

High Capacity Telehandlers





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Merlo Headquarters

S. Defendente di Cervasca (CN)
Italy

Merlo facility with 350000 m² of covered area:

- A - Electrical component production
- B - Hydraulic component production
- C - Frame production
- D - Cab production
- E - Axle production
- F - Engine configuration
- G - Machine assembly



Merlo

The technological leader in operating machines

Founded in Cuneo, Italy in 1964, Merlo is a family-run industrial group which designs, produces and markets a wide range of machinery under the Merlo and TreEmme brands.

People, innovation and sustainability are central to the Merlo brand. The Merlo Group is committed to respecting the environment while making the work of the operator (and everyone who is passionately dedicated to constantly improving the efficiency and performance of our products) more functional, safe and comfortable.

Our product portfolio consists of a complete range of telescopic handlers (both fixed and rotating), as well as self-loading concrete mixers (DBMs), TreEmme implement-holders for municipal and forestry use, and multi-purpose tracked Cingo transporters.

All products in the Merlo range are characterised by innovation, reliability and versatility. These pillars are the foundation of the Merlo Group, and continue to define Merlo's product range to this day.

Merlo S.p.A has always been synonymous with technological innovation in the world of telehandlers.





High Capacity telehandler range

Technology and productivity for everyone

The High Capacity range of telehandlers has been developed to meet the needs of all those who have to carry out demanding work and move heavy loads in complete safety. The technical architecture, applied to Merlo telehandlers, translates to unique and very versatile, top-performing and user-friendly machines.

Using the numerous technologies developed and patented by Merlo, this range offers excellent telescopic performance without limiting the speed of work, the manoeuvrability and ease of use typical of Turbofarmer and Panoramic products. These characteristics ensure that the models in this range can handle large quantities of material in a short space of time, providing the optimum response in the field of logistics, material handling and storage, without neglecting the handling of special components thanks to equipment designed specifically for specific requirements such as the maintenance of large machinery.

For this reason the High Capacity range is used in a variety of sectors: from industry to mining; from earth moving to agriculture; from construction to waste treatment.

User Interface:

In-cab display for viewing operational parameters. Ergonomic joystick controls with integrated travel-direction selector switch. Cursors and controls are designed to maximise ease of implementation.

Powertrain:

Hydrostatic transmission with permanent four-wheel drive, **engines from 116 to 170 HP and maximum speed of 40 km/h**. Exclusive position of the side and longitudinal engine.

Boom side-shift:

The only machines on the market to offer this device, which allows you to correct the positioning of the load without having to move the machine, without altering the stability and safety conditions for the operator.



Telescopic Boom:

Heights **from 8 to 18 metres** with load-bearing capacities from **4500 to 12000 kg**.

Exclusive design that ensures lightness, precision and durability. Implement-holder carriage equipped with hydraulic Tac-lock locking system, controllable from the cab.

Cab:

Level II FOPS and ROPS certified, designed to maintain the maximum level of ergonomics while ensuring excellent protection for the operator. The 1010 mm width and the wide glass surface ensure unparalleled comfort and full visibility.

Hydraulic System:

Sized hydraulic system to minimise manoeuvring times. Variable displacement (Load Sensing) hydraulic pump and Flow Sharing distributor, for maximum efficiency, excellent performance, and perfectly smooth operation.

Safety

Our Key Focus

Throughout the design of a Merlo, our main focus is always on operator safety. The cab structure, certified according to ISO 3449 FOPS and ISO 3471 ROPS standards, provides a class-leading level of protection for the operator. The FOPS protection grille is outside the glass roof to improve roominess while at the same time safeguarding the integrity of the structure and windscreen. All Merlo models are equipped with a built-in safety system which monitors and manages safety-related parameters in real-time. Merlo telehandlers also feature an automatic parking brake which engages if the engine switches off. This avoids unintentional movements, enhancing machine safety when stationary.

Merlo Boom

The Merlo boom uses a double "C" profile in high-strength steel, with welds made along the neutral bending axis. Hydraulic hoses and electrical wires positioned inside the boom, utilising a **"cartridge" system**, protects them against any possible impacts, and enables easy component extraction in case of required maintenance. The L-shaped runner blocks are made of composite material, maximising efficiency and reducing impact and wear on the sliding surfaces. The Merlo boom offers high accuracy with millimetric precision of movement control.



Frame

With **smaller dimensions** compared to market standards, the frame minimises the size of the machine. It is also equipped with a **steel bar "belt"** on the outside. Designed to maximise the strength of the machine's structure, the underside of the machine is completely protected by steel sheets. This protects all components from possible impact while driving off-road.

Levelling

Merlo telehandlers can be equipped with a side levelling corrector device. Thanks to this solution, by acting on a simple control in the cab, the customer can modify the machine frame transversal tilting, compensating for sloping terrain up to a maximum of 8% - approx. 5°. In this way, it ensures a **perfectly vertical lifting of the load**, by limiting the risks of lateral instability of the machine.



FOPS Protection

All Merlo telehandlers have a **metal structure above the glass roof on the outside of the cab** to comply fully with **FOPS Level II** standard, the most stringent certification level in protecting the operator from falling objects. The Merlo protection grid on top of the cab is moulded to reduce any impact on operator visibility, and ensures:

- Perfect comfort in the cab
- Excellent visibility of the load
- Maximum safety for the operator and cab components, including the roof and upper windscreen wiper
- The structure can be easily dismantled by the operator for thorough cleaning of the roof and windscreen.

