



Efficient milling in the 2-m class

# Cold Milling Machine W 1900



# Economic efficiency guaranteed – the multi-purpose W 1900



## Compact, lightweight, dependable

**//** The scope of activity of the lightweight W 1900 cold milling machine extends from a wide variety of fine milling applications and the large-scale rehabilitation of surface courses all the way to the complete removal of asphalt packages at full depth. The machine masters all of these challenges with superior ease, producing high-quality milling

results at exceptionally low operating costs. The tried-and-tested Flexible Cutter System (FCS) Light provides economically efficient solutions for all fine milling applications. The powerful W 1900 additionally impresses with hard-wearing design, simple repair and maintenance procedures and easily comprehensible handling.



◀ Machine operators are on the road to success with the efficient cold milling machine W 1900

▼ The machine's large water tank is a useful option for long, non-stop milling operations

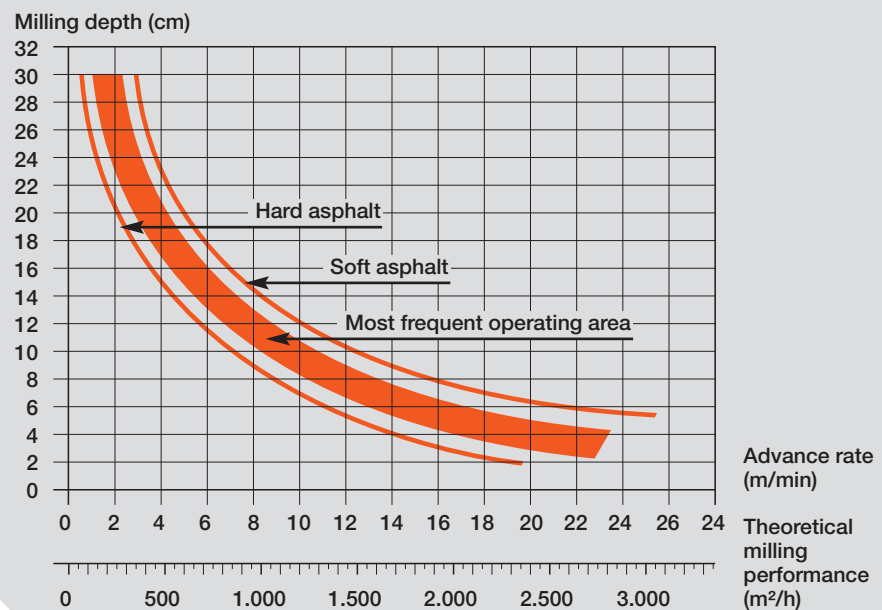
Minimized  
operating cost



- ▶ As an alternative to the cold milling machines of the 2-m class, the W 1900 is capable of removing entire pavements at a depth of 32 cm in one single machine pass.
- ▶ LEVEL PRO, the automatic levelling system specially developed for milling operations, provides highly accurate milling results of superior quality.
- ▶ The powerful front loading system fully meets the requirements of transporting the milled material from the drum housing quickly and reliably.
- ▶ The machine's compact design ensures ease of transport, good view and superb manoeuvrability.

# Tremendous milling performance comes as a standard feature

Superiority shows in the field



▲ Perfect milling results in the removal of thin pavement layers

Removing asphalt packages at depths of up to 320 mm ►



Theoretical milling performance of the W 1900 cold milling machine ▲

## Versatility plus high performance

/// The performance diagram for the W 1900 is an effective tool for the machine user, as it enables him to roughly estimate the expected theoretical milling performance. Our large milling machine is capable of removing asphalt packages at milling depths of up to 320 mm easily in just a single machine pass. The compact W 1900 makes the

most of its potential also when used for the large-scale removal of surface courses. It achieves a tremendous daily production rate of up to 10,000 m² in the field when removing 40 mm thick asphalt layers. The diagram gives impressive proof of the high milling performance which can be achieved with the W 1900 machine.

