

# PANORAMIC WITH STABILIZERS



**MERLO**

*BUILDING WITH CONFIDENCE.*



PANORAMIC



# IDEAS IN MOTION

Research and innovation have been primary goals of Merlo technicians and engineers since 1964, the year the company was established. Since then, product development has always targeted maximising safety, improving operator's comfort, and manufacturing increasingly more reliable and profitable machines.

Every day our engineers look to the future, even searching for the cutting-edge technical solutions which spur on our development and respond to daily challenges, overcoming seemingly insurmountable obstacles, to create innovating solutions which radically change the way people work.

Safety, comfort, and performance are the focus of Merlo research. And, that focus is the reason that every new Merlo product sets new standards in terms of design, performance, and respect for both mankind and the environment. Each new type becomes part of a winning team of inexhaustible energy, dedicated to overcoming even the most challenging of situations.

# THE PANORAMIC CONCEPT

## THE COMPETITIVE ADVANTAGE



### TECHNOLOGY ENTERS THE JOB SITE

Panoramic telehandlers take the name from their unrivalled visibility from the driver's seat. Since 1987 – when Merlo produced the world's first telehandler to feature a side-mounted engine – the Panoramic concept has been continuously developed and, to this day, remains the source of inspiration for other telehandler manufacturers.

The position of the engine plays a fundamental role in offering maximum accessibility from the ground and, together with the exceptionally low boom pivot point, makes possible its legendary all-round visibility.

When combined with the standard hydrostatic transmission, the side-mounted engine results in a machine that is typically smaller and lighter than competitors, something appreciated on today's often confined work sites.

Merlo's integral boom side-shift, frame levelling and hydraulic stabilizers ensure the highest levels of stability, safety and performance. Features such as the 'Ring of Steel' suggest a new level of ruggedness, high profitability and versatility. The Panoramic family - with hydraulic stabilizers - offers a host of models, with load capacities up to 4,000 kg and lift heights up to almost 17 metres.

◀

**38ST SERIES**  
**High-performing and user-friendly** - site telehandlers without compromise!

▼

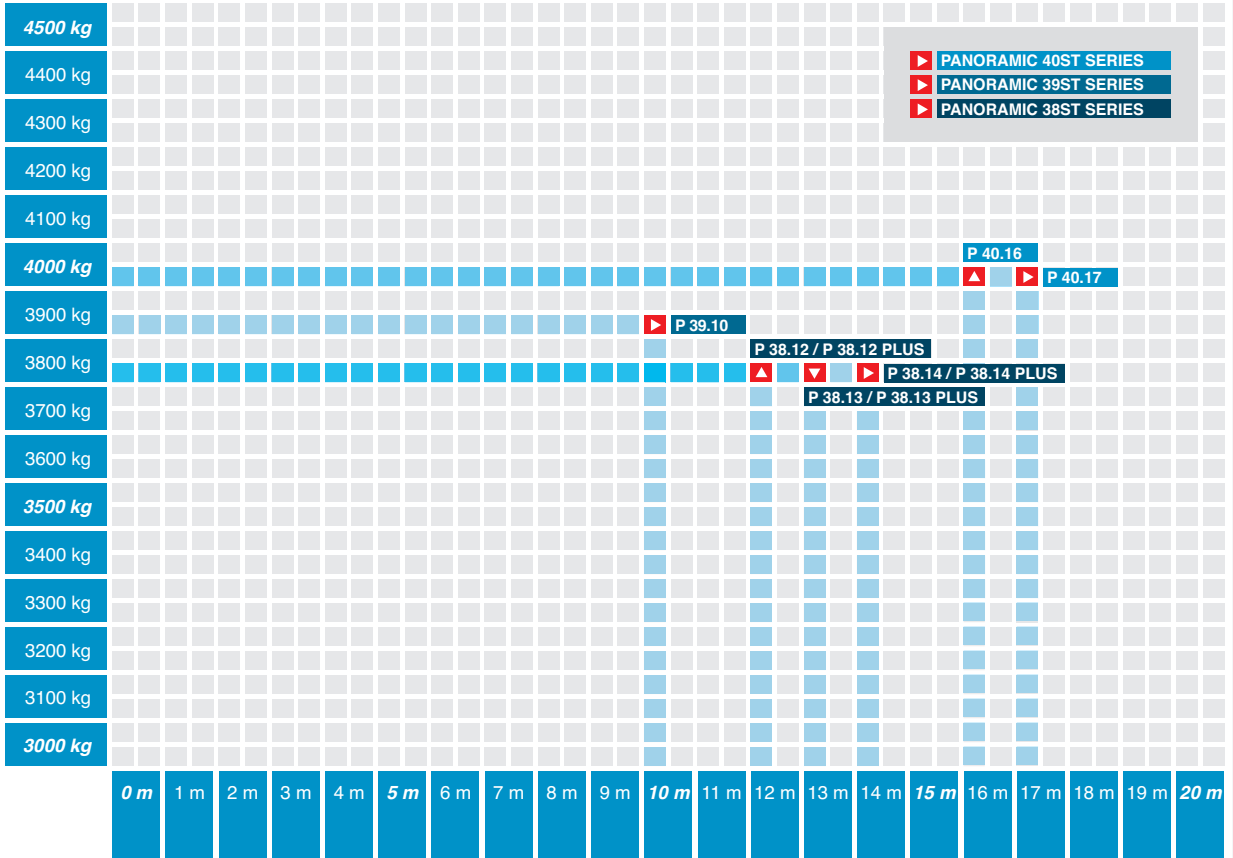
**39ST SERIES**  
 The **manoeuvrability, compactness** and high **power to weight** ratio of a small telehandler, but with **performance and versatility** as well!