Aerial work platform

All models from the High Capacity range **can be configured with aerial work platform**. This solution, complying with EN280 standard, assures an increased level of active and passive safety during work at heights, and enhances machine versatility. A new management solution has been applied to the aerial work platforms and allows for proportionality in the speed of platform movement in relation to the loads handled and the position of the boom. This speeds up work operations to the benefit of users.



ASCS

Merlo's ASCS (Adaptive Stability Control System) prevents risk of the machine tipping over frontally while handling a load.

The system regulates the speed and maximum degree of movement according to three operating parameters:

- Handled load - Kg of materials lifted
- Load position - reach, boom extension and carriage rotation
- Implement in use - **automatically recognised by special sensors.**

When the operational stability limit is reached, the system first reduces the speed of the arm, then stops movement completely. Independent control of each hydraulic movement allows for the identification of potentially unsafe movements, allowing only those which do not affect the stability, or which re-establish a safer position.

Display

The ASCS system is equipped, either as an option or as standard, with a **10,1" colour display** with integrated sensor for automatic brightness adjustment according to external light conditions. In this way, a simple reading of the stability conditions is always ensured, updated in real time, according to the load being handled and the implement in use. The operator can always see at what point the safety system will be triggered. Once the system intervenes by blocking all movements, a pop-up message appears, showing the operator all movements and operations which are not detrimental to the stability of the machine. Finally, the inclinometer is shown to maximise the safe use of the machine.



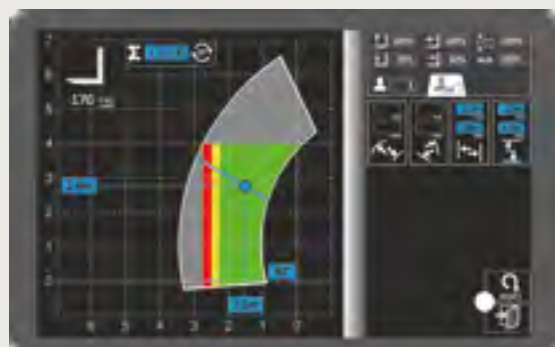
Working Area Setting

A special function, accessible via the display, allows the operator to **set working area restrictions**.

Adjustments can be made to vertical and horizontal movements (minimum and maximum height and extension), or to the relative movements of the boom (minimum and maximum lifting and extension angle of the extension).

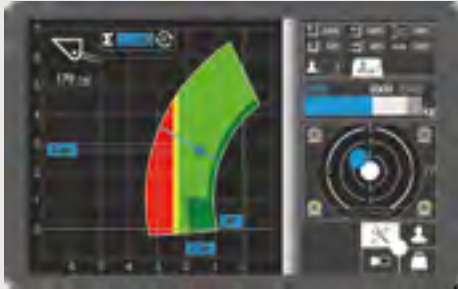
Adjustments are easy and precise, operating using the green thumb-wheel located near the joystick. This guarantees accurate adjustments of 0,1 metres while operating the boom. The angle of the boom can be adjusted with an accuracy of 1°.

The working area settings **increase safety during repetitive work, particularly in confined spaces**, such as inside a warehouse.



Movement Speed Setting

Merlo's ASCS system uses an in-cab display to customise the speed of individual movements of the boom and attachments in use. All of these parameters are controlled according to the needs of the operator as well as the requirements of the job. Up to nine different setups can be stored.

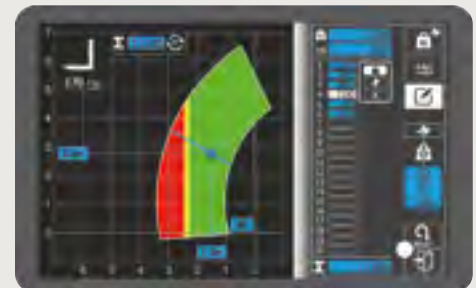


Free Zone

By equipping the machine with a bucket, which is recognised accordingly, the working free zone is **automatically activated**. A working area is up to 1 metre of reach and 10° of lift. Within this area it is possible to operate the machine without the control system blocking the movement of the implement in case of overload, facilitating digging operations and ensuring perfectly smooth movements.

Memorising Handled Loads

The ASCS display shows a reading of the load being handled, either manually or automatically, whenever the telescopic boom is raised beyond the height set by the operator. The average tolerance on the measured values of boom inclination is $\pm 5\%$. These can vary depending on the dynamic conditions of the machine. The system can store up to 1000 different readings, displaying the total and the last 20 values.



Continuous Delivery

Models with the ASCS display are equipped with a system for regulating and delivering a constant flow of oil to attachments via the headstock. This allows for **oil flow to be precisely and specifically adjusted from zero to maximum flow rate** for each of the 4 auxiliary hydraulic outlets at the top of the boom. This solution is also available as an option for several other models.

Rear Camera

In combination with the 10,1" colour display of the ASCS system, machines can be equipped with an automatic rear camera, activated when the machine is put into reverse. Images from the rear of the telehandler are shown directly on the in-cab display. The camera can also be activated manually from the ASCS menu.



Performance

Power at your Fingertips

The High Capacity telehandlers are equipped with a hydrostatic transmission, powered by a combustion engine which, using a two-speed gearbox or continuously variable transmission, allows a maximum speed of 40 km/h.

Featuring permanent four-wheel drive, the Merlo telehandlers have excellent braking capacity when the accelerator pedal is released, guaranteeing high torque to the wheels during material handling and transfers, as well as millimetric precision of movements when positioning the load.

