

Construction Range

AUSTRALIA & NEW ZEALAND



MERLO



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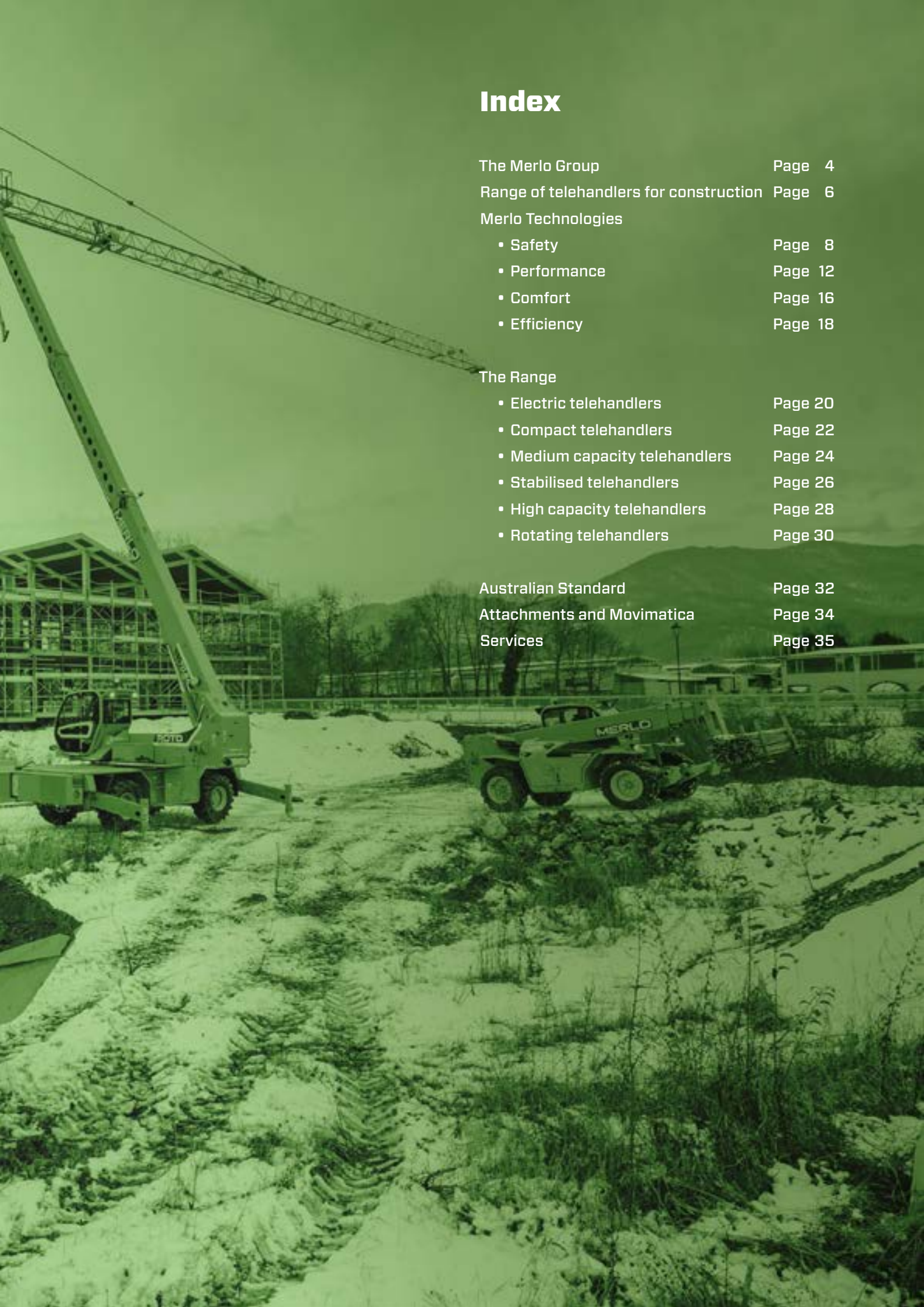
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Merlo Headquarters

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.