▲

**40ST SERIES**  
 The flagship machines, with **power, load capacities and lift heights** that are industry standards. The state of telehandler art in terms of technology and productivity.

THE PANORAMIC RANGE



# WINNING INNOVATIONS

## TOMORROW IS ALREADY HERE



### **FIRST IN PERFORMANCE AND RELIABILITY**

The unique design of a Merlo telehandler is immediately recognisable. The heart of the chassis is the immensely strong 'Ring of Steel' (of 70 mm diameter solid bar!).

It has both structural and protective functions, as well as increasing machine stability by significantly lowering the machine's centre of gravity.

This unique Merlo design ensures good weight balance which, together with versatile drive/steer axles, extraordinary ground clearance, generous approach and departure angles and road travel at up to 40 kph: all add up to unrivalled driving ability in the most challenging of ground conditions.

Panoramic telehandlers are among the safest and most comfortable ways to work - the highest standards of reliability, quality, profitability and, most of all, safety!

## PANORAMIC

## WINNING INNOVATIONS

The standard **hydraulic quick-attach fork carriage** allows attachments to be quickly interchanged using controls in the cab. A **double-acting hydraulic service fitted with quick couplings** provides the power for hydraulically-operated equipment.

The main chassis of the machine are enclosed within a **'Ring of Steel' (of 70 mm diameter solid bar)**, serving both structural and protective functions. It also helps to **lower the centre of gravity** of the machine, thus further increasing its stability.

The **cab is the largest** of this vehicle class, with its **huge glazed areas** affording **panoramic visibility** of the surrounding work zone, whilst both working and manoeuvring. Visibility is a key safety factor on site.

The **continuous longitudinal stability control system**, compliant with the **EN 15000** standards, automatically blocks any further aggravating movements when machine forward stability is less than that required for safe operation.

The **front hydraulic stabilizers** are **independently controlled**, and improve machine stability and safety in operation.

The hydraulically operated **frame levelling system** allows the chassis to be horizontally levelled, thus compensating for any lateral slope of the terrain and ensuring a truly vertical lift.

The Merlo-designed **suspension systems on either the boom or the front axle** ensure maximum comfort, and increase machine performance and safety.

The telescopic boom **extension mechanism** is **housed entirely within the boom** assembly, protecting it from site damage and ensuring maximum productivity.

Merlo-designed and built **"drop portal" axles** offer a greater ground clearance than many other types.

The exclusive **boom side-shift system** allows any load to be placed with maximum accuracy, without further movement of the machine.



# THE CAB

## ALL-ROUND VISIBILITY AND SAFETY



### **BEST-IN-CLASS ERGONOMIC DESIGN AND COMFORT**

The cab – the largest one in its class – is engineered to ensure safety, driving comfort, and visibility. The huge glazed area offers the operator excellent visibility in any direction. Both the windscreen and the rear window can be opened, and the steel frame of the cab complies with the international ISO 3449 FOPS Level 2 (Falling Object Protective Structure) standards and ISO 3471 ROPS (Roll-Over Protective Structures) standards.