The exclusively designed axles are manufactured and developed in-house by Merlo, and can be equipped with differential lock to ensure traction on any terrain, regardless of how unstable. The balance of the vehicle's weight, the design of the boom and hydraulic components allow for high telescopic capabilities without impacting the dimensions, or the fuel consumption of the machine.

Engines

All models feature a combustion engine in an original Merlo mounting layout, developed by Merlo with the invention of the panoramic visibility models. This configuration places the engine in a longitudinal direction, on the right side of the frame. This ensures **maximum accessibility to the components during scheduled and/or extraordinary maintenance operations**. The power range of the installed engines is **between 116 and 170 HP**. Finally, the electronic management of the injection system allows Merlo to precisely and smoothly adjust the power delivery according to the customer's requirements.



CVTRONIC

Merlo's continuously variable CVTronic smart transmission combines the advantages of a hydrostatic transmission with the same performance and yield as a traditional CVT system. Compared to a conventional hydrostatic transmission, the CVTronic provides:

- A 12% **increase in torque**
- **Reduced consumption** thanks to its excellent efficiency
- Ease of use, thanks to the elimination of gear changes.

Axles and Brakes

Axles are available in two versions: with **epicyclic reducers** to maximise the torque transmitted to the wheels, or with **portal reducers** to increase ground clearance. Both axle variants are designed and manufactured in-house to offer the best solution in terms of strength, service life and efficiency. The axles can be fitted with dry disc brakes sized to ensure lower running costs or wet brakes. All bearings and bushings are designed to ensure a longer service life and reduce the need for maintenance.



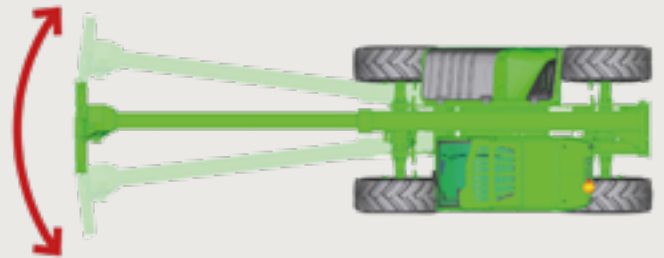
RRM

A **unique and patented solution**. Merlo developed and manufactured hydraulic couplings ensure:

- Quick assembly and disassembly
- Increased tightness of connections
- Increased component service life
- No risk of line twisting

Boom Side-Shift

This system is built into the machines' frame, and allows for the **lateral movement of the telescopic boom** to ensure precise load positioning, with no need for additional manoeuvring, thereby saving time, reducing stress, and improving the machine's productivity. The side-shift control is located on the joystick and is proportional to maximise operator efficiency.



Fan Drive

The **Fan Drive** is a technology fitted as standard that allows you to change the engine fan's rotation direction from venting, which cools the radiators, to blowing, which cleans them, eliminating dust and residues collected during the work phase, to maintain the system's performance and efficiency unaltered.



Hydraulic system

These are the only models on the market equipped with two separate circuits for hydraulics and hydrostatics with two different oil reservoirs. The hydraulic circuit consists of a load sensing variable displacement pump to guarantee lower fuel consumption and enhanced ease of use, performing up to three simultaneous movements without difficulty. The hydraulic distributor is mounted to the rear of the frame to reduce vibrations and heat transfer to the cab. At the same time, it ensures perfect accessibility for maintenance.

Hi-Flow Hydraulics

Models featuring Hi-Flow (HF) technology are equipped with the latest generation of hydraulic distributors developed by Merlo and associated with a high-flow hydraulic pump.

The Hi-Flow system combines the features of traditional hydraulics with innovative solutions such as:

- Descent by gravity
- Automated movement control
- Digitised actuator position control
- Continuous oil delivery

Thanks to Hi-Flow technology, Merlo is able to offer first-rate performance and unique solutions to speed up and simplify the daily tasks of the operator.



Capacitive Joystick

Merlo telehandlers can be equipped with a capacitive electronic joystick control. This joystick is able to detect the presence of the operator by means of a **capacitive type sensor**, which in turn enables the hydraulic movements of the machine. The joystick enables the operator to control the main hydraulic movements of the machine and implements, managing, as standard, up to three. A carriage rotation lock button can be found on the dashboard near the joystick. Once activated, this prevents the unintentional activation of the carriage rotation when working with attachments which require a fixed position (e.g. fly jibs and winches).

Descent by gravity

Fully automatic, allows the weight of the boom and load to be utilised while the boom lowers. This significantly **limits** the demand for hydraulic power and, consequently, fuel **consumption** and **noise**, without compromising on safety. Faster and more fluid movements allow for increased performance.



Vertical Elevation

Automatic vertical elevation was developed to facilitate load handling operations within confined spaces. By activating this function, the machine synchronises its extension and lifting movements in order to achieve a purely vertical movement of the load during both loading and unloading of the material.



Set-Point

The **Set-point** function has been developed to reduce repetitive operations for operators, simplifying daily work. By activating this function, the machine is able to memorise a working configuration, and is capable of autonomously managing the hydraulic movements (extension/retraction, lifting/lowering and carriage rotation) in order to return the implement to the memorised position.



Floating Management

Available as an option, floating boom management has been developed to increase the versatility of the machine, facilitating operations with equipment that needs to follow ground contours such as sweepers, snow ploughs, shovels, etc. Activating this function allows the boom to follow ground contours freely, ensuring that the implement is in constant contact with the ground.