# Ease of operation – high milling performance

► The seat can be moved out over the right side of the machine, placing the operator in an ideal working position

▼ Two operating consoles with optimized arrangement of the controls



Gaining control quickly



▲ Highly convenient: the protective canopy can be folded down for transport at the push of a button

## Ergonomically and clearly designed operator's platform

**//** Milling machine operators can familiarize themselves with the control system of the W 1900 in no time at all as handling requires only a few simple steps: the controls are arranged within easy reach and within the operator's immediate field of vision, and are labelled in a clear and language-neutral fashion. In addition, two steering wheels enable operation from the left or the right. The compact

design offers a good overall view of both the machine and construction site at all times. We have attached particular importance to an ergonomically designed workplace, as the spacious, walk-through operator's platform is fully vibration-damped and can be safely accessed from both sides. These are all features to improve not only concentration on the work quality but productivity as well.

# Automatic levelling system LEVEL PRO meets all requirements



## For highly precise, high-quality milling

**//** At the customer's request, the W 1900 is equipped with the automatic levelling system LEVEL PRO which has been specially developed for milling operations: LEVEL PRO achieves as yet unrivalled, top-quality milling results! The state-of-the-art system enables the levelling mode to be changed during operation, and additional

sensors can easily be integrated into the ongoing milling process. Ultimately, these refinements result in perfectly precise milling depth and inclination. Another mark in favour of LEVEL PRO is the system's extremely simple, user-friendly operation: Clearly arranged, large and self-explanatory function keys offer maximum operating convenience.

Electronic slope sensor for the milling of predefined pavement cross slopes ▶

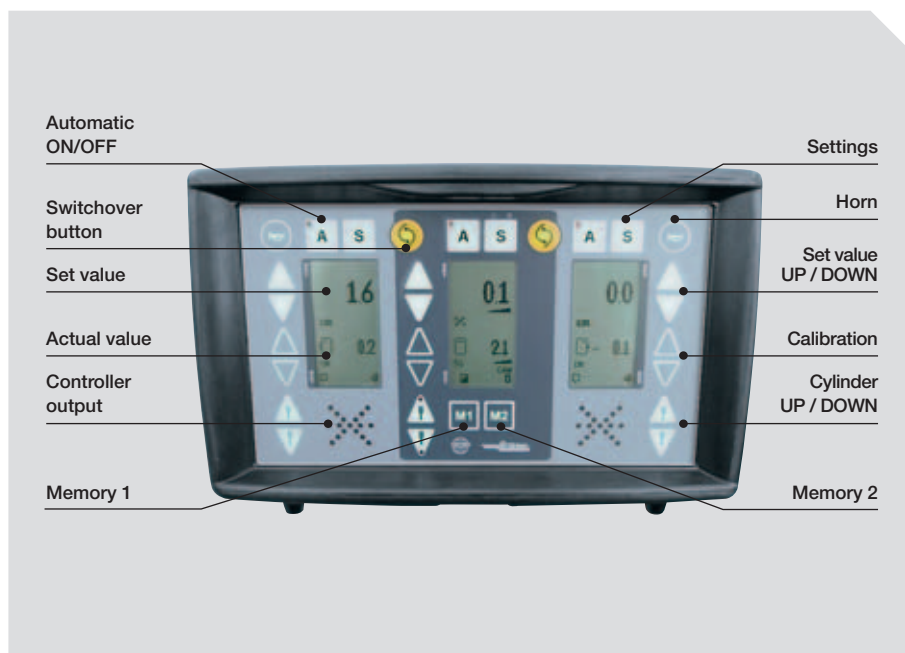
▼ Handling is facilitated by the clearly structured control panel



Levelling system of the latest generation



Wire-rope sensor for precise, automatic milling depth control ▲



- ▶ Different types of sensors, such as wire-rope sensor, slope sensor or ultrasonic sensor, can be selected or de-selected during the milling operation as required.
- ▶ Control of the milling depth can be effected by sensing along a wire with a transducing sensor, or by non-contact sensing of a wire or reference surface.
- ▶ Set and actual values of the left and right milling depths and of the cross slope are shown on large, easy-to-read screens.
- ▶ Set values can be pre-programmed on both sides, saved in the system's memory and called up as required.