Additional front- and rear-mounted lights, available as options, ensure excellent visibility even in poor lighting conditions. The cab is supported by special elastic mounts, designed to reduce vibration and increase the driver's comfort. For the same reasons, mechanical and hydraulic control assemblies are placed directly on the chassis, with all main services controlled electrically.





Depending on model and options chosen, the operation of the telescopic boom is controlled either with **hydraulic lever controls** (photo left) or with a **proportional electro-mechanical joystick** (photo below). A fully **electronic joystick** is available as an option on some models.



The **high/low travel speed range selector** (2-speed gearbox) is electrically controlled (photo below). A floor-mounted **Inching pedal** allows the operator to accurately control travel speed without changing the engine rpm. This is particularly useful when using buckets and loading attachments.



The **cab is easy to access**, with self-cleaning steps and a flat, obstacle-free floor. Both upper and lower **sections of the cab door open through a full 180°**.



A column-mounted **'Finger-Touch' electrical control lever** allows the driver to reverse driving direction without taking his hands off the steering wheel.





▲ The **steering column tilt** can be adjusted by up to 16 degrees, to match diverse driver shapes and sizes.

▶ The new **Merlo seat** can be moved through a wide adjustment range, and both seat cushion and back are equipped with supports for maximum comfort. A **pneumatic suspension seat** is available as an option.



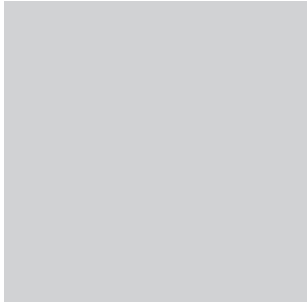
◀◀ The **instrument panel** displays the main operating parameters and includes a **longitudinal stability indicator "traffic light" and audible alarm**. The instrument panel of the 38ST series is shown in the photo left, whilst 40ST series is shown in the photo above.

▶ The convenient **right armrest** – integrated in the side dashboard – offers the operator a comfortable working position.

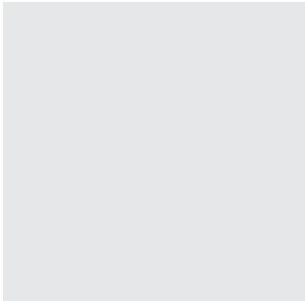




◀ Both the **windscreen and the rear window** can be **opened** to increase cab ventilation.



▶ An optional two-position **sun screen** ensures comfort, even in bright sunlight.



▲▼ The **rotating beacon folds down** to reduce overall height. The condenser assembly of the optional **air conditioning system** is housed in an external pod, so as not to increase the overall machine dimensions.



▲▶ **Storage compartments** of varying capacities are fitted throughout the cab module.



# THE TELESCOPIC BOOM

## ALWAYS UP TO THE JOB



### **STRENGTH AND EFFECTIVENESS WITHOUT COMPROMISE**

The telescopic boom is the core of every telehandler. It has to be robust and strong - so as to ensure a good load capacity and to be safely extended. But it must also be very rigid, even at its maximum extension, so as to prevent undue flexing and the 'banana boom' effect. Merlo engineers have successfully created a telescopic boom assembly that has become an industry trademark.

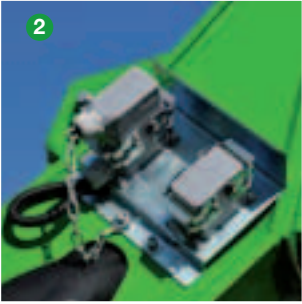
The boom sections are made of two U-shaped high-strength steel pressings, longitudinally welded to each other along or close to their neutral axis. The boom sections are moved simultaneously and progressively by a hydraulically powered extension mechanism, which is housed entirely within the boom, protecting it from site damage. The boom sections slide on special adjustable anti-friction pads, made of new-generation polymers, and exclusively selected by Merlo.

