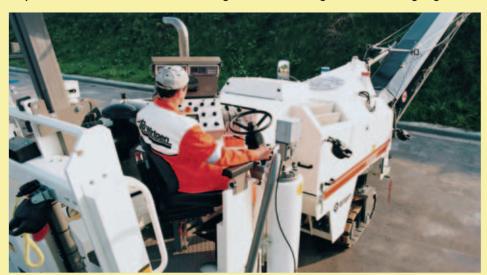
### **Ergonomic operation**



Clear view of the milled edge: the operator can always overlook the area to be milled, as well as the truck driving ahead of the machine. That is ergonomical, convenient and safe. And allows the operator to work on the one metre milling machine for a long time without fatiguing.

### Ergonomically designed operator's platform

The entire operator's platform has been designed according to practical, ergonomic aspects. First, there is the seat and steering wheel which can be adjusted to suit the operator's height. The operating elements have similarly been optimally arranged. The switches and levers for frequently needed functions are integrated into the armrest on the right of the operator's platform, leaving the left hand free to correct the steering movements and to operate the controls on the main control console. A multi-fuction display on the console makes the convenience perfect.



Prerequisite for excellent work: the spacious operator's platform affords the operator a complete overview of the site at all times.

### Convenient operation and maintenance



The rear right-hand suspension unit is normally swivelled outwards.



If space is limited, this unit can be hydraulically swivelled in front of the milling drum.



So the machine can mill round obstacles without interference.

## Milling right up to the edge The rear right-hand wheel of

The rear right-hand wheel or crawler can be slewed in front of the drum quickly and without physical effort. Patented by Wirtgen, this system allows the machine to mill edge-flushed right up to walls and similar boundaries while ensuring an optimum view of the milled edge. The wheel or crawler is slewed hydraulically from the driver's platform.

The large steering angle of the front wheels/crawlers ensures optimum handling and manoeuvrability, even on confined sites.



The engine hood opens wide to permit easy access to the engine and to the handful of maintenance and inspection points.

#### Simple and safe to service

The safety features of the W 1000 F/W 1200 F meet the customary high Wirtgen standards and ensure that the machine can be operated without accidents, for it goes without saying that the machine meets the requirements of the CE and "GS" (safety tested) regulations.

User-friendly maintenance has also been taken into account in the machine's design. The handful of service points are easily accessible and clearly marked. As a result, the W 1000 F/W 1200 F always remains in top form, even after many hours of operation.



Quickly and safely: the canopy roof is lowered hydraulically and the machine is securely lashed after being loaded onto a low-bed trailer to be transported to the next site.





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