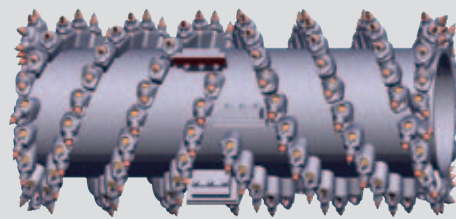
# Versatile drum assembly guarantees full utilization of the W 1900's capacity

Effective range  
of applications  
on the job site



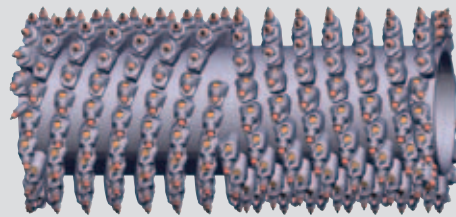
▲ The lifting side plates reliably seal off the drum housing when in working position

The full range of FCS  
Light milling drums ►



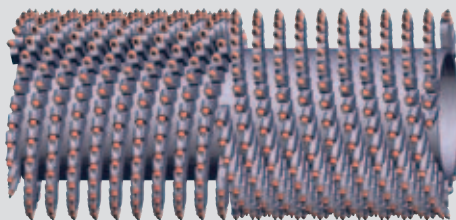
**FCS milling drum**

Milling width: 2,000 mm  
Milling depth: 0–320 mm  
Tool spacing: 15 mm



**FCS fine milling drum**

Milling width: 2,000 mm  
Milling depth: 0–100 mm  
Tool spacing: 8 mm



**FCS micro fine milling drum**

Milling width: 2,000 mm  
Milling depth: 0–30 mm  
Tool spacing: 6 x 2 mm

## Wide range of applications with FCS Light

/// The W 1900 goes it alone on the construction site when equipped with FCS Light. The field-proven system offers a broad range of applications, for it enables milling drums of equal width but with different tool spacings to be changed quickly and easily. A wide variety of additional jobs in the surface treatment of road pavements can thus be carried out economically with fine milling applications.

The milling drum assembly scores top marks also with the hydraulically height-adjustable side plates, which permit milling along road fixtures. Not to forget the hydraulically adjustable scraper blade: it is adjustable in height in order to load all or part of the milled material, or to leave it behind in the milled cut.

# Milling economically with the HT11 quick-change toolholder system

Gain time for what's really important



Optimized toolholder arrangement on the milling drum ensures a clean milling texture

The intelligent HT11 quick-change toolholder system offers lots of application benefits



## Heavy-duty technology

**//** The patented HT11 quick-change toolholder system impresses with high wear resistance in day-to-day operation on the job site, easy handling and additional tool cooling provided by an optimized toolholder design – to name just a few of its many advantages. It optimizes productivity and cuts operating costs. The integrated water spray system effectively prevents the formation of dust

during the milling operation and cools the cutting tools, thus extending their service life. Additional features, such as the hydraulically opening scraper blade, fold-out seats located between the rear track units, and the combined pneumatic cutting tool driver and extractor, ensure quick and easy replacement of cutting tools.

# Fit for the big jobs with powerful material loading



▲ The folding conveyor reduces the machine's transport length

▼ ... and to the right

▲ The powerful conveyor system transports large quantities of milled material

The machine has an exceptionally large slewing radius to the left ... ►



## The W 1900's powerful conveyor system keeps lots of trucks busy

Fast removal of the milled material is of vital importance for the successful completion of any milling job site. To accomplish this task, the W 1900 is equipped with a generously dimensioned two-stage front-loading system. The primary conveyor receives the milled material in the milling chamber, transports it to an effectively sealed point of transfer and from there to the discharge conveyor. The

steep-incline conveyor is fitted with sturdy ribs and powerfully loads the milled material on waiting trucks even under full load. The system's flexible discharge conveyor meets all practical requirements, because it can be adjusted in height and slewed by 45° to either side. This high degree of flexibility makes child's play also of loading the milled material to the side.



