

BAUMA 2019 Notice

4 February 2019 by Merlo

We are on the threshold of the BAUMA trade fair in MUNICH, an event which is set to be filled with important content for the Merlo Group, above all based on the numerous product innovations that will be presented during the exhibition.

BAUMA 2019 is the most important construction sector exhibition in Europe with around 600,000 visitors and a large number of operators are expected.

For the Merlo Group, BAUMA 2019 exhibition (MUNICH, 8-14 April) will be a great moment which will bring visibility to all the efforts that MERLO Group has made in recent years.

In the open air area south (FS.1108/3) all the NEW PANORAMIC and ROTO ranges will be on display, 2 completely renewed product families; a concentration of technology, performance and safety that have always distinguished the Merlo brand around the world.

This notice contains information on the following topics:

- The products displayed
- New PANORAMIC range
- New ROTO range
- Roto cab simulator
- CINGO range
- TreEmme 2019 models
- Turbofarmer 2019 models
- BAUMA Map

The products displayed on the Merlo stand

At the event, Merlo Group will be presenting a total of 16 models with 8 completely-new innovations

Panoramic

- P27.6
- P30.10
- P35.11TT
- P40.13
- P40.17
- P120.10 HM

Roto

- Roto 40.16 S
- Roto 50.21 S PLUS
- Roto 50.26
- Roto 50.35S-Plus

Other models

- Turbofarmer
 - TF 30.9
- Multifarmer
 - MF 34.9
- Multi-purpose Cingo tracked carriers
 - Cingo M800TD
 - Cingo M8.3 PLUS
 - Cingo M12.3EVO

- Tool-carrier tractors
 - TreEmme MM 135

New PANORAMIC range

The Panoramic range was launched in 1987, inspired by the ingenious idea to move the engine from the back of the machine to the right-hand side, leaving ample space for the telescopic boom. This revolutionary flash of insight changed the telehandler market forever, making Merlo the technological leader in this sector. Furthermore, the idea has enabled Merlo to create its first full-visibility machines range, offering an exponential increase in safety, precision and performance.

Over the course of the last 30 years, Merlo has continued to innovate and develop the Panoramic range, introducing a multitude of new technologies and solutions. Today, we are face to face with another evolution of this range, which further raises the Merlo benchmark, establishing new standards in performance, comfort and safety.

The new Panoramic models are built in accordance with the exclusive Merlo construction criteria, which allow the use of common modular components that are shared by the various different models in the range.

The new Panoramic range is available in two versions:

- Panoramic telehandlers with stabilisers
- High-capacity Panoramic telehandlers

These ranges incorporate distinctive Merlo solutions and content, and are designed to respond to the growing operational and safety needs of customers.

PANORAMIC with stabilisers

At BAUMA, Merlo will be presenting the new Panoramic telehandlers range with stabilisers. Each of the models has been fully redesigned with a view to further enhancing comfort, performance and operational safety.

The new Panoramic are composed by three ranges: Entry, Classic and Advances

The Panoramic Entry range are today composed of a model with fixed frame, designed for customers who need a machine that is intuitive to use, with simple content and easy maintenance. This model will be accompanied by the Panoramic Classic range, with unique technologies such as frame levelling and boom side-shift, which offers superior performances.

Merlo propose a third range: Panoramic Advanced which uses the leading technologies and solutions that characterise the Classic models and add some complete new features created to satisfy the requirements of even the most demanding users. Among the key features of the new Panoramic Advanced range are the new Epd Transmission, a more powerful engine with 100 HP and the PREMIUM cab finishing.

High Capacity PANORAMIC

The High Capacity telehandlers represent an extension of the popular Panoramic range.

This range is specially designed for heavy-duty handling in quarries, mines and major construction sites, enabling extremely onerous operations to be carried out whilst maintaining high levels of performance.

The key features of the Panoramic High Capacity range include the high performance levels it provides, combined with the most compact dimensions on the market, further enhancing the famous visibility offered by the Panoramic ranges.

The P120.10HM model is equipped with the new power-train, composed of the high-performance FPT Tier IV final engine which delivers 170 hp of power, and the Merlo CVTronic continuous variable transmission.

New PANORAMIC range

The innovative features

- New modular design
- New axles and stabilisers
- New EPD transmission
- New cab
- MCDC Safety system

New modular design

The modular concept has been closely studied with a view to improve the production process. It allows to combine modules with different features, reaching a product flexibility which enables to meet the market growing demands.

The new chassis design further increases its structural strength and weight, which is optimally distributed. This leads to enabling a degree of balance that allows us to be compact in terms of size and high levels in terms of performance, which needs to be maintained.

