

Agriculture Range





Index

The Merlo Group	Page 4
Range of telehandlers for agriculture	Page 6
Merlo Technologies	
• Safety	Page 8
• Performance	Page 12
• Comfort	Page 16
• Efficiency	Page 18
The Range	
• Electric Telehandlers	Page 20
• Compact Telehandlers	Page 22
• Medium Capacity Telehandlers	Page 24
• High Capacity Telehandlers	Page 26
• Telescopic Tractors	Page 28
• Stabilised Telehandlers	Page 30
Attachments and Movimatica	Page 32
Training centre	Page 33
Services	Page 34





Merlo headquarters

S. Defendente di Cervasca (CN)
Italy

Merlo facility with 350.000 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 1984, 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.





Range of telehandlers for agriculture Your Best Choice on the Field

Merlo has always offered telehandlers to meet the needs of the operator. The Merlo range of agricultural telehandlers keeps the focus on operator needs on the field. This range of telehandlers are more compact than similar models on the market while offering top performance and top of the range operator comfort, thanks to the widest cab in the category.

Merlo telehandlers, which are acknowledged worldwide as the all-rounders par excellence, offer specific solutions for every need in the livestock, forestry and fruit farming sectors, in the world of nurseries, biogas generation and drying plants, as well as in more specific contexts such as municipalities and poultry farming.

The Merlo range of agricultural telehandlers consists of several families which differ in specification and size; from the most compact, nimble machines to larger, higher capacity telehandlers.

Powertrain:

Electric transmission with:
Power up to 90HP, alongside a 2 or 4-wheel drive, or
Hydrostatic transmission with permanent drive wheels, engines with power from 75 to 170 HP, and a maximum speed of 40km/h.

Cab:

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

Telescopic Boom:

Maximum reach from **5 to 18 metres** with load-bearing capacities from **2500 to 12000kg**. Merlo's exclusive design, ensuring sturdiness, precision and speed. Merlo designed headstock equipped with hydraulic Tac-lock system, which is fully controllable from the cab.



User Interface:

In-cab display for viewing operational parameters. Ergonomic joystick and controls with integrated travel-direction selector switch. Controls are optimised for ease of use by the operator.

Hydraulic System:

Hydraulic system specifically sized to minimise manoeuvring times. Hydraulic pump with fixed displacement - gears - or variable - Load sensing and Flow Sharing distributor - according to the machine equipment.

Frame:

The only ones on the market to offer a frame built to a modular design that can be equipped with a lateral tilt compensation system and a boom side-shift system.

Safety

Our Biggest 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 of the glass roof to improve headroom in the cab while protecting the structure of the machine and the windscreen. All Merlo models are equipped with a built-in safety system which monitors and manages safety-related parameters in real-time. An automatic parking brake which engages if the engine switches off 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.



Safety system

In order to remain fully compliant with regulations in frontal tipping prevention, Merlo telehandlers are equipped with features developed specifically to keep the operator safe from frontal tipping, without sacrificing performance, particularly of boom speed and lifting capacity.

The features differ according to product range:

- The most compact models are equipped with an EN15000-compliant system.
- The higher capacity models are equipped fully with our innovative ASCS system (Page 10).

Chassis

Designed with small 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 have the option to equip a side leveling corrector device, enabling the operator to modify the tilt of the frame of the machine, compensating for sloping terrain up to a maximum of 8% (approximately 5°).

By limiting the risk of machine instability, a Merlo telehandler with side leveler ensures a **perfectly vertical lift of the load**, even on rough or uneven terrain.

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 molded to reduce any impact on operator visibility, and ensures:

- 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.



ASCS

Safety Through Technology

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. The automatic light sensor allows for the operator to, at any time, read and utilise the display.

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.



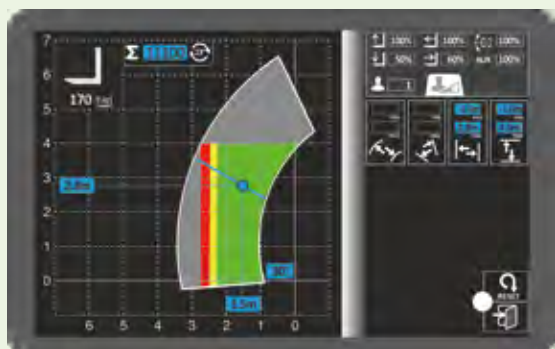
Working area setting

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).

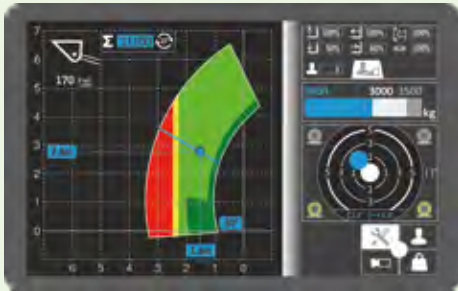
Adjustments are easy and precise, operating using the green thumb-wheel located near the joystick. This guarantees accurate adjustments of 0.1 metres while operating the boom. The angle of the boom can be adjusted with an accuracy of 1°.

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 and the requirements of the job. Up to nine different setups can be stored.



Free zone

By equipping the machine with a shovel, 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.