Large slewing radius,  
large discharge height

... and also protects the  
conveyor belt from  
premature wear and tear ▼

▲ Sturdy ribs ensure  
reliable material transport

The hydraulically height-  
adjustable gradation control  
beam prevents the pavement  
from breaking into large slabs ... ►



- ▮ The conveyor system can be equipped with continuously adjustable conveyor belt speed control.
- ▮ The gradation control beam is positioned in front of the milling drum, thus effectively preventing the pavement from breaking into large slabs.
- ▮ The discharge parabola can be adjusted to any given situation, thus enabling even large trucks to be filled right to the top.
- ▮ The system's hydraulic hoses are well protected inside the conveyor structure.

# Making swift headway even on sites where space is limited

Move into position quickly and accurately



Precise steering is guaranteed by a height-independent, parallel sliding block guide

Crab steering permits the machine to easily approach the milled track from the side



## The agile W 1900 is in full control where space is limited

The manoeuvrability of a large milling machine is of vital importance on job sites where space is limited. Whether loading, manoeuvring or turning the machine, or milling in bends, on winding roads or urban roads with fixtures: The compact W 1900 masters tight radii with superior ease thanks to its hydraulic, finger-light, all-track steering with large steering angles. The tried and tested steering

system enables the machine to move into position quickly and to precisely mill along a specified cut. In addition, an engageable differential lock guarantees consistently high traction even when working on difficult ground. The four track units can be separately adjusted in height hydraulically, thus ensuring ample ground clearance.

# Ease of maintenance is part of the machine's basic equipment package

All points of maintenance provide easy access from the operator's platform or from the ground ▶



Clever and effective



▲ Wide-opening panels facilitate maintenance procedures

Ample space for carrying out all maintenance work ▶



## Gain valuable operating time

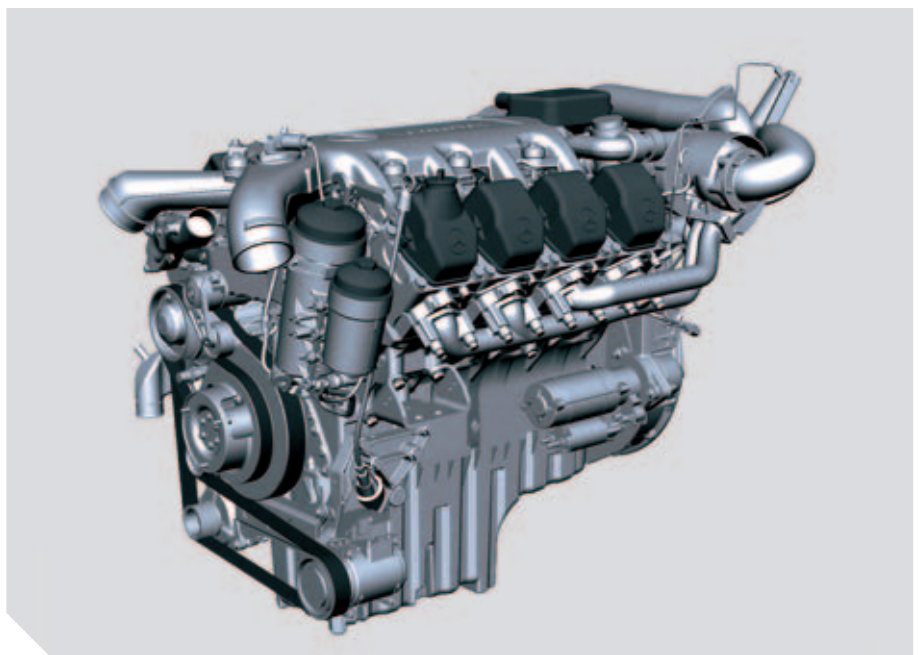
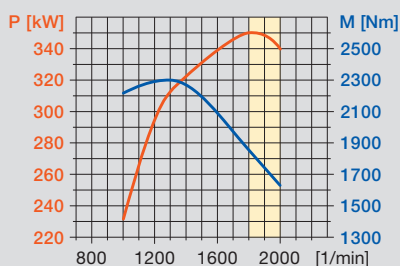
/// Maximum machine availability is of central importance for achieving consistently high daily production rates on the milling site. That's why we have geared the W 1900 for fast, easy maintenance. Opening the engine cowling provides direct and convenient access to the small number of intelligently arranged points of inspection and maintenance.