The new power-train module facilitates access to the main components due to the fact that these are positioned on the outside, for unrivalled ease of intervention and maintenance.

New axles and stabilisers

The new Panoramic has evolved, with new and more technological axles incorporated within a cast metal structure. The portal axle shaft provides high ground clearance, enabling the telehandler to be used in even the most gruelling conditions.

The new axles are larger and more heavily reinforced than before, which leads to a significant increase for the payload and a general reliability of the entire assembly.

The new stabilisers represent a fundamental feature of the new Panoramic range, with the advantage that they can stabilise the machine without extending beyond the footprint of the telehandler. In addition, the stabilisers are anchored directly onto the front axle, which allows them to be levelled according to driver needs up to 24%.

New EPD transmission

The entire new PANORAMIC range is equipped with the Merlo hydrostatic transmission, which offers guaranteed performance in terms of precision and energy efficiency, a unique feature in the sector.

The new EPD Eco Power Drive electronic control unit is included as standard on the Panoramic Advanced range. This exclusive technology automatically reduces the engine revs in line with the power required by the transmission, which vary in accordance to the speed set. This technology significantly reduces fuel consumption.

New cab

The Panoramic range now features the new cab, which has already won recognition on the Turbofarmer ranges for its design, comfort and ergonomics.

The new cab is a true embodiment of technology and design, courtesy of the various technical solutions with which it is equipped, such as: The new curved glass windscreen, which increases visibility, and the cab pressurization system, which complies with ISO 10263-3 standards. The structure, designed to comply with ROPS/FOPS Level II regulations in terms of safety.

The surface area of the glass has been increased by 10%, along with the volume of the cab interior, enabling the user to operate in maximum comfort.

The new, more ergonomic interiors have been designed with highly intuitive control positioning, allowing the operator to have all of the telehandler functions within reach.

MCDC safety system

Safety has always been a key prerogative of the Panoramic range, and in this instance once again, the new range features the new version of the MCDC safety system.

Through an exclusive system that automatically detects the type of attachment in use, the geometric "extension and boom angle" configuration of the machine and the load being handled, the operator is guaranteed a full overview of the parameters measured. As a result, operators can remain focused on the work in progress in total safety.

New ROTO range

Back in 1991, Merlo Group presented the first handler with revolving turret, a revolutionary concept that enabled telehandlers to rotate and move material through 360° for the very first time, without having to reposition the machine. This model, which was equipped with 6 stabilisers, provided the basis for the rapid and radical evolution of technologies in this sector, with a single constant throughout this process: Merlo's position as industry leader. Indeed, for more than 25 years, this type of machine has been known all over the world as "the Roto", and Merlo remains the global leader in this market.

This is the year in which Merlo creates a new milestone with the introduction of the new ROTO telehandlers range, a truly innovative solution based on the new modular design concept with a host of new technological features, which have served to make these machines a continuous point of reference within the sector.

The new Roto rotating turret telehandlers are available in 3 ranges

- Roto 400 - models with 415° turret rotation
- Roto 600 - models with 600° turret rotation
- Advanced - models with continuous turret rotation

These new product ranges are designed to meet the growing needs of customers, satisfying the requirements expressed by the numerous sectors in which the Roto range is used.

The Roto ranges are provided in three different versions, one of each is dedicated to take different type of customers. They are subdivided as follows:

- Basic machine created for the rental market;
- Medium equipped machine with suspension (also available in PLUS version), in order to satisfy those who require units that are innovative in terms of use but simple in terms of content and maintenance;
- Last, but not least, the most complete version equipped with the most advanced technology, which raises the standards even higher, setting Merlo as a benchmark point.

ROTO 400

The new Roto 400 range with 415° turret rotation has been totally overhauled in terms of comfort, safety and the power train, in order to improve the performance and the usage.

These models are characterised by a simplified ON/OFF stabilisation system with open-close "book" movement, and this function can be activated either automatically or manually.

The new Roto 400 will be available in two versions: rental models and models with suspension. The first of these is dedicated to customers renting the machine and to those who require telehandlers that are innovative in terms of use but simple in terms of content and maintenance, while the second is equipped with suspension and PLUS set-up, raising the standards even higher in order to meet the increasing demand from customers and markets alike.

The new models in the Roto 400 range with suspension are further enhanced by the multifunctional display and road speed of 40 km/h, both of which come as standard.

ROTO 600

The design and development project for the new Roto range led to the creation of another complete new range, ROTO 600. These new telehandlers represent the link between the Roto 400 and the Advanced ranges. The new Roto 600 range uses the leading technologies and solutions that characterise the other ranges.

These models feature 600° turret rotation, with a lifting capacity up to 4,950 kg and operating heights ranging from 20.8 to 26 metres.