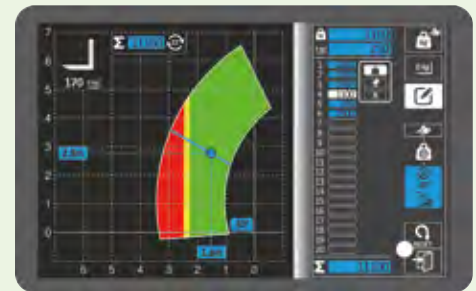
Within this area it is possible to operate the machine without the control system blocking the movement of the implement in case of overload, facilitating digging operations and ensuring perfectly smooth movements.

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

Merlo telehandlers use two different types of technology for powering the wheels:

- Electric transmission: Powered by a large battery pack (eWorker models)
- Hydrostatic transmission: Powered by a heat engine, enables the machine to reach a maximum speed of 40 km/h (depending on the model).

Featuring permanent two or four-wheel drive, Merlo telehandlers have top-level brake responsiveness when the throttle is released. This guarantees high torque to the wheels during materials handling and transferring, while also offering 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.

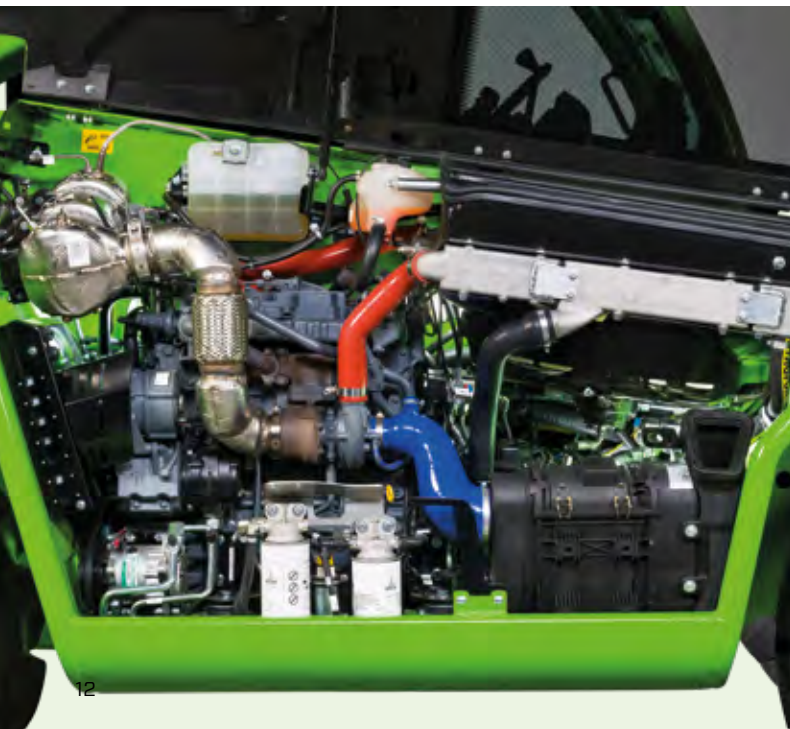
Axles and brakes

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.



Engines

All conventionally powered models feature a heat engine in an original Merlo mounting layout, developed alongside the first Panoramic 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.

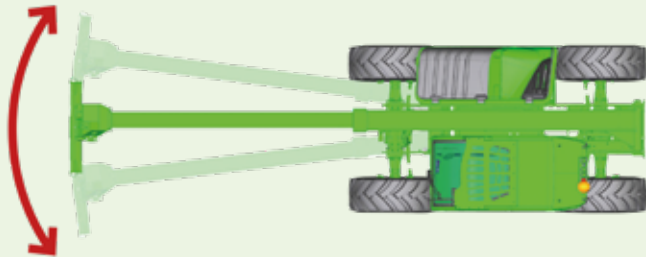
Diesel engines are used as standard, with a **power range between 75 and 170 HP**.

Finally, the electronic management of the injection system allows Merlo to precisely and smoothly adjust the power delivery according to the customer's requirements. In the case of electric telehandlers, the machine's motion is powered by electric motors mounted directly in the primary drive scheme. If requested, they can be mounted in the wheel gearbox or the machine axle.

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.



Boom side-shift

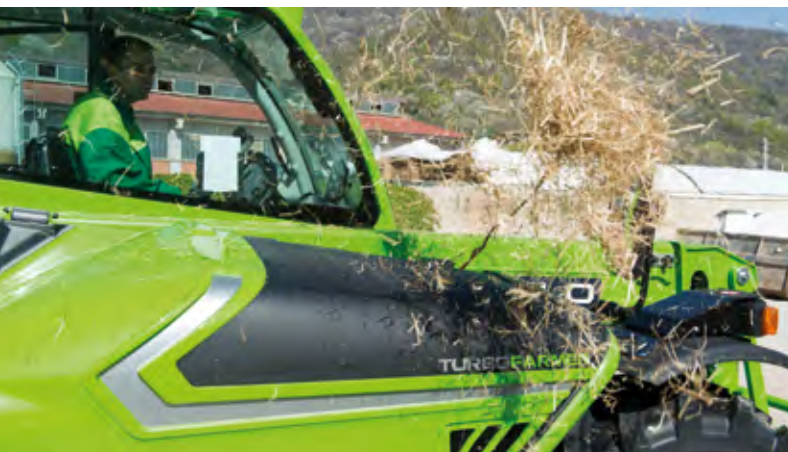
This system is built into the machines' frame, and allows for the **lateral movement of the telescopic boom**, ensuring precise load positioning, with no need for additional manoeuvring.

The side-shift control is located on the joystick and is proportional to maximise operator efficiency.