Range of Telehandlers for Construction Your Best Tool on Site

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 are recognised worldwide as the best available all-purpose units, capable of offering specific solutions for every need in the construction, renovation, infrastructure, industrial and logistics sectors, as well as in other related areas, such as recycling, municipal works, and mining. The Merlo range of construction telehandlers consists of several families which differ in specification and size; from compact models, to those equipped with rotating turrets capable of reaching considerable working heights.

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 40 km/h.

Cab:

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

Telescopic Boom:

Maximum reach **from 5 to 35 metres** with load-bearing capacities **from 2500 to 10000 kg**. 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 frame, depending on the range, can be equipped with a lateral tilt correction system, boom side-shift system and active hydropneumatic suspension.

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 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. 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.



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 all models are equipped fully with our innovative stability controlling ASCS system (Page 10).

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 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, 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.

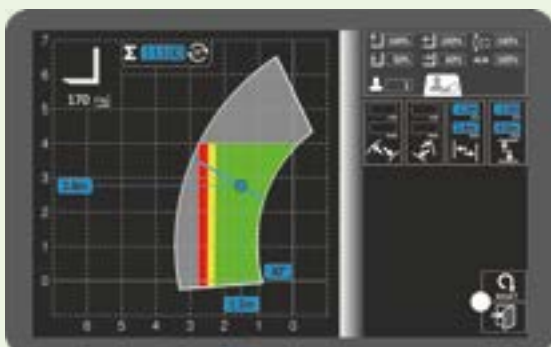


Working Area Setting

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

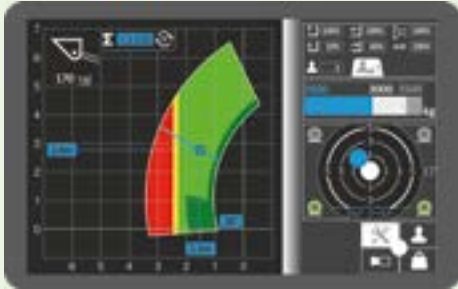
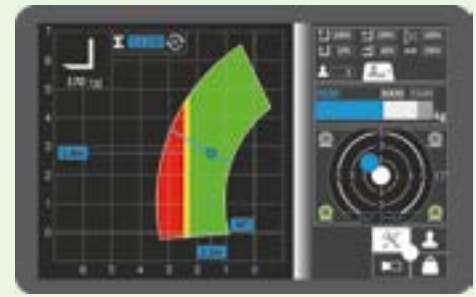
Adjustments can be made to vertical and horizontal movements (minimum and maximum height and extension), or to the relative movements of the boom (minimum and maximum lifting and extension angle of the extension).

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

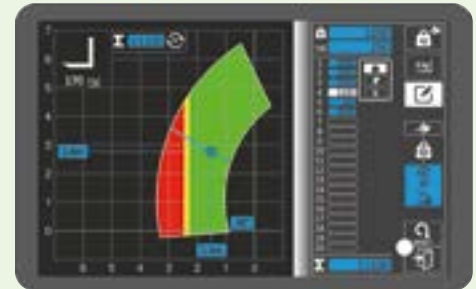


Free Zone

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.**

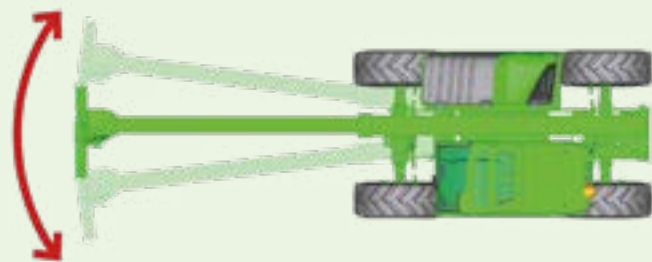
Diesel engines are used as standard, with a **power range between 75 and 170HP.**

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.



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**, 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.



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.



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.



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 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 (limited to 90° for the eWORKER model), the high distance between the upright and steering wheel, and the correct positioning of the steps and handles for access.