Comfort

The best work station

The exclusive cab, fitted with vibration-damping silent-blocks on the frame, has been developed to guarantee our customers a record level of comfort, with a width of **1010 mm** and a **large glass surface of 4,3 sq.m** ensuring the best roominess in its class. Simple and easy access to the cab is guaranteed by the **180° opening door**, the high distance between the upright and steering wheel, and the correct positioning of the steps and handles for access. Acoustic and thermal comfort have also been taken care of down to the smallest detail in all telehandler ranges, thanks to intensive research into the most innovative technical solutions and materials, ensuring optimal soundproofing and thermal insulation. Finally, the entry of dust into the passenger compartment is prevented thanks to the cab pressurisation compliant with ISO 10263-3 standards*

NOTES: * *pressurisation level not approved for use of pesticides, work in hazardous environments, with asbestos, etc.*

Cab entry

Easy access to the cab is ensured by the **180° opening door**, which **maximises entry space**, and the large distance between the upright and steering wheel. The side window, which is independent of the door body, can be locked in the open position to maximise air exchange, visibility and direct contact with those working outside near the machine. It is possible to unlock the window either by means of the control on the floor or with the release knob installed directly on the window to facilitate unlocking operations.



Cab

Merlo's **design** guarantees high levels of **functionality and comfort**; grouping the information provided to the driver and the controls of the various systems and devices for optimal ergonomics. The reverse shuttle on the steering wheel is also present on the joystick.

- 1 - ASCS display (Opt)
 - 2 - Capacitive joystick
 - 3 - Steering wheel and transmission controls
 - 4 - Transmission display
 - 5 - Pedals
 - 6 - Accessory compartment and air conditioning controls
- The steering column, including the steering wheel and transmission display, can be adjusted in height to fit operator requirements. The display shows all information dedicated to road circulation (levels, temperatures, speed, etc.)

Air-conditioning

Developed according to automotive standards, **cutting the warm-up and cool-down times in half** compared to a conventional air conditioning system. The suction vent is located on the side of the cab, away from potential sources of dust and dirt, while inside there are 8 vents, three of which are dedicated to defrosting the windscreen, for optimum climatic comfort.



Boom Suspensions

The active boom suspension system (BSS) is available as an option (standard for the HF models), which protects the load during transfer and maintains a high level of driving comfort on rough terrain. The **suspension is automatically deactivated** at low speed (below 3 km/h), for boom maximum precision and power.



Merlo Carriage

Merlo machines have a carriage designed to ensure record-breaking performance with every implement, without compromising on lightness, which is essential for ensuring an exceptional lifting capacity. The maximum rotation facilitates the loading and unloading of material with buckets. The **Tac-lock device**, which comes **standard on all the models**, guarantees maximum operating comfort, allowing the implements to be hydraulically locked from the cab.

Suspended Cab

The models in this range can be fitted with the **exclusive and patented Cab Suspension (CS)**. With CS, the cab is fitted with an active hydropneumatic suspension, which can be controlled directly by the operator with an electric switch. When the suspension is active, the total displacement of the passenger compartment is 110 mm (-60 mm / +50 mm). This decreases vibrations in the cab, increasing operator comfort during transport and work operations on even or uneven ground.



Lighting

Merlo telehandlers are all fitted as standard with road lights and a rear number plate lighting system. In addition, the Medium Capacity range can be equipped with additional front and rear lights mounted in the upper part of the cab. This solution allows an optimal view of the area in which work is being performed, even in limited light conditions. Finally, optional boom-mounted lights are available to illuminate the load at every stage of lifting.

Efficiency

Simpler and Smarter

Merlo telehandlers boast the **smallest dimensions and lightest weights on the market**, guaranteeing reduced manoeuvring space, fuel consumption for transfers and reduced impact on the ground. Excellent manoeuvrability further reduces manoeuvring times, for greater productivity and lower power consumption. In order to ensure a further reduction in consumption and operating costs, Merlo telehandlers boast **full electronic management of the transmission and engine**, in order to minimise RPM and, consequently, fuel demand. All models in the range are equipped with a double-acting hydraulic service line at the top of the boom and an electrical socket for machine-implement communication, making them compatible with a wide range of specially designed attachments in order to increase the versatility of the machine and allow its use in a wider range of applications, thereby reducing depreciation times.

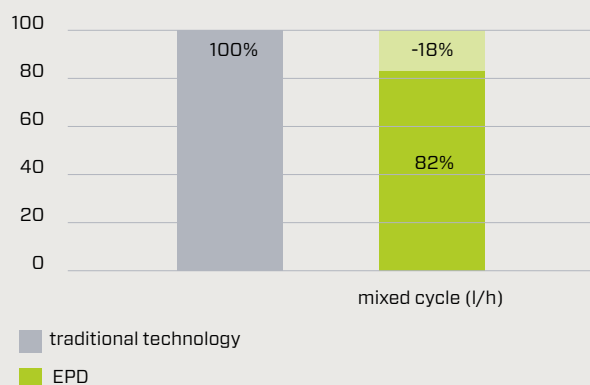
Visibility

The **improved visibility on the market** ensures **efficiency** in movement **and safety** for customers, reducing stress for operators who perform numerous manoeuvres during the working day. To achieve these standards of visibility, Merlo has invested in understanding the best position of the cab and boom for the operator. Merlo has also developed a detailed bonnet design and a large glass surface with the aim of ensuring fast, safe and precise operations. In addition, three different brushes are installed on the machine to ensure perfect window cleaning even in heavy rain. Electric controls in the cab control continuous or variable speed operation depending on the weather conditions.