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



Fan Drive

Fan Drive technology comes fitted as standard, and allows the operator to change the engine fan's rotation direction from venting.

This cools and blows the radiators, which cleans them, eliminating dust and residues collected during the work phase, maintaining the system's performance and efficiency.

3-point rear linkage and PTO

Merlo Multifarmers are equipped with **3-point rear linkage** (with electronic or hydraulic control) at the rear of the frame, as well as a **mechanical PTO** with clutch and electronic engagement. This is capable of providing dual speed 540/1000.

The rear of the vehicle is designed to ensure maximum accessibility to the 3-point rear linkage.





Hydraulic system

These are the only models on the market equipped with **two separate circuits for hydraulics and hydrostatics** with two different oil reservoirs. Merlo telehandlers can be equipped with two different hydraulic solutions:

- Hydraulic with open centre distributor (gear pump): The maximum operating pressure is limited to 210 bar to reduce component wear and overheating of the hydraulic oil.
- Hydraulic with Flow Sharing distributor: The latter maximises the efficiency and responsiveness of the system, allowing for the simultaneous operation of up to three hydraulic movements.

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.



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 the ground contours freely, ensuring that the implement is in constant contact with the ground.

Comfort

Mastered Through Innovation

The Merlo cab, fitted with vibration-damping silent-blocks on the frame, has been developed to guarantee Merlo operators a record level of comfort. A cab width of 1010mm and a large glass surface of 4.3 sq.m ensures the best standard of roominess in its class. In addition, all models can be fitted with a heated pneumatic suspension seat to further increase driving comfort. The eWorker models, equipped with 100% electric transmission, allow a total reduction of vibrations and noise emitted by a standard engine. 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 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

To ensure simple and easy access to the cab, the door of Merlo telehandlers **can be opened by up to 180°** (opening limited to 90° for the eWorker model). Additionally, the inside of the door is equipped with a large handrail to assist the operator when getting in and out of the cab.

These features, combined with the large distance between the pillar and the steering wheel, increase entry space and accessibility for all users.

The lower part of the door is made of a glass structure to ensure complete visibility to the working area on the left side of the machine.

The side window, which is independent of the door body, can be locked in the open position.



Cab

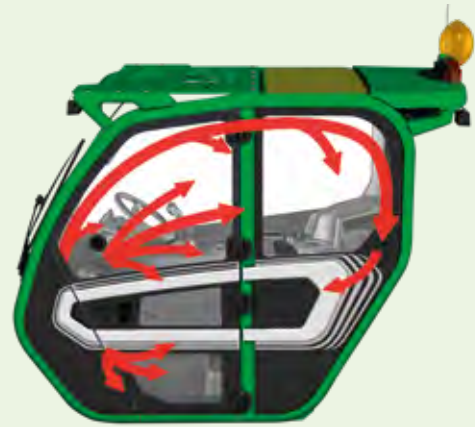
Merlo's design guarantees high levels of **functionality and comfort**; grouping the information provided to the driver and the controls of the various systems and devices for optimal ergonomics. The reverse shuttle on the steering wheel is also present on the joystick.

- 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 in accordance with automotive standards, **cuts 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, there are eight vents inside of the cab.



Boom suspensions

The active Boom Suspension System (BSS) is available as an option (standard for the Hi-Flow models). BSS 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), allowing for maximum boom precision and power.

Merlo carriage

Merlo machines have a carriage designed to ensure top performance, no matter the job. The maximum rotation facilitates the loading and unloading of material with shovels. The **Tac-lock device**, which comes **standard** on all models, guarantees maximum operating comfort, allowing attachments 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.

Efficiency

Simpler and Smarter

Merlo telehandlers for the agricultural and livestock sectors boast the smallest dimensions and lightest weights on the market, increasing manoeuvrability and reducing impact on the ground. The eWorker models ensure a total reduction in fuel consumption and pollutant emissions and feature a practical stop and start system to avoid drawing electricity when not required. Electric models are equipped with a braking energy recovery system to improve transmission efficiency. 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.

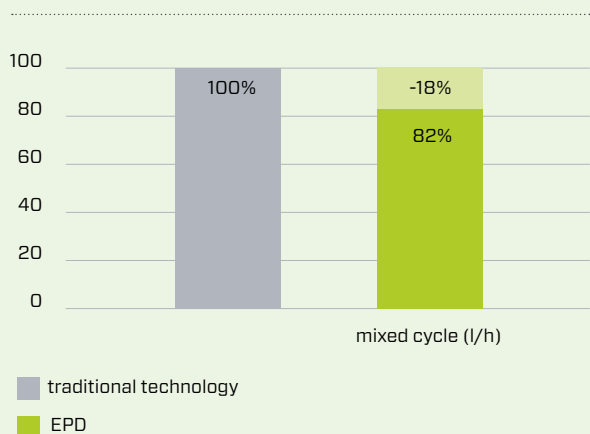
Visibility

Merlo's improved visibility increases range of movement and safety for operators. To achieve these standards of visibility, Merlo has invested in understanding the best position of the cab and boom for the operator. Merlo have also developed a detailed bonnet design and a large glass surface with the aim of ensuring fast, safe and precise operations.



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 potential.



Steering modes

One of Merlo's development focuses is to **minimise manoeuvring space** while maximising the agility of 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, 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.