Finally, the eWORKER models, equipped with 100% electric transmission, allow a total reduction of vibrations and noise emitted by the heat engine, for greater operator comfort.

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

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
- 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.).



Tilting Cab

Merlo's exclusive cab tilting system ensures high levels of comfort, operational visibility, ergonomics and safety. From the drivers' seat, the operator is able to use a button to activate the cab's tilting feature. The tilt angle raises up to 20° and allows the operator to monitor any movements or positional changes of the load when working at height, without having to move their neck into an uncomfortable position for extended periods of time.

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.



Axle Suspension

Merlo's exclusive, electronically-controlled active suspension absorbs vibrations, guaranteeing a more comfortable ride, especially when operating on rough terrain. In addition to reducing transport times and improving operator comfort, Merlo cab suspension also operates as a transversal and frontal inclination corrector, allowing you to work in total safety even on sloped terrain.

Efficiency

Simpler and Smarter

Merlo telehandlers for the construction and rental sectors boast the smallest dimensions and lightest weights on the market, guaranteeing reduced manoeuvring space and reduced impact on the ground. Excellent manoeuvrability further reduces manoeuvring times, for greater productivity and lower power consumption. Finally, 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. Finally, the 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.

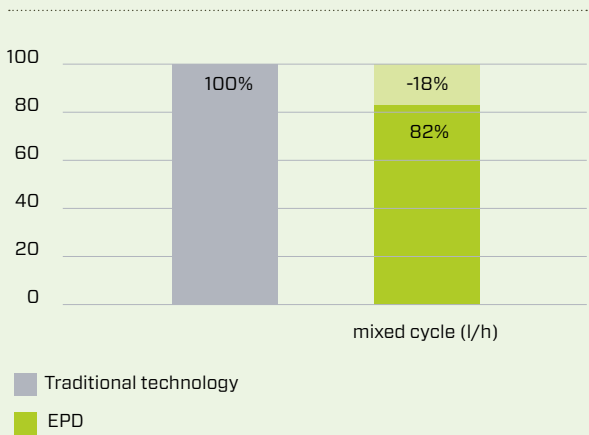
Visibility

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 has 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

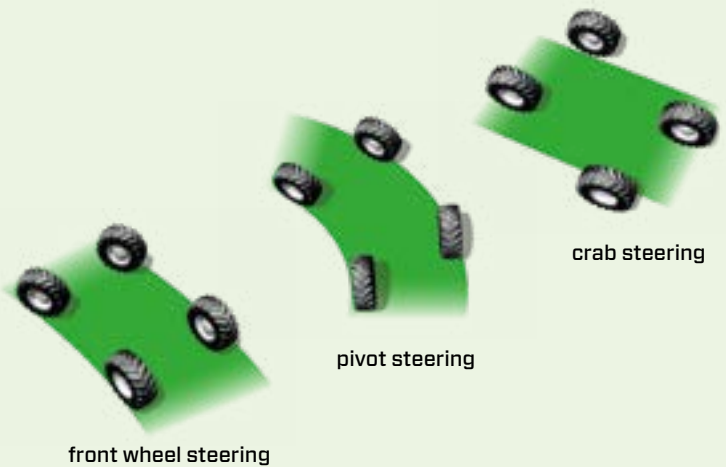
The patented Merlo EPD Plus system, applied to hydrostatic transmissions, includes three modes of use that apply to different operating needs: “**Heavy Load**”, “**Eco**” and “**Speed Control**”. The “Eco” mode optimises performance in relation to fuel consumption and can be used for light operations; 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 capacity.



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.

Electric Power Supply

All rotary telehandlers in the Merlo range can be equipped with a Plug-in solution, which allows them to operate in total safety without the use of a combustion engine. This equipment allows the telehandler to be connected to a 400 volt power line and operate fully electrically.