All maintenance procedures are completed swiftly and easily, enabling the profitable milling operation to continue as quickly as possible. In addition, the machine comes complete with a comprehensive tool kit which can be kept in lockable storage compartments.

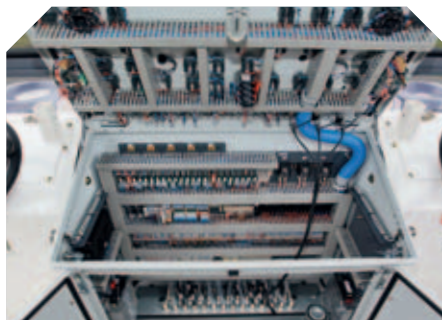
# Intelligent engineering – high-quality components and production

The machine is powered by a heavy-duty diesel engine of the proven Mercedes brand

Ideal characteristic curve:  
extreme engine lugging results in an increase of engine output and torque



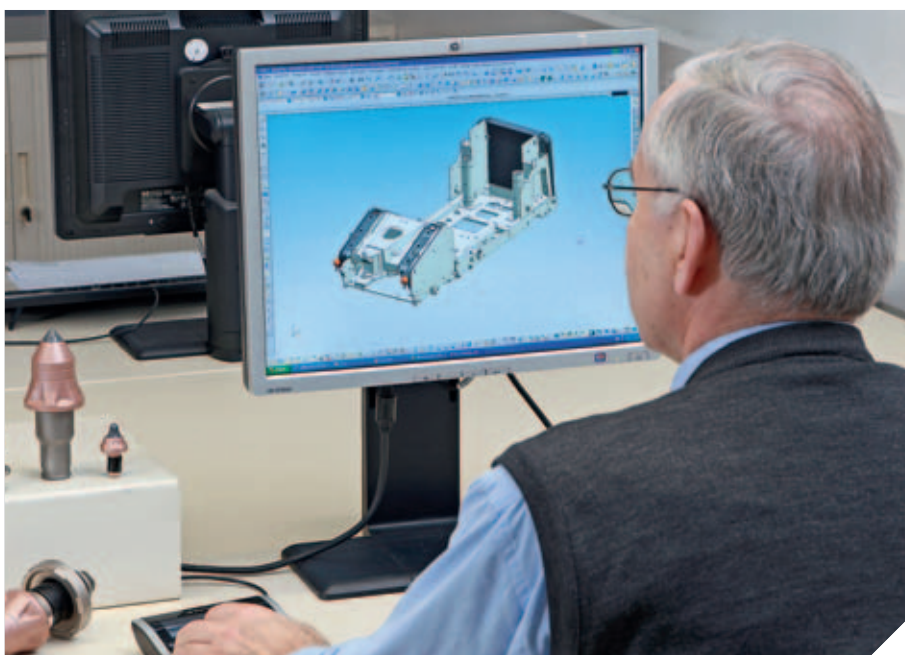
Electrical cabinet and hydraulic components made in Germany



## We rely on quality “made in Germany”

In the process of selecting vendor components for the W 1900 large milling machine, we consider only those manufacturers who can guarantee highest quality criteria in terms of the durability, failure safety and strength of their products. As a result, we provide our cold milling machine mostly with high-quality high-tech components bearing the

“Made in Germany” hallmark. A prime example of this is the high-performance diesel engine from Mercedes – it impresses with high traction and low fuel consumption rates. The machine’s fully electronic engine management system additionally ensures maximum torque stability.



High quality, world-wide customer service

Original spare parts from Wirtgen  
can be supplied worldwide at  
extremely short notice ▼

▲ Engineering and design in the  
German main plant

Final assembly is performed  
by skilled expert staff ►



Highly qualified German engineers and technicians are in charge of engineering and design of the W 1900 machine.

High-quality components guarantee the maximum operational availability and robustness of our large milling machine.

The machines are manufactured in state-of-the-art production facilities by highly qualified expert staff and in mature production processes.

The global Wirtgen service network enables service technicians to be on location quickly, however remote the construction site.



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