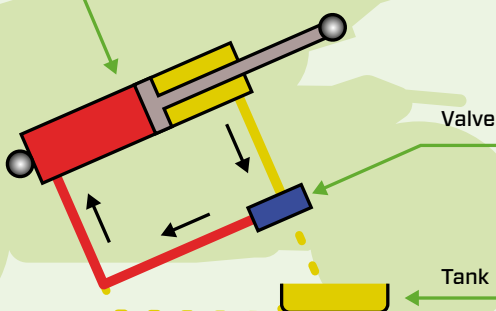
Towing

In order to maximise the versatility of these models, it is possible to type-approve telehandlers as "agricultural tractors with telescopic boom". This allows them to tow trailers on public roads, reaching a maximum towing limit of 32 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 models are available with rear hydraulic outlets and with the possibility of continuous oil delivery.



Lifting cylinder



Regenerative system

In order to improve productivity, all HM models come as standard with Merlo's regenerative system for the hydraulic circuit.

This system has been developed to **improve the boom's angular speed** when lifting a load, increasing the boom's speed by 36%.

Electric Telehandler Range

The continuous search for innovative solutions and technologies to satisfy the needs of operators has led Merlo to the creation of an exclusive range of telehandlers respectful of the environment, **100% powered by batteries**.

These machines are designed to completely reduce noise levels and polluting emissions, increase manoeuvrability in confined spaces and drastically reduce operating costs.

Merlo's range of electric models is the ideal tool for applications in closed environments such as stables, warehouses, materials sheds and greenhouses. The 2WD or 4WD traction coupled with the 2500kg max load guarantee operation and traction on all jobs, both on and off-road, meeting the requirements of the municipal, agricultural, landscaping and livestock sectors.

MODEL	EW25.5-60	EW25.5-90
Maximum load capacity (kg)	2500	2500
Lift height (m)	4.8	4.8
Unladen weight (kg)	4950	4950
Front standard tyres	AS 504 10.0/75-15.3 18PR	AS 504 10.0/75-15.3 18PR
Rear standard tyres	AW702 10.0/75-15.3 18PR	AS 504 10.0/75-15.3 18PR

Width	1540	1540
Height	1975	1975
Length	3320	3320
External steering range	2850	3250

Engine	2 x electric	3 x electric
Battery (type and V)	Lead-acid 48 V	Lead-acid 48 V
Nominal capacity	960 Ah	960 Ah
Engine power (kW/HP)	44/60	66/90
Maximum speed (km/h)	25	25
Traction	2WD, 3 drive modes	4WD, 3 drive modes
Autonomy	8h	8h
Recharge time (hours)	9 h (220 V)	9 h (220 V)

Hydraulic pump	LS + FS	LS + FS
Delivery/pressure (l/min-bar)	42 l/min (210 bar)	42 l/min (210 bar)
FOPS and ROPS	YES	YES
Regenerative braking	YES	YES



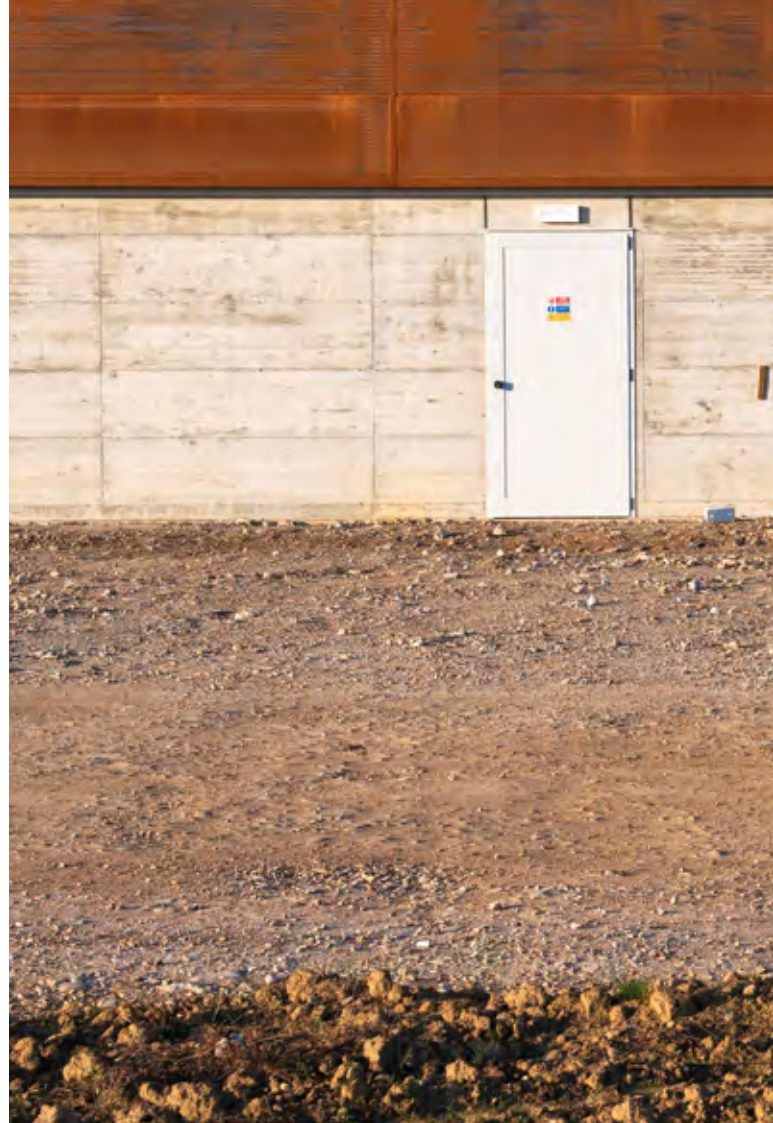


Compact Telehandler Range

Compact telehandlers are highly manoeuvrable, smaller models, making them **extremely easy to use** during material handling and positioning, **even in confined spaces**.