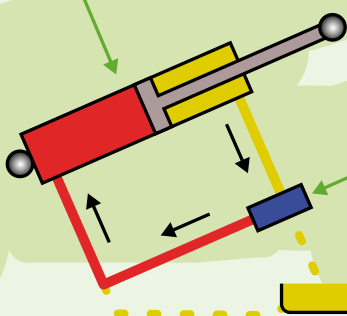
Merlo's Plug-In solution provides considerable advantages, reducing polluting emissions and noise, facilitating work even in city centres and during evening shifts, and lowering fuel consumption and maintenance costs.



Lifting cylinder

Valve

Tank



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, **powered completely 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 are ideal for applications in closed environments such as stables, warehouses, materials sheds and greenhouses. The 2WD or 4WD traction coupled with the 2500 kg max load guarantee operation and traction on any job, both on and off-road, meeting the needs of the municipal and infrastructure, construction and industrial sectors.

MODEL	E-WORKER 25.5-60 2WD	E-WORKER 25.5-90 4WD
Maximum load capacity (kg)	2200	2200
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 1 0,0/75-15,3 18PR
Rear standard tyres	AW702 10,0/75-15,3 18PR	AS 504 10,0/75-15,3 18PR

Width (mm)	1540	1540
Height (mm)	1975	1975
Length (mm)	3320	3320
External steering range (mm)	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	4WD
Autonomy (hours)	8h	8h
Recharge time (hours)	9h (220V)	9h (220V)

Hydraulic pump	LS + FS	LS + FS
Delivery/pressure (l/min-bar)	42 l/min (210 bar)	42 l/min (210 bar)
FOPS LIV I 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 3000 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	TF27.6	P27.6AUPLUS	TF33.7-115EE
Maximum load capacity (kg)	2700	2500	3000
Lift height (m)	4,6	5,9	6,5
Unladen weight (kg)	4850	4850	6600
Standard tyres	12/75-18	12-16.5	400/70-20

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

Engine	Kohler 2504 TCR	Kohler 2504 TCR	Deutz TCD3.6
Anti-pollution technology	Stage V - DOC + DPF	Tier 4 - DOC	Tier 3
Range/Cylinders	2500/4	2500/4	3600/4
Engine power (kW/HP)	55,4/75,1	55,4/75,1	85/115
EPD	Plus	No	Plus
Hydrostatic transmission	Top - 1V	Yes - 1V	Yes - 2V
Maximum speed (km/h)	40	40	40
Hydraulic pump	Gear + FS	Gear	LS+FS

Delivery/pressure (l/min-bar)	95-210	95-210	125-210
ASCS	Light	Full	Full
FOPS II + ROPS Cab	Yes	Yes	Yes
Cab suspension	No	No	No



TF33.7-115LEE	TF33.9CS-140	TF33.9-115EE	TF30.9-115LEE	TF30.9-115EE
3000	3300	3300	3000	3000
6,5	6,2	6,2	8,5	5,8
6600	7450	7200	7100	7100
400/70-20	400/70 - 24	400/70 - 24	400/70-20	400/70-20

2100	2250	2250	2100	2100
2020	2300	2240	2020	2120
4310	4330	4330	4330	4330
-	-	-	-	-
-	-	-	-	-

Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6
Tier 3	Stage V - SCR + DPF + DOC	Tier 3	Tier 3	Tier 3
3600/4	3600/4	3600/4	3600/4	3600/4
85/115	100/136	85/115	85/115	85/115
Plus	Plus	Plus	Plus	Plus
Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V
40	40	40	40	40
LS+FS	LS+FS	LS+FS	LS+FS	LS+FS

125-210	125-210	125-210	125-210	125-210
Full	Light	Light	Full	Light
Yes	Yes	Yes	Yes	Yes
No	Yes	No	No	No

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 4050 kg and maximum lifting heights between 7 and 10 metres. The strength of this range lies in its **broad selection of machines**, 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.