REDUCED CONSUMPTION

Merlo EPD technology



EPD and Self-Accelerating Joystick

The exclusive EPD (**Eco Power Drive**) is a Merlo **patented** system for electronically controlling and regulating the engine and transmission. The EPD automatically controls and adjusts engine speed, hydrostatic pump flow rate and hydrostatic motor displacement according to operating conditions. This is to maximise efficiency and reduce RPM, **ensuring a reduction in fuel consumption** of up to 18%.

The EPD includes the **“self-accelerating joystick”** function, which manages engine speed proportionally to the use of the joystick (the greater the inclination of the joystick, the greater the engine RPM). This feature further maximises the responsiveness for material handling.

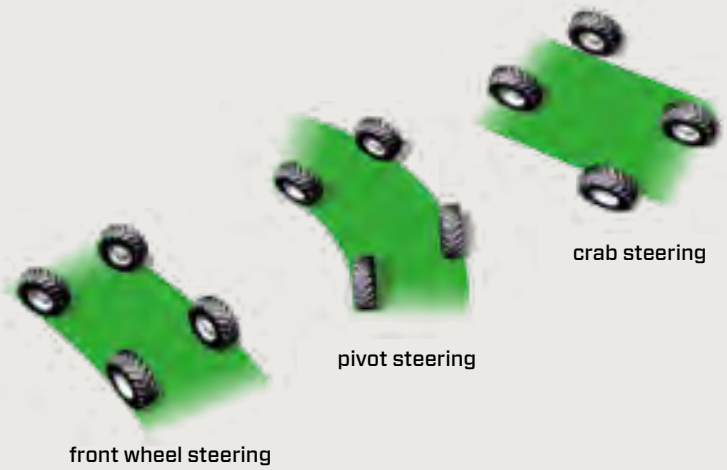
Eco Power Drive - Plus version

The patented Merlo **EPD Plus** system, applied to hydrostatic transmissions, **includes** three modes of use that apply to different operating needs: **“Heavy Load”**, **“Eco”** and **“Speed Control”**. The “Eco” mode optimises performance in relation to fuel consumption and can be used for light operations; the “Speed Control” mode is essential for transport and towing, allowing the forward speed to be set and maintained constant regardless of changing operating conditions; the “Heavy Load” function is optimised for heavy-duty work requiring the machine to be used to its full capacity.



Steering Modes

A constant commitment is to **minimise manoeuvring space** while maximising the agility of the produced machines. Merlo axles ensure maximum steering angle for manoeuvring in tight spaces. Additionally, the operator can manage the steering of the machine with three different options according to the specific needs of the job (front wheel steering, pivot steering and crab steering (for lateral movements)). In the case of electric telehandlers, only one steering option is available (rear axle), but a wheel rotation angle that reaches almost 90° allows for the range of movement of an electric forklift.



Battery Isolator Switch

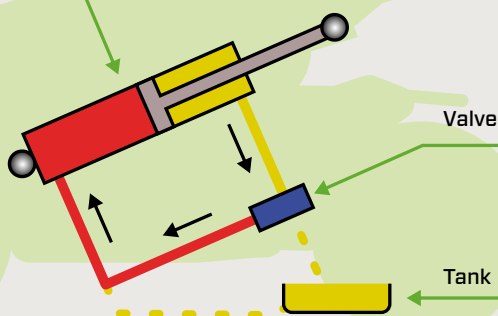
As a standard feature, the Merlo telehandlers come equipped with an **electric, automatic and timed battery switch** to improve the efficiency and life of the batteries. Removing the key from the ignition switch starts a process which completely disconnects the machine's electrical circuit without compromising the reliability of the machine's electrical control units. With the circuit off, the operator can simply insert the keys into the control panel again to reactivate all functions of the batteries. A button is also available near the battery that allows for forceable disconnection of the battery in order to meet the operational needs of the other utilities.

Towing

In order to maximise the versatility of these models, it is possible to type-approve telehandlers as "agricultural tractors with telescopic boom", allowing them to tow trailers on public roads, with different solutions for coupling and braking trailers, reaching a maximum towing limit of 24 tonnes. To ensure full visibility of the towing hook, a rear-view mirror is fitted at the rear of the frame, tilted so that the trailer kingpin can be seen. Finally, to maximise the machine versatility, several solutions are available with rear hydraulic outlets controlled in a proportional manner and with the possibility of continuous oil delivery.



Lifting cylinder



Regenerative System

In order to improve productivity, all HM models come as standard with the Merlo's regenerative system for the hydraulic circuit. This solution has been developed to **increase the boom's angular speed** when lifting a load. This fully automated system is capable of increasing the boom's speed by 36%.

Turbofarmer High Capacity Telehandlers range

Record-breaking speed and agility

The Turbofarmer High Capacity telehandler range consists of 3 models with lifting capacities between 4500 kg and 6500 kg, and lifting heights of up to 11 m, in 9 different versions depending on the configuration.

The strength of this range lies in its speed of action and handling combined with a broad selection of products, which allows the customer to choose from numerous exclusive technological options, like the suspended cab and the continuously variable transmission, able to meet the various operational needs of all the end users.

The range consists of two different product lines, which vary in terms of size and weight:

- TF50.8 – TF45.11
- TF65.9



TF50.8 - TF45.11

They are the most compact models in the High Capacity range. Equipped with axles fitted with epicyclic reducers, ensuring fast and precise work.