The range achieves lifting capacities between 2700 and 3300 kg and maximum heights between 6 and 9 metres. Equipped with the exclusive Merlo cab (already a favourite on the higher segment models), Merlo Compact models have the most spacious and comfortable driving position available on the market for telehandlers of their size and capacity.

The possibility to tow trailers on the road allows for even more usability of these machines, increasing versatility and saving both in time and in fuel consumption.



MODEL	P27.6PLUS	P27.6TOP	TF27.6	TF33.7-G	TF33.7-115
Maximum load capacity (kg)	2700	2700	2700	3300	3300
Lift height (m)	5.9	5.9	5,9	6.6	6.6
Unladen weight (kg)	4850	4850	4850	6400	6700
Standard tyres	12-16.5	12-16.5	12.0/75-18 12PR	400/70-20	400/70-20

Width (mm)	1860	1860	1860	2100	2100
Height (mm)	1960	1960	2020	2120 (2.020 L)	2120 (2.020 L)
Length (mm)	3910	3910	3910	4310	4310
Boom side-shift (mm)	-	-	-	-	-
Frame levelling (%)	-	-	-	-	-

Engine	Kohler 2504 TCR	Kohler 2504 TCR	Kohler 2504 TCR	KOHLER KDI 2504 TCR	Deutz TCD3.6
Anti-pollution technology	Stage V DOC + DPF	Stage V DOC + DPF	Stage V DOC + DPF	Stage V DOC + DPF	Stage V SCR + DPF + DOC
Displacement / cylinders	2500/4	2500/4	2500/4	2500/4	3600/4
Engine power (kW/HP)	55.4/75.1	55.4/75.1	55,4/75,1	55.4/75.1	85/115
EPD	NO	NO	Plus	STD	Plus
Hydrostatic transmission	SI - 1V	TOP - 1V	TOP - 1V	SI - 2V	SI - 2V
Maximum speed (km/h)	40	40	40	40	40
Hydraulic pump	Gears	Gears	Gears+FS	Gears	LS + FS

Delivery/pressure (l/min-bar)	95-210	95-210	95-210	98-210	125-210
ASCS	NO	NO	Light	NO	Light
FOPS LEV II Cab	YES	YES	YES	YES	YES
Cab suspension	NO	NO	NO	NO	NO



TF30.9-G	TF30.9-115
3000	3000
8.6	8.6
7100	7200
400/70-20	400/70-20

2100	2100
2120 (2.020 L)	2120 (2.020 L)
4330	4330
-	-
-	-

Kohler KDI 2504 TCR	Deutz TCD3.6
Stage V DOC + DPF	Stage V SCR + DPF + DOC
2500/4	3600/4
55.4/75.1	85/115
STD	Plus
SI - 2V	SI - 2V
40	40
Gears	LS + FS

98-210	125-210
NO	Light
YES	YES
NO	NO



P27.6 family cab interior

Medium Capacity Telehandler Range

Medium Capacity telehandlers have been developed to offer an all-rounder machine to meet the needs of the logistics and material handling sector, providing greater power and capacity than Compact models. The range achieves lifting capacities between 3300 and 4200 kg and maximum lifting heights between 7 and 10 metres. The strength of this range lies in its **broad selection of products**, allowing a choice from various exclusive technological options, such as cab suspension, the boom side-shift system and the continuously variable transmission, making this range extremely versatile and able to meet the different operational needs of the user.



MODELLO	TF35.7-140	TF35.7CS-140	TF33.9-140	TF33.9CS-140	TF42.7-116	TF42.7CS-116	TF42.7-136	TF42.7CS-136	TF42.7 CS-145-CVTRONIC
Maximum load capacity (kg)	3500	3500	3300	3300	4200	4200	4200	4200	4200
Lift height (m)	6,6	6,6	8,6	8,6	7	7	7	7	7
Unladen weight (kg)	6800	6950	7300	7450	7800	8000	7800	8000	8000
Standard tyres	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24

Width (mm)	2250	2250	2250	2250	2310	2310	2310	2310	2310
Height (mm)	2240	2300	2240	2300	2530	2530	2530	2530	2530
Length (mm)	4310	4310	4330	4330	4730	4730	4730	4730	4730
Boom side-shift (mm)	-	-	-	-	-	-	-	-	-
Frame levelling (%)	-	-	-	-	-	-	-	-	-

Engine	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Perkins 904J	Perkins 904J	Perkins 904J	Perkins 904J	Deutz TCD3.6
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 + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC
Displacement / cylinders	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4
Engine power (kW/HP)	100/136	100/136	100/136	100/136	85,9/116,8	85,9/116,8	100/136	100/136	105/143
EPD	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus
Hydrostatic transmission	YES - 2V	YES - 2V	YES - 2V	YES - 2V	YES - 2V	YES - 2V	YES - 2V	YES - 2V	CVTronic
Maximum speed (km/h)	40	40	40	40	40	40	40	40	40