MODEL	TF35.7-115EE	TF35.7-140	TF35.7CS-140	TF33.9-140	TF42.7-116EE	TF42.7-136	TF42.7CS-136	TF42.7TT-136
Maximum load capacity (kg)	3500	3500	3500	3300	4050	4200	4200	4200
Lift height (m)	6,5	6,5	6,5	8,5	7	5,6	5,6	7,2
Unladen weight (kg)	6700	6950	6950	7450	7700	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

Width (mm)	2250	2250	2250	2250	2310	2310	2310	2310
Height (mm)	2240	2300	2300	2300	2530	2530	2530	2530
Length (mm)	4310	4310	4310	4330	4730	4730	4730	4730
Boom side-shift (mm)	-	-	-	-	-	-	-	+/- 150
Frame levelling (%)	-	-	-	-	-	-	-	+/- 8

Engine	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Deutz TCD3.6	Perkins 904D	Perkins 904J	Perkins 904J	Perkins 904J
Anti-pollution technology	Tier 3	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Tier 3	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC
Range/Cylinders	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4	3600/4
Engine power (kW/HP)	85/115	100/136	100/136	100/136	85,9/116,8	100/136	105/136	100/136
EPD	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
Maximum speed (km/h)	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
Delivery/pressure (l/ min-bar)	125-210	125-210	125-210	125-210	151-250	139-250	139-250	139-250
ASCS	Full	Full	Light	Full	Full	Light	Light	Light
FOPS II + ROPS Cab	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cab suspension	No	No	Yes	No	No	No	Yes	No



TF42.7TTCS-136	TF42.7TTCS 145-CVTRONIC	TF38.10-116EE	TF38.10-136	TF38.10TT-136	TF38.10CS-136	TF38.10TTCS-136	TF38.10CS 145-CVTRONIC	TF38.10TTCS 145-CVTRONIC
4050	4200	3800	3800	3800	3800	3800	3800	3800
7,2	7,2	9,5	6,1	8,6	6,1	9,5	6,1	8,6
8200	8200	8200	8300	8500	8500	8800	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

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

Perkins 904J	Deutz TCD3.6	Perkins 904D	Perkins 904J	Perkins 904J	Perkins 904J	Perkins 904J	Perkins 904J	Deutz TCD3.6	Deutz TCD3.6
Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Tier 3	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
100/136	105/143	85,9/116,8	100/136	100/136	100/136	100/136	100/136	105/143	105/143
Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus
Yes - 2V	CVTronic	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V	CVTronic	CVTronic
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
139-250	150-250	151-250	139-250	139-250	139-250	139-250	145-250	145-250	145-250
Full	Light	Full	Light	Light	Light	Full	Light	Light	Light
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes

Stabilised Telehandler Range

Equipped with front stabilisers to ensure greater balance and safety when handling loads at greater working heights, the Merlo Stabilised Telehandler range is one of Merlo's key offerings to the construction market.

With lifting capacities of between 3500 and 5000 kg and maximum heights between 11 and 18 metres, these machines are designed for use on any type of worksite thanks to the **stabilisers that do not protrude beyond the outline of the frame**, for exceptional accessibility.

These models can be equipped with different exclusive technological features, such as suspended cab, boom side-shift and transverse tilt corrector, offering customers solutions tailored to their needs.

MODEL	P35.11	P35.11EE4	P40.13EE	P40.17EE	P50.18EE
Maximum load capacity (kg)	3500	3500	4000	4000	5000
Lift height (m)	9	11,1	12,5	16,6	9,2
Unladen weight (kg)	9000	9000	9150	11520	13300
Standard tyres	400/70-24	400/70-24	400/70-20	400/70-24	400/80-24

Width (mm)	2310	2310	2240	2420	2480
Height (mm)	2530	2530	2425	2500	2535
Length (mm)	5150	5150	5410	5970	6190
Boom side-shift (mm)	+/- 310	+/- 310	+/- 340	+/- 435	+/- 445
Frame levelling (%)	+/- 8	+/- 8	+/- 8	+/- 8	+/- 8

Engine	Kohler 2504 TCR	Kohler 2504 TCR	Perkins	Perkins	Perkins 904J
Anti-pollution technology	Stage V DOC + DPF	Tier 4 - DOC	Tier 3	Tier 3	Stage V - SCR + DPF + DOC
Range/Cylinders	2500/4	2500/4	3600/4	3600/4	3600/4
Engine power (kW/HP)	55,4/75,1	55,4/75,1	85,9/116,8	85,9/116,8	85,9/116,8
EPD	STD	STD	No	No	STD
Hydrostatic transmission	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V	Yes - 2V
Maximum speed (km/h)	33	33	40	40	40