The use of MULTIPOSITION-type stabilisers with automatic or manual control represents a further development for these telehandlers, enabling the inclination of the ground to be offset by up to 6 degrees, as well as adapting the extension of the stabilisers in accordance with the conditions on the work site.

The new Roto 600 will be available in two versions: rental models and models with suspension. The first of these is dedicated to customers renting the machine and to those who require telehandlers that are innovative in terms of use but simple in terms of content and maintenance, while the second is equipped with suspension and , raising the standards even higher in order to meet the increasing demand from customers and from the market.

The new models in the Roto Entry 400 range with suspension are further enhanced by the multifunctional display and road speed of 40 km/h, both of which come as standard.

Roto Advanced

Here, we reach the top of the segment, with the new ROTO Advanced, embodying technology and performance. This range is intended to maintain Merlo's position as leader in the world markets, as well as adding to the prestigious awards already won by the previous Roto ranges.

Among the key features of the new Roto Advanced range are the multi-position stabilisers with automatic control, the advanced safety system, the continuous rotation of the turret and the new modular design cab, which features the exclusive movement system that adjust the tilt up to 20°.

The Advanced range can be equipped with the multi-award winning continuous variable transmission - CVTronic - which ensures an acceleration of 0 - 40km/h without torque interruption and without pausing for the gear change.

The new Roto Advanced range can be used at working heights ranging from 20.8 to 34.2 metres, with load capacities ranging from 4950 kg to 7000 kg for the most high-performance versions.

The innovative features

The new ROTO telehandlers feature a number of innovative solutions:

- New modular design
- New EPD transmission
- New cab
- New capacitive joystick and new "smart" armrest
- New ASCS safety system

New modular design

The modular concept has been closely studied with a view to improve the production process. It allows us to combine modules with different features, reaching a product flexibility which enables us to meet the market growing demands.

The new chassis design further increases its structural strength and weight, which is optimally distributed. This leads to enabling a degree of balance that allows us to be compact in terms of size and high levels in terms of performance, which needs to be maintained. The new power-train module facilitates access to the main components due to the fact that these are positioned on the outside, for unrivalled ease of intervention and maintenance.

New EPD transmission

The entire new ROTO range is equipped with the Merlo hydrostatic transmission, managed by the new EPD ("Eco Power Drive") electronic control system. This exclusive technology automatically reduces the engine revolutions in line with the power required by the transmission, which in turn corresponds with the speed parameters set. The EPD system significantly reduces fuel consumption and delivering best in class performance in the telehandler industry.

New cab

The Roto range now features the new PREMIUM cab, which has already won recognition on the Turbofarmer ranges for its design, comfort and ergonomics.

The new cab is a true embodiment of technology and design, courtesy of the various cutting-edge technical solutions with which it is equipped, such as: The new curved glass windscreen, which increases visibility, and the cab pressurisation system, which complies with ISO 10263-3 standards. In addition, the structure is designed to comply with FOPS Level II regulations in terms of safety.

The surface area of the glass has been increased by 10%, along with the volume of the cab interior, enabling the user to operate in maximum comfort.

The Roto Advanced models are equipped with the exclusive Merlo cab tilting system which enables it to be angled to 20°, allowing the operator to work in maximum comfort even when the boom is fully extended whilst maintaining a high level of concentration on the operations underway.

The new, more ergonomic interiors have been designed with highly intuitive control positioning, allowing the operator to have all of the telehandler functions close to hand on the new joystick and the newly-designed armrest.

Access to the cab has also been significantly improved, with the use of the numerous handles that make it easier to get in and out. The second ladder on the engine side, improves cab accessibility for access even when the turret is rotated to 180°.

New capacitive joystick and new “smart” armrest

The Advanced versions of the Roto are equipped with an electronic capacitive joystick. This is mounted onto a multifunctional armrest integrated with the seat, and sized so as to ensure comfort for all operators.

Two sensors automatically detect the presence of the operator's hand, preventing any erroneous or accidental movements of the joystick whilst making it comfortable and simple to use. On the left side, three buttons allow the operator to select the telehandler travel direction: Forwards - Neutral - Back. These buttons are within easy reach, and are designed for maximum ergonomics. The rotation of the turret is also controlled by a miniature mouse, which allows the command to be operated without moving your hand from the joystick.

A further innovation is the new positioning of the machine functional controls, which operate the stabilisers, suspension, etc... These are now integrated into the new armrest and into the new joystick. The operator can now interact with the LCD display directly from the armrest.