Hydraulic pump	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS
Delivery/pressure (l/min-bar)	125-210	125-210	125-210	125-210	151-250	151-250	139-250	139-250	145-250
ASCS	Light	Light	Light	Light	Light	Light	Light	Light	Light
FOPS LEV II Cab	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cab suspension	NO	YES	NO	YES	NO	YES	NO	YES	YES



TF38.10-116	TF38.10 CS-116	TF38.10-136	TF38.10 CS-136	TF38.10 CS-145-CVTRONIC	TF42.7TT-136	TF42.7T-TCS-136	TF42.7T-TCS-145-CVTRONIC	TF38.10 TT-136	TF38.10T-TCS-136	TF38.10T-TCS-145-CVTRONIC
3800	3800	3800	3800	3800	4200	4200	4200	3800	3800	3800
9,5	9,5	9,5	9,5	9,5	7,2	7,2	7,2	9,7	9,7	9,7
8300	8500	8300	8500	8500	8000	8200	8200	8500	8800	8800
400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24	400/70-24

2310	2310	2310	2310	2310	2310	2310	2310	2310	2310	2310
2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530
4760	4760	4760	4760	4760	4730	4730	4730	4760	4760	4760
-	-	-	-	-	+/- 150	+/- 150	+/- 150	+/- 180	+/- 180	+/- 180
-	-	-	-	-	+/- 8	+/- 8	+/- 8	+/- 8	+/- 8	+/- 8

Perkins 904J	Perkins 904J	Perkins 904J	Perkins 904J	Deutz TCD3.6	Perkins 904J	Perkins 904J	Deutz TCD3.6	Perkins 904J	Perkins 904J	Deutz TCD3.6
Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC
3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4
85,9/116,8	85,9/116,8	100/136	100/136	105/143	100/136	100/136	105/143	100/136	100/136	105/143
Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus
YES - 2V	YES - 2V	YES - 2V	YES - 2V	CVTronic	YES - 2V	YES - 2V	CVTronic	YES - 2V	YES - 2V	CVTronic
40	40	40	40	40	40	40	40	40	40	40

LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS	LS+FS
151-250	151-250	139-250	139-250	145-250	139-250	139-250	145-250	139-250	139-250	145-250
Light	Light	Light	Light	Light	Light	Light	Light	Light	Light	Light
YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
NO	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES

High Capacity Telehandler Range

The range of Heavy Capacity telehandlers is designed for handling heavy loads in both industrial and agricultural environments. The range achieves lifting capacities between 4500 and 12000 kg and maximum heights between 8 and 18 metres.

These models, produced according to a new modular concept of frame and cab, have excellent performance in terms of visibility, safety and comfort. They can also be equipped with unique technological extras, such as cab suspension, continuously variable transmission and boom side-shift.

Merlo Heavy Capacity machines are unique in **maintaining their compact dimensions**, increasing their manoeuvrability and versatility.



MODEL	P72.10PLUS	P120.10HM	P65.14HM	P50.18HM	TF45.11T-170-HF
Maximum load capacity (kg)	7200	12000	6500	5000	4500
Lift height (m)	9,55	9,8	13,9	17,9	10,6
Unladen weight (kg)	11300	16200	15250	15700	10100
Standard tyres	400/70-24	17.5-25"	17.5-25"	17.5-25"	500/70-24"

Width (mm)	2240	2520	2520	2520	2400
Height (mm)	2500	2850	2850	2850	2530
Length (mm)	5480	5770	5910	6180	5040
Boom side-shift (mm)	+/- 250	+/- 185	+/- 375	+/- 440	-
Frame levelling (%)	+/- 8	+/- 8	+/- 8	+/- 8	+/- 8

Engine	Perkins 904J	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
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
Displacement / cylinders	3600/4	4500/4	4500/4	4500/4	4500/4
Engine power (kW/HP)	85.9/115	125/170	125/170	125/170	125/170
EPD	STD	STD	STD	STD	Plus
Hydrostatic transmission	SI - 2V	CVTronic	CVTronic	CVTronic	SI - 2V
Maximum speed (km/h)	40	40	40	40	40

Hydraulic pump	LS	LS + FS	LS + FS	LS + FS	HF
Delivery/pressure (l/min-bar)	108 - 250	158 - 230	158 - 230	158 - 230	160 - 250
ASCS	Full	Full	Full	Full	Full
FOPS LEV II Cab	YES	YES	YES	YES	YES
Cab suspension	NO	NO	NO	NO	NO



TF45.11TCS-170-HF	TF45.11TCS-170 CVTRONIC-HF	TF50.8T-170-HF	TF50.8TCS-170-HF	TF50.8TCS-170 CVTRONIC-HF	TF65.9T-170-HF	TF65.9TCS-170-HF	TF65.9TCS-170 CVTRONIC-HF
4500	4500	5000	5000	5000	6500	6500	6500
10,6	10,6	7,8	7,8	7,8	8,8	8,8	8,8
10300	10350	9500	9700	9750	11000	11200	11250
500/70-24"	500/70-24"	500/70-24"	500/70-24"	500/70-24"	500/70R24	500/70R24	500/70R24

2400	2400	2400	2400	2400	2400	2400	2400
2590	2590	2530	2590	2590	2510	2510	2510
5040	5040	4870	4870	4870	5260	5260	5260
-	-	-	-	-	-	-	-
+/-8	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8

FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
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	Stage V SCR + DOC + DPF
4500/4	4500/4	4500/4	4500/4	4500/4	4500/4	4500/4	4500/4
125/170	125/170	125/170	125/170	125/170	125/170	125/170	125/170
Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus
SI - 2V	CVTronic	SI - 2V	SI - 2V	CVTronic	SI - 2V	SI - 2V	CVTronic
40	40	40	40	40	40	40	40

HF	HF	HF	HF	HF	HF	HF	HF
160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250
Full	Full	Full	Full	Full	Full	Full	Full
YES	YES	YES	YES	YES	YES	YES	YES
YES	YES	NO	YES	YES	NO	YES	YES

Tractor

Telehandler Range

Telescopic Tractors include **models equipped with 3-point rear linkage and rear mechanical PTO**. These machines are designed to provide greater versatility in the agricultural sector, a true cross-over between the telehandler and the tractor.