Hydraulic pump	LS + FS	LS + FS	LS	LS	LS
Delivery/pressure (l/min-bar)	117 - 250	117 - 250	108 - 250	108 - 250	108 - 250
ASCS	Light	Full	Full	Full	Full
FOPS II + ROPS Cab	Yes	Yes	Yes	Yes	Yes
Cab suspension	No	No	No	No	No





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 10000 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 High Capacity machines are unique in **maintaining their compact dimensions**, increasing their manoeuvrability and versatility.



MODEL	TF45.11T 170-HF	TF45.11T 170EE-HF	TF45.11TCS 170-HF	TF45.11TCS-170- CVTRONIC-HF	TF50.8T 170-HF	TF50.8T 170EE-HF	TF50.8TCS 170-HF	TF50.8TCS-170- CVTRONIC-HF
Maximum load capacity (kg)	4500	4500	4500	4500	5000	4500	5000	5000
Lift height (m)	9	9	9	9	7,8	7,8	7,8	7,8
Unladen weight (kg)	10100	10100	10300	10350	9500	9700	9700	9750
Standard tyres	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24	500/70R24

Width (mm)	2400	2400	2400	2400	2400	2400	2400	2400
Height (mm)	2530	2530	2590	2590	2530	2590	2590	2590
Length (mm)	5040	5040	5040	5040	4870	4870	4870	4870
Boom side-shift (mm)	-	-	-	-	-	-	-	-
Frame levelling (%)	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8	+/-8

Engine	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
Anti-pollution technology	Stage V - SCR + DOC + DPF	Tier 2	Stage V - SCR + DOC + DPF	Stage V - SCR + DOC + DPF	Stage V - SCR + DOC + DPF	Tier 2	Stage V - SCR + DOC + DPF	Stage V - SCR + DOC + DPF
Range/Cylinders	4500/4	4500/4	4500/4	4500/4	4500/4	4500/4	4500/4	4500/4
Engine power (kW/HP)	125/170	125/170	125/170	125/170	125/170	125/170	125/170	125/170
EPD	Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus
Hydrostatic transmission	Yes - 2V	Yes - 2V	Yes - 2V	CVTronic	Yes - 2V	Yes - 2V	Yes - 2V	CVTronic
Maximum speed (km/h)	40	40	40	40	40	40	40	40

Hydraulic pump	HF	HF	HF	HF	HF	HF	HF	HF
Delivery/pressure (l/min-bar)	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250	160 - 250
ASCS	Full	Full	Full	Full	Full	Full	Full	Full
FOPS II + ROPS Cab	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cab suspension	No	No	Yes	Yes	No	Yes	Yes	Yes



TF65.9T 170-HF	TF65.9TCS- 170-HF	TF65.9TCS- 170EE-HF	TF65.9TCS-170- CVTRONIC-HF	P72.10EE	P50.18HM	P65.14HM	P120.10EE	P120.10HM
6500	6500	6500	6500	7200	5000	6500	10000	12000
7	7	8,8	7	9,2	17,5	13,5	9,8	6,9
11000	11200	11200	11250	12150	15700	15250	16200	16200
500/70R24	500/70R24	500/70R24	500/70R24	400/70-24	17.5-25"	17.5-25"	17.5-25"	17.5-25"

2400	2400	2400	2400	2240	2520	2520	2520	2520
2510	2510	2510	2510	2500	2850	2850	2850	2850
5260	5260	5260	5260	5480	6180	5910	5770	5770
-	-	-	-	+/- 250	+/- 440	+/- 375	+/- 185	+/- 185
+/-8	+/-8	+/-8	+/-8	+/- 8	+/-8	+/-8	+/-8	+/-8

FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45	Perkins	FPT NEF45	FPT NEF45	FPT NEF45	FPT NEF45
Stage V - SCR + DOC + DPF	Stage V - SCR + DOC + DPF	Tier 2	Stage V - SCR + DOC + DPF	Tier 3	Stage V SCR + DPF + DOC	Stage V SCR + DPF + DOC	Tier 2	Stage V SCR + DPF + DOC
4500/4	4500/4	4500/4	4500/4	3600/4	4500/4	4500/4	4500/4	4500/4
125/170	125/170	125/170	125/170	85,9/116,8	125/170	125/170	125/170	125/170
Plus	Plus	Plus	Plus	Plus	Plus	Plus	Plus	STD
Yes - 2V	Yes - 2V	Yes - 2V	CVTronic	Yes - 2V	CVTronic	CVTronic	CVTronic	CVTronic
40	40	40	40	40	40	40	40	40

HF	HF	HF	HF	LS	LS + FS	LS + FS	LS + FS	LS + FS
160 - 250	160 - 250	160 - 250	160 - 250	108 - 250	158-230	158-230	158-230	158-230
Full	Full	Full	Full	Full	Full	Full	Full	Full
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No	Yes	Yes	Yes	No	No	No	No	No

Rotating Telehandler Range

Merlo Rotating telehandlers are equipped with a **turret capable of operating at 360 degrees** which offers a greater range of motion than a fixed telehandler. These machines are able to offer high operational precision.

The Merlo Rotating Telehandler range achieves lifting capacities between 5000 and 7000 kg and maximum heights between 21 and 26 metres. The ROTO models stand out for their cabs featuring exceptional comfort, an innovative "Modular" design, the use of technology to ensure greater safety and comfort, and unparalleled efficiency.

MODEL	ROTO50 26SPLUSEE	ROTO50 21SPLUSEE	ROTO70 24SPLUS
Maximum load capacity (kg)	5000	5000	7000
Lift height (m)	25,9	21	24,2
Unladen weight (kg)	17300	16500	20200
Standard tyres	18-22.5	18-22.5	445/65 R22.5

Width (mm)	2430	2430	2490
Height (mm)	3120	3120	3160
Length (mm)	7150	6830	7545
Frame levelling (%)	+/-12, +/-4	+/-12, +/-4	+/-12, +/-4

Engine	FPT NEF45	FPT NEF45	FPT NEF45
Anti-pollution technology	Tier 2	Tier 2	stage V SCR+DOC+DPF
Range/Cylinders	4500/4	4500/4	4500/4
Engine power (kW/HP)	125/170	125/170	125/170
EPD	STD	STD	STD
Hydrostatic transmission	Yes - 2V	Yes - 2V	Yes - 2V
Maximum speed (km/h)	40	40	40

Hydraulic pump	2 - LS + FS	2 - LS + FS	2 - LS + FS
Delivery/pressure (l/min-bar)	138+100 - 250/230	138+100 - 250/230	138+100 - 250/230
ASCS	Full	Full	Full
FOPS II + ROPS Cab	Yes	Yes	Yes
Cab suspensio	No	No	No
Tilting cab	Yes	Yes	Yes
Turret rotation	Continuous	Continuous	Continuous





Merlo products are AS10896-1 and AS1418.10 compliant

Safety comes first!

The whole Merlo product range sold and used in Australia and New Zealand is certified as meeting the required Australian Standards issued. The most popular Merlo telehandlers have been Tested and Certified following the latest Australian certifications.

The certification includes the design analysis, the stability and limiting device validation, according to specific load charts for Australia. In addition, the structural integrity design is checked. Therefore Merlo machines are delivered with a Certificate of Conformity issued by the Manufacturer "Merlo S.p.A" directly.

In addition and upon request, any Merlo Telehandler and its original attachments offered to our final customers can be provided with its proper specific "Design Verification" documents

The pictures shown in the following pages highlight the main specifications adopted by Merlo to meet the Australian market requests.



Rear camera starts automatically when engaging the reverse shuttle.