The stand out features include:

- 160 l/min hydraulics with Hi-Flow (HF) technology
- EPD with maximum speed of 40 km/h
- 125 kW/170 hp engine
- CS and CVTronic technology available



TF65.9

Models developed to offer greater telescopic performance. The portal axles allow for the most efficient transfer of power from the transmission, thus making the machine nimbler in off-road conditions. The boom is designed to offer improved performance even in heavy-duty applications such as digging.

The stand out features include:

- 160 l/min hydraulics with Hi-Flow (HF) technology
- EPD with maximum speed of 40 km/h
- 125 kW/170 hp engine
- CS and CVTronic technology available

Panoramic High Capacity telehandler range

Power and operation precision

The Panoramic High Capacity telehandler range consists of 4 models with lifting capacities between 5000 kg and 12000 kg, and lifting heights of up to 18 m.

The strength of this range is its high lifting capacity combined with ease of use and precision in the management of the telescopic boom and transmission. All models are equipped with exclusive technological features, such as the ASCS safety system and boom side-shift.

The range consists of two different product lines, which vary in terms of size and configuration:

- P72.10Plus
- Panoramic HM



P72.10Plus

Model designed to offer high lifting capacities, ensuring maximum ease of use. The portal axles allow increasing the ground clearance, thus making the machine nimbler in off-road conditions.

The stand out features include:

- 104 l/min hydraulics with Load Sensing technology
- EPD transmission with maximum speed of 40 km/h
- 85.9 kW/116 hp engine
- Levelling device and boom side-shift system



Panoramic HM

Models developed to offer greater lifting capacity, enabling them to reach heights of up to 18 metres. The axles with epicyclic reducers are equipped with oil immersed brakes. The cab is on a higher position in order to ensure that the operator has better visibility.

The stand out features include:

- 158 l/min hydraulics with Load Sensing and Flow Sharing technology as well as a regenerative system
- EPD transmission with maximum speed of 40 km/h
- 125 kW/170 hp engine with CVTronic gearbox
- Levelling device and boom side-shift system

Attachments

The attachments, which are designed and manufactured at the Merlo Group facilities, are the real operational tools used by Merlo telehandlers, and are designed to bring out the machines' performance and versatility in different operational situations.

The patented recognition of the attachments and the effective Tac-lock hydraulic locking system allow for quick tool changes to be performed, with the operating parameters being configured automatically for maximum safety.



Service and Spare Parts

Merlo is committed to protecting the **value**, **performance** and **productivity** of your telehandler over time. Whoever purchases a Merlo machine can rest assured that they have chosen a product that meets the highest standards in quality, reliability and innovation.

Careful periodic maintenance, combined with the use of original spare parts, becomes an economic advantage, and reduces the number of interventions required; in this way, your Merlo telehandler will maintain the same excellent performance levels over time, not to mention a high resale value.



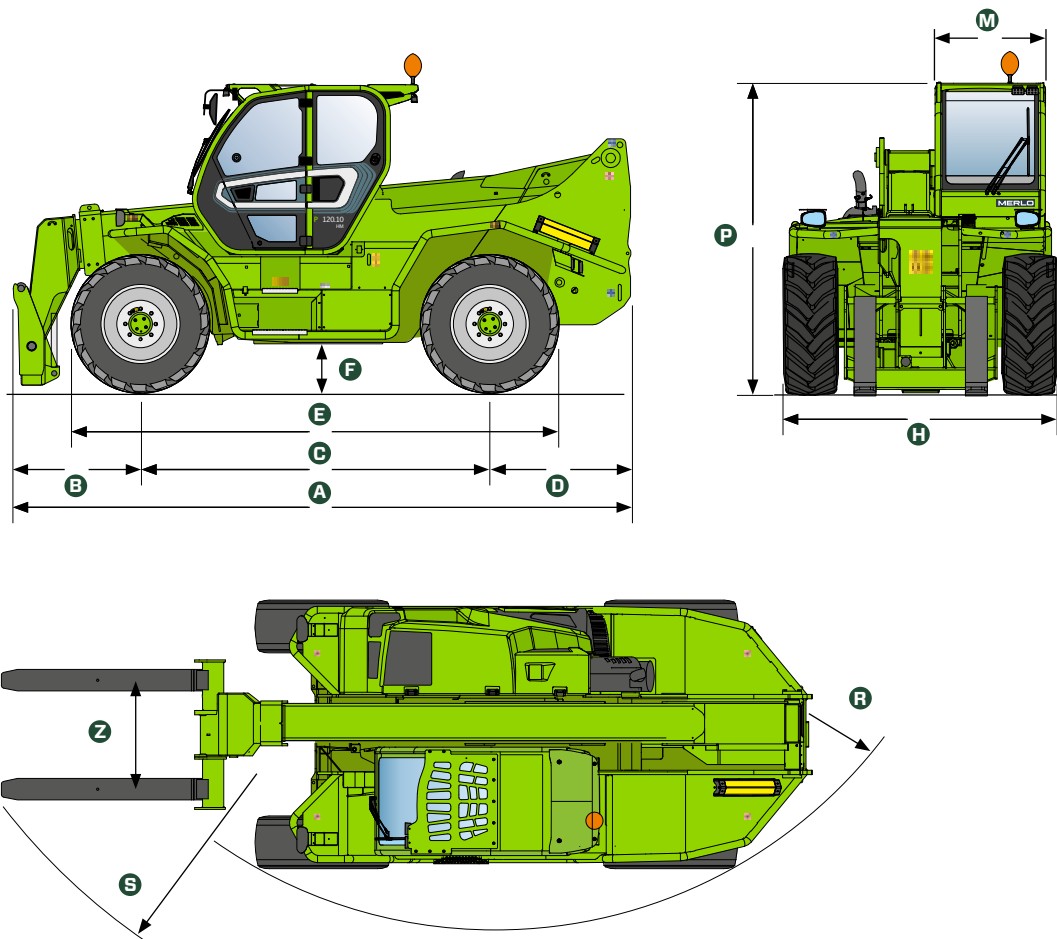
MerloMobility

The Merlo telehandler range offers exclusive technology, making their telehandlers even smarter and more connected.