The **versatility** of Panoramic telehandlers can be further increased by an almost **endless list of Merlo attachments** and optional equipment, which can be interchanged on the fork carriage in only a few moments. The variety of applications is vast: from lifting materials, placing personnel safely, handling pallets, to earth-moving operations. A standard Panoramic feature is the **hydraulic locking Tac-Lock system (1)** - giving the

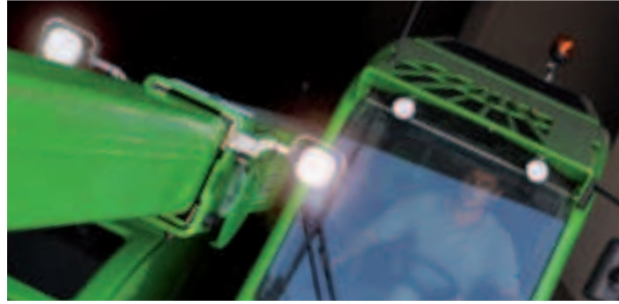
Merlo driver an extraordinary advantage against the conventional, manual hook-up system of many competitors. It takes but a few moments to connect an attachment to the fork carriage. **The hitching and locking operations are controlled directly from the cab**, while hydraulic quick-couplings make connection of the hydraulic supply simple and allow the machine to be immediately operational. An electrical connector is mounted on

the boom end (2) **for the selection of a variety of electrically controlled equipment**. A standard **double-acting hydraulic service with quick couplings** is fitted on the boom for the powering of hydraulic attachments. The **boom extension mechanism**, together with its **hydraulic and electrical components**, is fitted **completely within the boom sections**, ensuring maximum protection and reliability.

◀  
A convenient **pendulum inclinometer**, always visible to the operator, allows him to read the boom angle at any time, for comparison with the load chart.



▶  
**Additional working lights** can be optionally installed on both the cab and the boom by request, making work at night or in poor lighting conditions easier and safer.



**BSS (BOOM SUSPENSION SYSTEM) – THE SUSPENSION SYSTEM FOR THE TELESCOPIC BOOM**

**BSS (Boom Suspension System)** is an option available on certain models that uses simple and reliable technology to provide **effective damping** of shock loads transmitted to the payload and boom during handling and transport operations. The basis of the system is a **hydraulic circuit equipped with gas-pressure shock absorbers** that reduce the jolting of the telescopic boom during high-speed travel and while operating on uneven terrain. A control is available to the operator to either disable the suspension (for a conventional operation of the telescopic boom) or enable the automatic damping system.



# BOOM SIDE-SHIFT

## AN EXCLUSIVE TECHNOLOGY



### ACCURACY IS STANDARD

Machine stability and the ability to perform accurate, gentle placing with a load are fundamental requirements in achieving safe and productive operation of a telehandler. Even more so, as lift heights increase. All Panoramic telehandlers equipped with front stabilizers feature a brilliant boom side-shift system uniquely developed by Merlo. This system is superbly effective, as it allows the upper part of the chassis and the boom to move sideways, relative to the longitudinal axis of the machine.

The operator controls the resulting sideways movement of the load with great accuracy. As side-shifting is contained within the original design of the machine, it ensures maximum stability within load chart limits throughout the whole working arc, irrespective of how much the frame and the boom are shifted.

Other systems commonly used in the industry – such as a hydraulically operated fork side-shift system on the boom head – may compromise stability or reduce the available payload, as well as making the use of attachments very complicated.

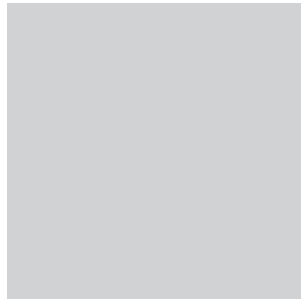
## PANORAMIC

## BOOM SIDE-SHIFT

With the **Merlo-patented boom side-shift system** the whole chassis – including the telescopic boom – can be shifted sideways in relation to the longitudinal axis of the machine via a control in the cab. This movement is made possible by the **unique method of attaching the front axle to the chassis**. In reality, the axle is the fulcrum upon which the side-shift movement is made. Movements made with this system

are **very accurate and time-saving**: the operator has no need to either carry out positioning manoeuvres or constantly shift the whole machine to obtain the required position. The amount of side-shift movement available depends on the Panoramic model, as well as on the boom extension being used, and can be as much as **870 millimetres** on the larger models! Using the side-shift system in no

way limits the lift performance of the machine; on the contrary, it ensures **full compliance with load charts, irrespective of how much the boom is shifted sideways**, extended, or raised. Combined with the frame levelling system and the stabilizers, the side-shift system allows the operator to obtain the best possible working configuration to ensure **greater stability and more efficient operation** of the telehandler.



## FRAME LEVELLING

The **frame levelling system is built into the chassis**. It is both effective and simple.