ASCS safety system

The innovative features implemented across the new Roto range also extend to safety, with the introduction of the new and exclusive ASCS safety system. This system collects a host of different parameters from the machine, analyses data in real time and creates a load diagram. The system provides a visual representation on the new LCD display of the perimeter of the perimeter of safety operations. This new technology analyses traditional parameters, such as:

- Load position: extension angle of the boom, turret rotation, carriage rotation.
- Stabilisers position (ROTO Advanced)
- Weight of lifted load
- Attachment in use (recognised automatically)

ROTO cab simulator

One of the most interesting technology item that will be presented at the MERLO stand will be the new ROTO cab dynamic simulator.

The simulator will be open to the public, and visitors will have the opportunity to enjoy a unique experience inside the new ROTO cab, with the chance to directly control the different functions of the telehandler, simulating real working conditions. The new armrest, the new multifunctional lever and the new display will be at full disposal of the operator. All operations will be carried out inside the relaxing surroundings of the new PREMIUM cab, with maximum visibility guaranteed by the exclusive curved glass windscreen.

The experience will also enable visitors to try out the exclusive movement system which enables operators to adapt cabs tilting angle to up to 20°, ensuring continued visibility and keeping operator's attention focused on the procedures being carried out.

Telehandlers

P27.6 telehandler

This model represents the reference point in the ultra-compact segment. The P27.6 boasts unrivalled handling through its building concept, leveraging minimum dimensions and superior comfort, which differentiate these models from the competitors one. This distinctive feature is a result of the modular cab, which is also fitted on the machine's older brothers, the Turbofarmer, the Panoramic and the Roto.

Turbofarmer TF 30.9 telehandler

Thanks to its compactness, high performance and high level of efficiency the Turbofarmer is the leading machine range in construction and building applications. The TF30.9 (Compact series) has been awarded with the Machine of the Year 2015 prize for the innovative technological content it offers. This solution has served as the starting point for the development of the new Merlo ranges presented at BAUMA. The key strength of the Turbofarmer range is its extensive product offering, enabling customers to choose between different versions with exclusive technological features to meet a host of different operational requirements.

Tool-carrier tractors

The TreEmme offers best in class products range in the tool-carrier tractor segment, with machines designed for tasks such as snow and woodland clearing operations, road maintenance and special applications such as road-rail preparation.

The MM 135 model will be on display at the trade fair, equipped with lateral hedge-trimmer boom, ideal for road maintenance applications. It is particularly suitable for municipal companies or for maintaining green spaces. A second model, the MM250, will also be present, ideal for heavy duty uses and operations which require high engine and hydraulic power, such as snow ploughs or blowers, or hydraulic-drive forestry shredders and high-capacity winches.

Multi-purpose CINGO tracked carriers

The Cingo multi-purpose series tracked dumpers completes the range of models on display at the trade fair.

Versatility and adaptability are the two key features that set the Cingo system apart, making it unique within its category.

The design concept applied to these multi-purpose Cingo tracked dumpers guarantees maximum transverse stability even in sloping conditions, courtesy of the low centre of gravity, which works in synergy with the track transmission system to ensure improved grip on easily deformed or uneven surfaces, whilst reducing pressure on the ground.

A wide range of models are available, with load capacities ranging from 400 kg up to 1200 kg, while the Multifunction ranges are equipped with the patented Merlo device for quick connection of attachments, enabling these solutions to be used in a wide range of applications

The models displayed during the exhibition are as follows:

New CINGO M800TD

The new Cingo M800TD model has been revised and updated with a number of cutting-edge technical solutions, including the 10 HP Honda engine with electric ignition, delivering high performance levels and load capacities of up to 800 kg.

The fully-hydraulic transmission system with lateral gear motors on tracks and integrated parking brake give the machine superb traction performance and maximum control in sloping conditions.

The Cingo M800TD can be fitted with various types of attachment, making it the perfect solution for a wide range of applications. The machines on display at the trade fair will be presented alongside a concrete mixer and a bucket dumper with self-loading bucket.

New Cingo M12.3 Evo

The new Cingo M12.3 is the result of an intensive technical review process, which has led to the design of this new compact multifunctional model, ideal for extremely heavy-duty operations in difficult conditions.

This model is equipped with a 21 HP Kubota engine that guarantees extremely high levels of performance. A new servo-assisted control system has been added to this machine, guaranteeing maximum precision of movements when driving.

The Cingo M12.3 Evo comes with a dual hydraulic pump as standard option - the first of these is dedicated to the hydraulic traction system, while the second manages the hydraulic flow to the service connections. In addition, the ground clearance has been increased, to allow maximum adaptability even in challenging conditions.

Source: Merlo SpA; Merlo Deutschland GmbH

Merlo On LECTURA Specs