The MerloMobility connectivity system uses 4.0 technology to transfer key information from the machine to a web portal. Transferred information includes the vehicle's functionality, safety diagnostics and location.



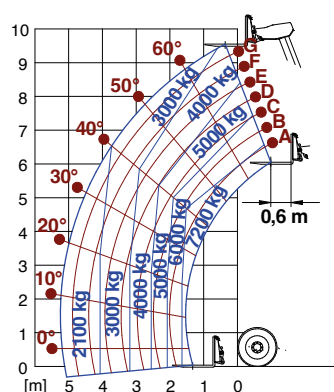
Technical characteristics



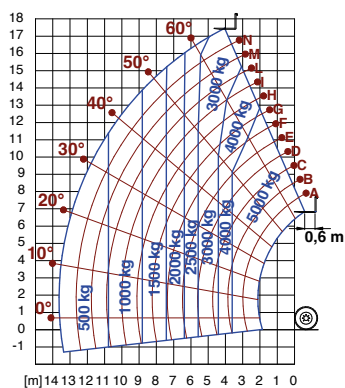
MODEL	DIMENSIONS	A	B	C	D	E	F	H	M	P	R	S	Z
P72.10PLUS	mm	5480	1255	2920	1304	4815	450	2240	1010	2500	3970	4990	850
P50.18HM	mm	6180	1605	3240	1335	5235	450	2520	1010	2850	4300	5480	850
P65.14HM	mm	5910	1335	3240	1335	5235	450	2520	1010	2850	4300	5400	850
P120.10HM	mm	5770	1145	3290	1335	5260	450	2520	1010	2850	4300	5700	1170
TF45.11T-170-HF	mm	5040	1340	3050	650	4360	440	2400	1010	2530	3830	4800	850
TF45.11TCS-170-HF	mm	5040	1340	3050	650	4360	440	2400	1010	2590	3830	4800	850
TF45.11TCS-170-CVTRONIC-HF	mm	5040	1340	3050	650	4360	440	2400	1010	2590	3830	4800	850
TF50.8T-170-HF	mm	4870	1170	3050	650	4360	440	2400	1010	2530	3830	4800	850
TF50.8TCS-170-HF	mm	4870	1170	3050	650	4360	440	2400	1010	2590	3830	4800	850
TF50.8TCS-170-CVTRONIC-HF	mm	4870	1170	3050	650	4360	440	2400	1010	2590	3830	4800	850
TF65.9T-170-HF	mm	5260	1270	3050	940	4660	440	2400	1010	2510	4560	5325	850
TF65.9TCS-170-HF	mm	5260	1270	3050	940	4660	440	2400	1010	2510	4560	5325	850
TF65.9TCS-170-CVTRONIC-HF	mm	5260	1270	3050	940	4660	440	2400	1010	2510	4560	5325	850

MODEL	P72.10PLUS	P50.18HM	P65.14HM	P120.10HM	TF45.11 T-170-HF	TF45.11 TCS-170-HF
Unladen weight (kg)	11300	15700	15250	16200	10100	10300
Maximum load capacity (kg)	7200	5000	6500	12000	4500	4500
Lift height (m)	9,55	17,9	13,9	9,8	10,6	10,6
Maximum reach (m)	5,2	13	8,8	5,3	7	7
Reach at max. load capacity (m)	2	3,8	3	1,3	1,9	1,9
Load capacity at max. reach (kg)	2100	500	1600	2900	650	650
Load capacity at max. lift height (kg)	4000	3000	4000	7000	3500	3500
Boom side-shift (mm)	+/- 250	+/- 440	+/- 375	+/- 185	-	-
Frame levelling (%)	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8
Engine	Perkins 904J	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
Engine power (kW/HP)	85,9/115	125/170	125/170	125/170	125/170	125/170
Anti-pollution technology	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF
Reversible fan	YES	NO	NO	NO	OPT	OPT
Maximum speed (km/h)	40	40	40	40	40	40
Fuel tank capacity (l)	140	150	150	150	140	140
AdBlue tank capacity (l)	18	43	43	43	18	18
Hydrostatic transmission	YES - 2V	CVTronic	CVTronic	CVTronic	YES - 2V	Yes - 2V
EPD	STD	STD	STD	STD	Plus	Plus
Hydraulic pump	LS	LS + FS	LS + FS	LS + FS	HF	HF
Delivery/pressure (l/min-bar)	108 - 250	158 - 230	158 - 230	158 - 230	160 - 250	160 - 250
Hydraulic oil tank capacity (l)	100	149	149	149	100	100
Cab finishing	ECO	PREMIUM	PREMIUM	PREMIUM	PREMIUM	PREMIUM
ASCS	Full	Full	Full	Full	Full	Full
ROPS, FOPS LEV II Cab	YES	YES	YES	YES	YES	YES
Cab controls	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control
Reverse shuttle	Dual reverse	Dual reverse	Dual reverse	Dual reverse	Dual reverse	Dual reverse
Boom suspension	NO	NO	NO	NO	YES	YES
Tac-lock	YES	YES	YES	YES	YES	Yes
Permanent four-wheel drive	YES	YES	YES	YES	YES	Yes
All-wheel steering	YES	YES	YES	YES	YES	Yes
Standard tyres	400/70-24	17.5-25	17.5-25	17.5-25	500/70R24	500/70R24