**Two hydraulic cylinders connect the chassis to the front axle** and allow levelling movements to be made.

Having a hydraulic cylinder on each side of the axle ensures that the tilt to both left and right are perfectly symmetrical. In addition to that, unlike other solutions commonly adopted in the industry, the system developed by Merlo **ensures a homogeneous force distribution** on the front axle, which is uniformly stressed along its whole structure. When the machine is on a terrain that slopes sideways, **the operator can control the side tilt of the frame, with an adjustment up to 10% to each side**.



# THE STABILIZERS

## SAFETY AND STABILITY EVEN ON UNEVEN GROUNDS



### **MAXIMUM STABILITY WITHIN THE MINIMUM SPACE!**

Two hydraulically operated stabilizers on the front axle ensure the necessary stability and allow the machine to be fully operational even on uneven or sloping surfaces.

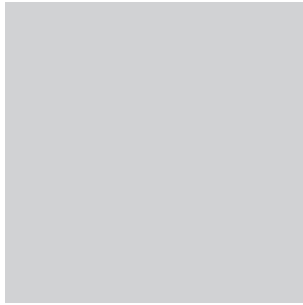
The operator can place the stabilizers independently upon the ground and use them to level the chassis, compensating for any transverse slope for maximum stability. Frame levelling can be used in addition to the stabilizers. The stabilizers are controlled by two independent levers, which ensure maximum flexibility for positioning. In their stowed position, the stabilizers of Panoramic telehandlers are within the machine periphery and extend only 200mm further when deployed.

This is an essential competitive advantage when working in confined spaces, where there is no extra room to extend the stabilizers greatly beyond machine size. This concept means that stabilisers can be used, to maximise stability and safety, in practically all situations!

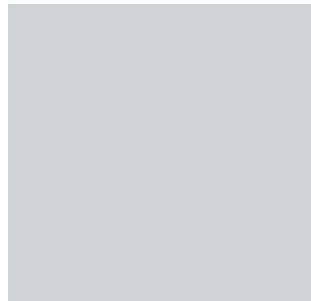




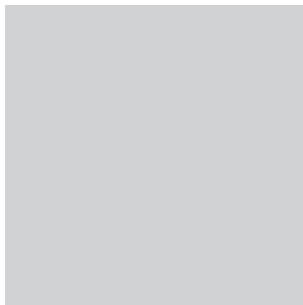
Merlo engineers installed **stabilizers directly upon the front axle** instead of on the frame, because this solution offers **greater versatility while positioning the machine** and, most of all, ensures better compensation of any transverse slope.



The stabilizers are controlled by **two independent levers**, which ensure maximum flexibility in their positioning.



The **correction** available from the frame levelling system can be combined with the effects of the stabilizers, so as to **keep the frame in a horizontal position** even with a **transverse slope of 24%**.



Whether operating with or without stabilizers, **your Merlo always remains very compact in width**, and allows you to work even in the narrowest spaces.



# SIDE-MOUNTED ENGINE

## TOTAL ACCESSIBILITY



### PERFORMANCE AT THE HIGHEST LEVEL

Most Panoramic telehandlers utilise a four-cylinder turbo diesel engine, compliant with Tier 3 emission standards, with power outputs up to 74.9 kW (102 HP). These provide ample power and available torque throughout their operating range.

Prompt response to a power demand is crucial for these machines, which need power in the most diverse of conditions. The engine is mounted low down on the right-hand side of the chassis for greater accessibility and safer servicing, as technicians can work with their feet resting firmly on the ground, with all mechanical and hydraulic assemblies close at hand.

Merlo was the first telehandler company to adopt this layout, which has since become the industry norm.

The transmission is hydrostatic and utilises variable displacement pump and motor, ensuring high performance and a wide control range at full power. The maximum travel speed is as high as 40 kph on some models.



The **high-performance engine** and **hydrostatic transmission** ensure great driving performance and safety even on slopes.

