# Reliable intelligence: Wirtgen F series large milling machines

Wirtgen, the cold milling machine specialist, is boosting milling efficiency in the long-term with its new large milling machine generation. The intelligent machines of the so-called “F series” help operators to maintain an optimum balance between performance, quality and costs. In this respect, **Wirtgen’s large milling machines are making a groundbreaking contribution to digitization in road rehabilitation.** The sales launch of the W 210 Fi, W 200 Fi and W 200 F models is scheduled to coincide with the start of Bauma 2019.

With their flexible milling widths ranging between 1.5 and 2.5 m as well as milling depths of up to 330 mm, the new Wirtgen large milling machines cover a wide range of applications from surface course rehabilitation to complete removal and fine milling. They are equipped with engines rated at up to 563 kW, depending on the machine type.

With the CONNECTED MILLING approach, Wirtgen is squarely focusing on digitization, automation and documentation of milling operations. CONNECTED MILLING stands for the direct flow of information between the machine, operator, service workshop and scheduling department. To this end, Wirtgen has harnessed the infrastructure of the existing Wirtgen Group WITOS telematics solution. The intelligent MILL ASSIST system and the precise Wirtgen PERFORMANCE TRACKER (WPT) are innovative elements of CONNECTED MILLING.

MILL ASSIST: Lower consumption, higher output, improved quality

Because job-site conditions frequently change, the milling machine operator has to constantly reset machine parameters such as the drum speed, water volume and milling speed. Achieving optimum results requires manually intervening in the process to cater to the properties of the surface being milled – an extremely demanding task due to the complex multitasking involved.

WIRTGEN's introduction of its new generation of large milling machines marks the launch of the first smart machines capable of independently and optimally executing performance and quality specifications from the operator. The entire milling process is digitally mapped and simulated in real time, based on a comprehensive analysis of all parameters. In automatic mode, the innovative MILL ASSIST machine control always selects the most favorable ratio between milling performance and operating costs. The machine responds intelligently and dynamically to changing conditions. This makes the operator's job a great deal easier while vastly improving machine performance and reducing diesel, water and tool consumption as well as CO2 and noise emissions.

*DUAL SHIFT two-speed powershift transmission for the W 210 Fi professional machine*

With the new two-speed powershift transmission, automatically controlled with MILL ASSIST, a significantly larger range of milling drum speeds is now available. What’s more, the diesel engine used has a cutting-edge output with a high torque from 1,300 rpm. This reduces diesel consumption and noise emissions.

Together with the diesel engine, the intelligent control of the two-speed powershift transmission extends both the upper and lower range of possible milling drum speeds. In this way, fuel and tool wear can be significantly reduced in the low drum speed range. In the upper drum speed range it is possible to achieve a high milling pattern quality even when operating at a high area output. This makes the professional W 210 Fi the ideal machine for particularly demanding milling tasks.

WPT can also be retrofitted on large milling machines built in 2010 or later

The Wirtgen PERFORMANCE TRACKER is the ideal complement to the Wirtgen Group's WITOS telematics solution and ensures transparent tracking of the milling performance. When milling work has been completed, a measurement report is automatically generated in Excel and PDF format and sent by email, for instance to the machine operator’s order control department. Alongside the new F series, all Wirtgen large milling machines built in and after 2010 can be retrofitted with the WPT.

Man-machine-interface optimizes user-friendly **operation**

The newly developed operating concept optimizes integrated communication between man and machine. Using software tailored to cold milling requirements, the machine provides the operator with all important data on the milling process and the status of the milling machine. Milling machine operators can now view all the information that was previously shown on three displays quickly and clearly on a single control panel. They can register all relevant parameters at a glance and monitor and control the machine at the same time. Meanwhile, operation is intuitive and highly ergonomic. All machine functions and statuses can be viewed on one large 7-inch control panel. All LEVEL PRO ACTIVE leveling operations can be controlled from a 5-inch control panel which can also be mounted on the right or left of the machine. In addition, up to two 2-inch control panels with favorite buttons can be integrated into the operator's stand. They help the machine operator to carry out his essential control functions with maximum convenience.

Precise LEVEL PRO ACTIVE leveling system with new automated functions

With the full integration of LEVEL PRO ACTIVE into the machine control, key machine functions have been directly linked with one another and precise milling results have been pre-programmed. The leveling system also features many automatic and added functions.

For example, the possibility of raising the machine to drive over a manhole cover speeds up work processes. LEVEL PRO ACTIVE also provides active and precise support when the machine is positioned at the start of a second milling track. This greatly improves the quality of milled surfaces.

Simple and fast milling drum change in just 15 minutes

The easier and faster a milling drum can be changed, the faster a milling machine can be back on the job and earning money. With the optional Multiple Cutting System (MCS), milling drums of the same milling width but with different tool spacing can now be changed without using any additional tools in just 15 minutes – an innovative and unique feature in the industry.

The side door first opens hydraulically. The milling drum is connected by a main bolt. A loosening tool provided by WIRTGEN is positioned on the bolt and the bolt loosened at the push of a button by the milling drum rotation device. All the operator then has to do is remove the bolt and pull out the milling drum.

The ease with which milling drums with different tool spacings can be changed to suit specific applications offers numerous advantages. It not only increases machine productivity: switching to the ideal milling drum for each job also significantly reduces the costs associated with wear. In addition, WIRTGEN customers can respond quickly and flexibly to the changing requirements encountered in day-to-day job-site operations.

*Changing the entire milling drum assembly in just one hour*

Thanks to the new quick-change milling drum assembly, milling drum assemblies with different milling widths can be used – 2.0 m, 2.2 m or 2.5 m for the W 210 Fi and 1.5 m, 2.0 m or 2.2 m for the W 200 Fi/W 200 F. The fully pre-assembled milling drum assembly can now be changed in just one hour.

--- END ---

Photos:

|  |  |
| --- | --- |
|  | W\_photo\_W210Fi\_00005\_HI Powerful: The new Wirtgen W 210 Fi large milling machine is the professional machine with the highest milling output. |

|  |  |
| --- | --- |
|  | W\_graphic\_W210Fi\_00004\_HI Quality: The Wirtgen LEVEL PRO ACTIVE automatic leveling system, which is fully integrated into the milling machine, ensures that the milled surface is even and true to cross-section, line and level. |

|  |  |
| --- | --- |
|  | W\_graphic\_W210Fi\_00029\_HI New operator's stand: The hydraulic height-adjustable weather canopy of the Wirtgen large milling machines can be individually adapted to suit operating and weather conditions. On the right-hand side, the platform of the operator's stand can also be extended beyond the edge of the machine by more than 20 cm. |

Photos:

|  |  |
| --- | --- |
|  | W\_graphic\_W210Fi\_00037\_HI Simple changes: With the new Wirtgen Multiple Cutting System, milling drums can be changed in just 15 minutes. |

*Note: These photographs are only intended as a preview. For printing in publications, please use the photographs in 300 dpi resolution that are available for download from the Wirtgen GmbH / Wirtgen Group websites.*

|  |  |
| --- | --- |
| For further information  please contact:  WIRTGEN GmbH  Corporate Communications  Michaela Adams, Mario Linnemann  Reinhard-Wirtgen-Strasse 2  53578 Windhagen  Germany  Phone: +49 (0) 2645 131 – 4510  Fax: +49 (0) 2645 131 – 499  E-mail: presse@wirtgen.com  www.wirtgen.com |  |