Merlo ASCS (Adaptive Stability Control System) rated capacity limiter



Lateral and longitudinal level indicators



Boom ram safety blocking device



Load Chart compliant with australian standards



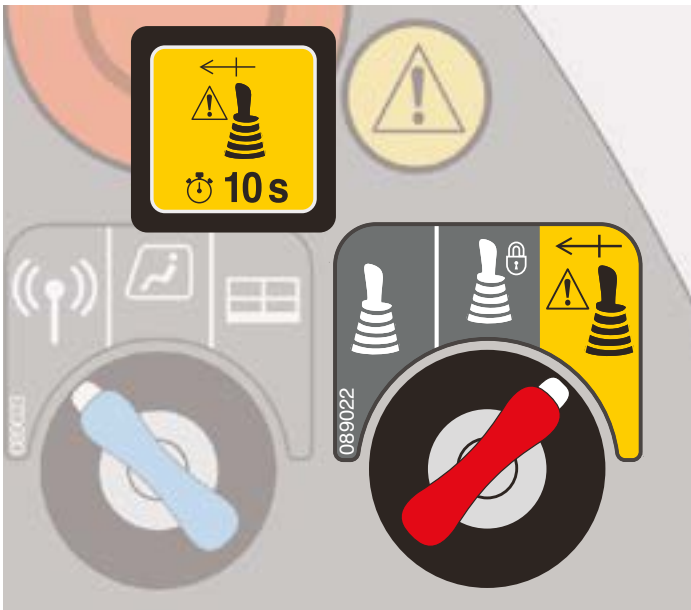
External longitudinal stability indicator



Internal longitudinal stability indicator



Machine identification plate

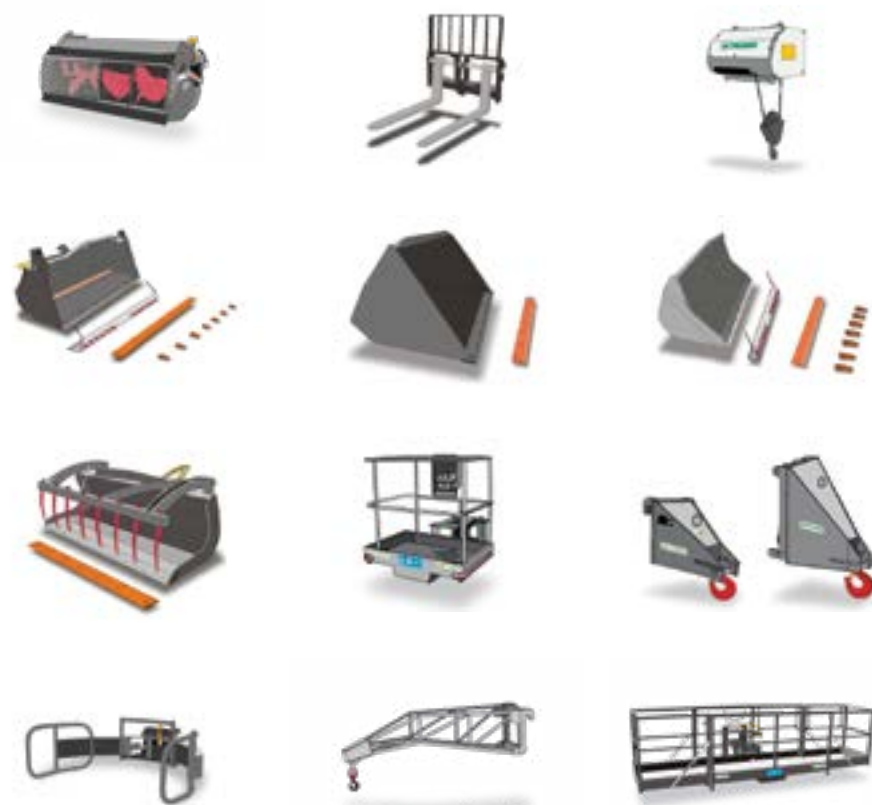


Timer-controlled bypass

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.



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 a **fast** response and a quick resolution to any problem.





GCANZ2404EN

Your Merlo dealer

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