The range achieves lifting capacities between 3400 and 4400 kg and maximum heights between 7 and 9 metres.

The high versatility of use, the exclusive performance and the technologies they can be equipped with – boom side-shift and cross tilt corrector – make these models the perfect partners.



MODEL	MF34.7-140	MF34.7CS-140	MF34.7CS-140-CVTRONIC
Maximum load capacity (kg)	3400	3400	3400
Lift height (m)	6,85	6,85	6,85
Unladen weight (kg)	7900	8000	8000
Standard tyres	460/70-R24	460/70-R24	460/70-R24

Width (mm)	2240	2240	2240
Height (mm)	2485	2485	2485
Length (mm)	5440	5440	5440
Frame levelling (%)	+/-8	+/-8	+/-8

Engine	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6
Anti-pollution technology	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC
Displacement / cylinders	3600/4	3600/4	3600/4
Engine power (kW/HP)	100/136	100/136	100/136
EPD	Plus	Plus	Plus
Hydrostatic transmission	SI - 2V	SI - 2V	CVTronic
Maximum speed (km/h)	40	40	40

Hydraulic pump	LS + FS	LS + FS	LS + FS
Delivery/pressure (l/min-bar)	145 - 210	145 - 210	145 - 210
ASCS	Light	Light	Light
FOPS LEV II Cab	YES	YES	YES
Cab suspension	NO	YES	YES
PTO	YES	YES	YES



MF34.9-140	MF34.9CS-140	MF34.9CS-CVTRONIC	MF44.7CS-170-CVTRONIC	MF44.9CS-170-CVTRONIC
3400	3400	3400	4400	4400
8,86	8,86	8,86	6,8	8,8
8400	8500	8500	9150	9530
460/70-R24	460/70-R24	460/70-R24	500/70-R24	500/70-R24

2240	2240	2240	2400	2400
2485	2485	2485	2590	2590
5440	5440	5440	5370	5570
+/-8	+/-8	+/-8	+/-8	+/-8

Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	FPT NEF45	FPT NEF45
Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC	Stage V - SCR + DPF + DOC
3600/4	3600/4	3600/4	4500/4	4500/4
100/136	100/136	100/136	125/170	125/170
Plus	Plus	Plus	Plus	Plus
SI - 2V	SI - 2V	CVTronic	CVTronic	CVTronic
40	40	40	40	40

LS + FS	LS + FS	LS + FS	LS + FS	LS + FS
145 - 210	145 - 210	145 - 210	150 - 210	150 - 210
Light	Light	Light	Full	Full
YES	YES	YES	YES	YES
NO	NO	YES	YES	YES
YES	YES	YES	YES	YES

Stabilised Telehandler Range

Merlo's Stabilised telehandlers for agriculture have been designed to ensure **maximum stability and precision during operation**.

The range reaches lifting capacities of up to 3500 kg and maximum heights of 11 metres; equipped with a powerful 105 kW – 143 hp engine, it allows the towing of trailers of up to 24 tons (depending on the different configurations). Work at height can also be carried out thanks to different types of aerial work platforms.

These features make Merlo Stabilised telehandlers particularly suitable for farms and municipalities which also need a machine suitable for the maintenance of buildings or structures.

MODEL	TF35.11TT-145
Maximum load capacity (kg)	3500
Lift height (m)	11
Unladen weight (kg)	9100
Standard tyres	400/70-24

Width	2310
Height	2530
Length	5150
Boom side-shift (mm)	+/- 310
Frame levelling (%)	+/- 8

Engine	Deutz TCD3.6
Anti-pollution technology	Stage V - SCR + DPF + DOC
Displacement / cylinders	3600/4
Engine power (kW/HP)	105/143
EPD	STD
Hydrostatic transmission	SI - 2V
Maximum speed (km/h)	40