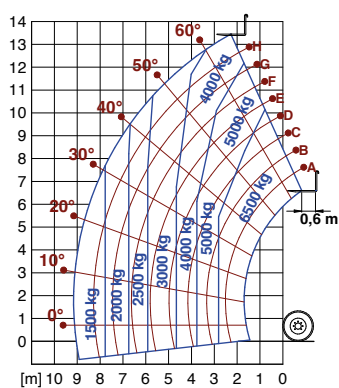
P72.10



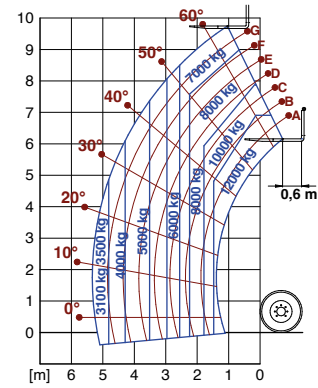
P50.18



P65.14

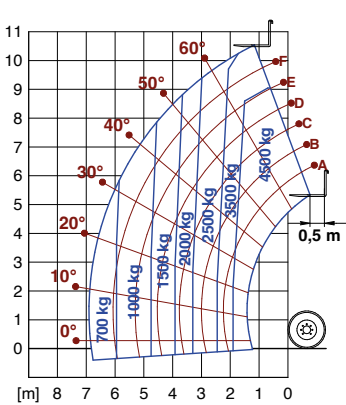


P120.10

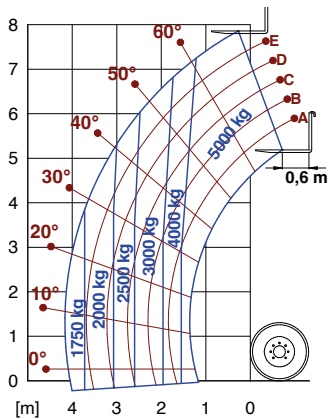


TF45.11TCS-170 CVTRONIC-HF	TF50.8 T-170-HF	TF50.8 TCS-170-HF	TF50.8 TCS-170 CVTRONIC-HF	TF65.9 T-170-HF	TF65.9 TCS-170-HF	TF65.9 TCS-170 CVTRONIC-HF
10350	9500	9700	9750	11000	11200	11250
4500	5000	5000	5000	6500	6500	6500
10,6	7,8	7,8	7,8	8,8	8,8	8,8
7	4,2	4,2	4,2	4,7	4,7	4,7
1,9	1,4	1,4	1,4	1,5	1,5	1,5
650	1600	1600	1600	2000	2000	2000
3500	5000	5000	5000	4500	4500	4500
-	-	-	-	-	-	-
+/-8	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8
FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
125/170	125/170	125/170	125/170	125/170	125/170	125/170
Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF	Stage V SCR + DOC + DPF
OPT	OPT	OPT	OPT	OPT	OPT	OPT
40	40	40	40	40	40	40
140	140	140	140	140	140	140
18	18	18	18	18	18	18
CVTronic	YES - 2V	YES - 2V	CVTronic	YES - 2V	YES - 2V	CVTronic
Plus	Plus	Plus	Plus	Plus	Plus	Plus
HF	HF	HF	HF	HF	HF	HF
160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250
100	100	100	100	100	100	100
PREMIUM	PREMIUM	PREMIUM	PREMIUM	PREMIUM	PREMIUM	PREMIUM
Full	Full	Full	Full	Full	Full	Full
YES	YES	YES	YES	YES	YES	YES
Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control	Electronic joystick control
Dual reverse	Dual reverse	Dual reverse	Dual reverse	Dual reverse	Dual reverse	Dual reverse
YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES
500/70R24	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24

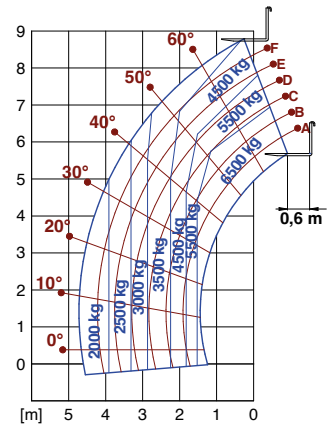
TF45.11



TF50.8

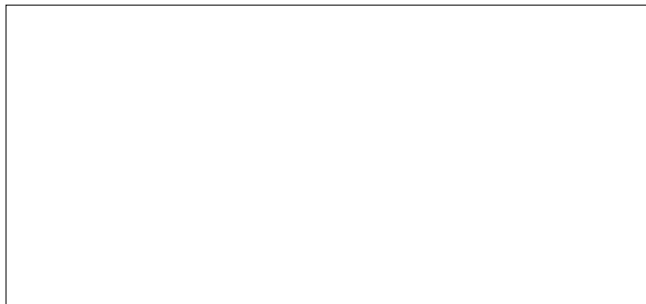


TF65.9





Your Merlo dealer



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