**Permanent four-wheel drive** ensures mobility on all terrain.



**THE HYDRAULIC SYSTEM**

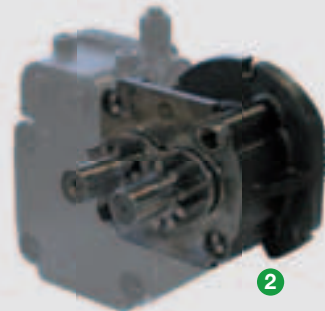
**LOAD SENSING PUMP**

High-performance models are equipped with a **hydraulic axial-piston pump featuring a Load-Sensing controller** (1). Hydraulic oil flow automatically varies depending on the demand from the various hydraulic circuits. This system is highly

efficient in continuous heavy-duty operation, as it ensures **power availability and a rapid response to controls** whenever necessary. Hydraulic oil flow always matches only that demanded through the joystick, **reducing fuel consumption and increasing component durability.**

**GEAR PUMP**

Panoramic 39ST series models utilise a **hydraulic gear pump** (2). In this case hydraulic oil delivery varies depending on the engine rpm, and is directly controlled with the accelerator pedal.

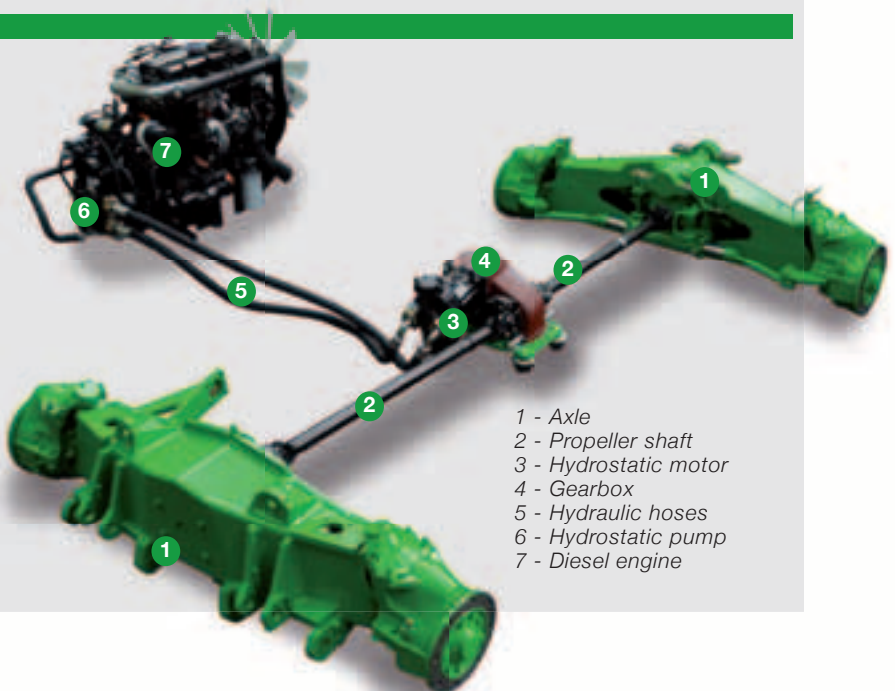


**THE HYDROSTATIC TRANSMISSION**

The **hydrostatic transmission**, with its own completely **independent hydraulic circuit**, has a high dynamic braking effect, so that the **use of brakes can be minimised.**

Hydraulic oil, pressured by a variable displacement pump, is sent to the hydrostatic motor through hoses, where it is turned into mechanical power. The hydrostatic motor drives an electrically selected **mechanical two-speed gearbox**. This power is then transferred to the axles through two propeller shafts. The travel speed is controlled simply by the pressure applied to the accelerator pedal, without the necessity to change gears as in conventional mechanical transmissions.

The hydrostatic transmission is combined with a permanent four-wheel drive, ensuring **optimum mobility and road holding** even in difficult conditions.



- 1 - Axle
- 2 - Propeller shaft
- 3 - Hydrostatic motor
- 4 - Gearbox
- 5 - Hydraulic hoses
- 6 - Hydrostatic pump
- 7 - Diesel engine

# DROP PORTAL AXLES

## PERFORMANCE FOR ANY TERRAIN



### **NO ROUTE IS IMPOSSIBLE**

The drop portal axles, designed and manufactured in-house by Merlo, are designed for heavy-duty applications, and permanent four-wheel drive allows the machine to move easily - even in the most treacherous situations.

The concept places the main axle body above the centreline of the wheel hub. Compared with traditional axle design, it provides a greater ground clearance with equal-sized tyres, with the plus of a low centre of gravity.

The rear axle is freely oscillating, adapting to unevenness even in extreme off-road conditions and ensuring maximum tyre grip even on steep slopes by reducing wheel spin.

If necessary, an optional fully-locking rear differential is available, either on the rear axle only or on both axles.