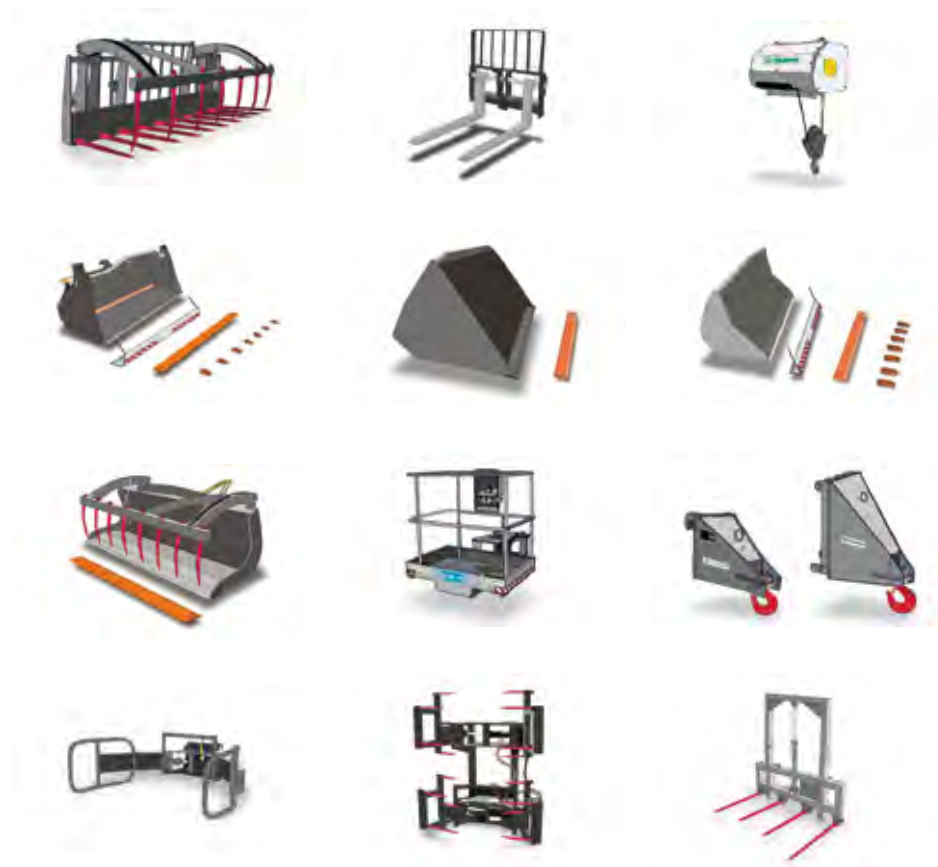
Hydraulic pump	LS + FS
Delivery/pressure (l/min-bar)	150-250
ASCS	Light
FOPS LEV II Cab	YES
Cab suspension	NO





Attachments

Merlo attachments, designed and manufactured in the Merlo factory, are the real operational tools of Merlo telescopic handlers. The result of decades of experience of Merlo technicians who interpret the operational needs of our customers in order to create a solution which enhances the machine's performance in different operating situations. Attachments with dimensional and performance characteristics specifically designed for the agricultural world have been developed for the dedicated models. Every telehandler in the Merlo range is equipped with a Merlo developed headstock, which allows attachments to be shared across multiple models. The exclusive, patented attachment recognition system and the efficient hydraulic locking system allow for quick implement changeovers and automatic configuration of the operating parameters, for greater versatility and safety.



Merlo Infomobility Movimatica

The Merlo telehandler range offers exclusive Movimatica technology, making Merlo 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. Featuring a practical and intuitive web interface and a mobile app for portable devices, MerloMobility is a versatile and flexible tool that offers all Merlo customers the ability to remotely monitor all the parameters mentioned above, maximising their machines' efficiency and productivity, and allowing them to check the operational and diagnostic status of their machines in real time.





Training Centre

The Merlo Training and Research Centre (MTRC) was as a result of Merlo's firm belief that safety cannot exist without adequate training. Established with the aim of providing adequate training in compliance with the current laws and decrees, the Training and Research Centre expresses Merlo Group's desire to excel on an international level in the field of occupational safety training, by providing training courses for the operators of aerial work platforms, forklifts, telehandlers, cranes, earthmoving machinery, agricultural and forestry tractors, snow ploughs, urban sanitation vehicles, and more.



Merlo Service

Merlo is committed to protecting the **value**, **performance** and **productivity** of your machine 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 reduces the number of services required, meaning your Merlo will maintain the same excellent performance levels over weeks, months, and years of consistent use.



After-Sales Support

Merlo is able to offer a comprehensive range of top-quality maintenance and support services due to extensive training from Merlo around the world. In order to identify any issues quickly and reliably, and help to efficiently resolve any issues, Merlo has developed a **diagnostic platform** which reflects the evolution of our product range and allows a complete diagnostic analysis to be performed on the vehicles' various electronic control units using a single communication module for all our telehandlers.

Customer service

Merlo's specialist teams will be on hand to support you during your machine's service life. The Customer service guarantees an **fast response** and a quick resolution to any problem.



Warranty Extension

Customers can choose a warranty extension of up to 3 years and 3600 hours of operation, which can be adapted to suit their individual requirements.

The extended warranty gives you the peace of mind of having your vehicle repaired by the **expert professionals** of **Merlo's After-Sales Service Network** for a longer period of time.



Spare Parts

We manufacture over 90% of our machine components internally. Due to this, we are able to guarantee original spare parts made specifically for our machines. In addition, our spare parts are subject to continuous and rigorous quality controls.

To limit downtime and ensure optimal performance, we also continue to invest in the management of our spare parts and logistics services, which are constantly expanding. We strive to always deliver the right parts, to the right place, at the right time, with a fast and efficient customer-centric supply chain.

The figures:

- **5**
Warehouses worldwide
- **Over 16000 cubic m**
Storage surface area
- **Over 35000**
Spare parts codes managed
- **Over 1400000**
Spare parts delivered per year



Your Merlo dealer

MERLO S.p.A.

Via Nazionale, 9 - 12010 S. Defendente di Cervasca (CN) Italy
Tel. +39 0171 614111 - Fax +39 0171 684101
www.merlo.com - info@merlo.com