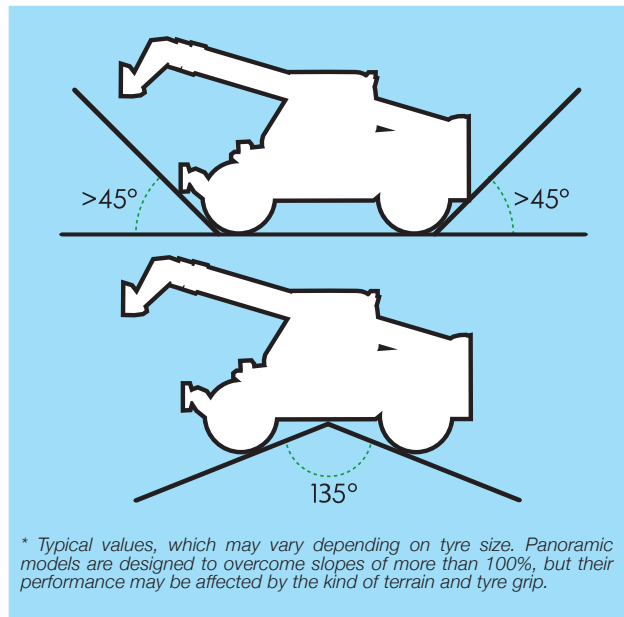


▲

The **drop portal axles**, with crown and pinion hub reduction, provide exceptional ground clearance. The Merlo **drive train layout** reduces both noise and pitch during braking and acceleration, improving driving comfort and load retention.

▶

Off-road performance is particularly impressive for its class, due to the **high angles of attack and departure**.



◀

**Axle oscillation** enhances off-road performance of the machine.

ALL-WHEEL BRAKING

**Servo-assisted hydraulic service disk brakes, with floating callipers**, are fitted to each hub. A dual-circuit hydraulic layout is utilised to guarantee maximum safety. An **independent, spring-operated disk** parking brake acts upon the main transmission propeller shaft. The **parking brake** is applied automatically when the engine is switched off.

EAS – ELECTRONIC ACTIVE SUSPENSION, ANOTHER INNOVATION EXCLUSIVE TO MERLO

Front axle hydro-pneumatic suspension (**EAS, Electronic Active Suspension**) is available as an option on top Panoramic models, ensuring the best suspension performance and comfort during continuous operation on uneven terrain. This front axle suspension perfectly combines **hydraulics and electronics, ensuring effective damping** and effective control of its performance. The suspension stroke is controlled **automatically and continuously** depending on the terrain. The self-adjusting system ensures effective damping irrespective of the load, terrain and driving speed, without requiring any intervention by the driver. When the vehicle drives over an obstacle, this **active suspension** returns the hydraulic energy it absorbed, thus ensuring the best possible damping. Suspension levelling **depends on driving speed and transported load**; this

ensures the best possible exploitation of the telehandler's performance, while

offering the **operator unrivalled comfort and safety**.



THREE STEERING MODES AND AUTOMATIC WHEEL RE-SYNCHRONISATION

The four drive wheels are all steered using a hydraulic power steering system. The operator has a choice of three steering modes:

- **Front wheel steer (A)**.
- **All wheel steer** to achieve the smallest turning radius (B).
- **Crab steer** to move the machine sideways without losing longitudinal alignment (C).



# MERLO ATTACHMENTS

## UNLEASHING THE POWER OF VERSATILITY



### **MANY MACHINES IN ONE**

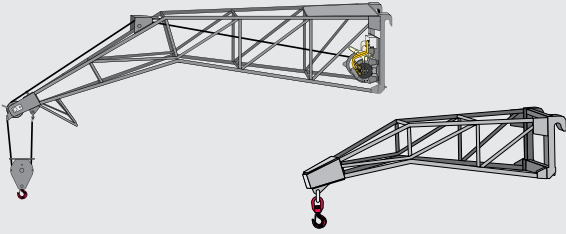
Merlo attachments are a great concept that further enlarge the tremendous versatility of Panoramic telehandlers. For all models there are countless technologically advanced working tools that maximise their potential, enhance their versatility, and optimise their use in any sector.

The excellent performance and characteristics of Merlo attachments are the result of integrating their engineering with the base machine design, as well as of an exclusive manufacturing process.

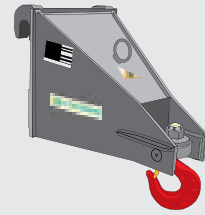
When equipped with Merlo attachments, Panoramic telehandlers offer efficiency, profitability, and significant cost savings. It takes just a few moments to connect any Merlo attachment to the fork carriage, and to meet alternate lifting, transport, loading/unloading and precision handling needs promptly and effectively.

Merlo multifunctional systems are always ready to get to work in countless different applications, and to offer their best in terms of versatility, quality, profitability and, most of all, safety.

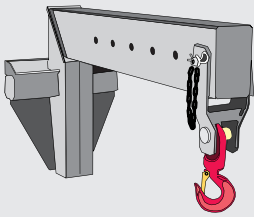
FLY JIB WITH OR WITHOUT WINCH



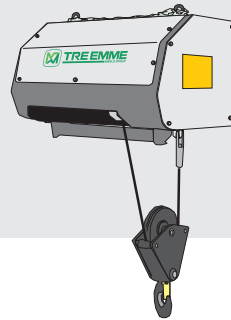
HOOK ON CARRIAGE



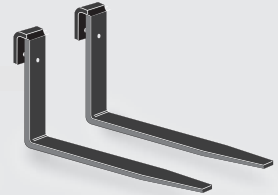
CRANE ARM



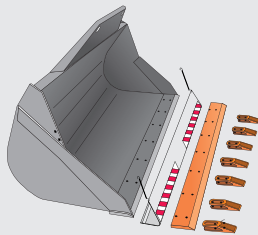
WINCH



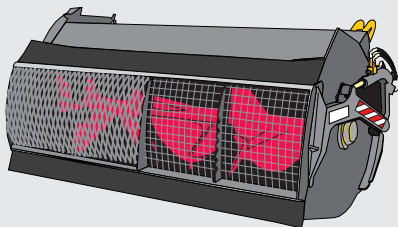
FORKS



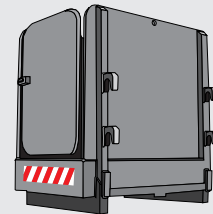
EXCAVATING BUCKET



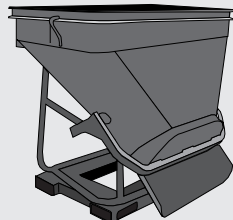
CONCRETE MIXING BUCKET



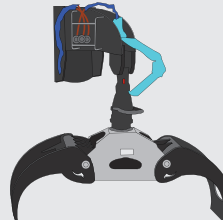
BRICK HANDLER



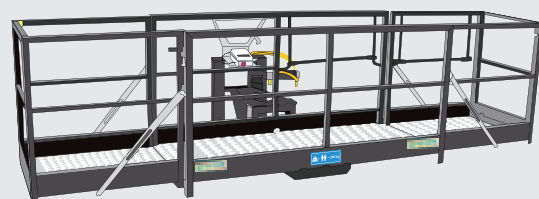
CONCRETE SKIP



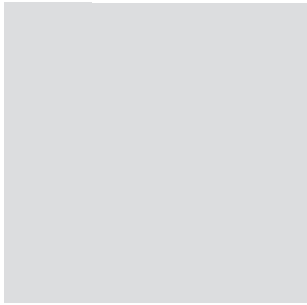
ROTATING GRAB



VARIABLE WIDTH SLEWING PLATFORM



# THE MERLO WORLD ANOTHER PLANET!



## INTERNET

Let the Merlo world enthuse you on the Internet. Visit [www.merlo.com](http://www.merlo.com).

## MERLO SERVICE

Nobody knows the needs and expectations of telehandler users better than we do, and our customers are aware of that. They know they can rely on **highly skilled service technicians** wherever there is a Merlo machine in operation.

## A GLOBAL PRESENCE

Over **600 sales and service partners** in the world bring you those values that can only be ensured by experience and innovative technologies. Choosing Merlo means finding out every day the advantages offered by cutting-edge technologies.



## MERLO FINANCE

A **range of customised financial products**, with competitive economic conditions, administrative efficiency and procedural simplicity. All complemented by value-added services, such as customised insurance and contract documentation.

## DOOR ALWAYS OPEN

You can have **guided tours** in our plants and get to know our manufacturing and commercial organisation. You will find out that what we have is an integrated, full-cycle manufacturing process, not a mere assembly of components.



**MERLO PROJECT**

A breeding ground for ideas and the beating heart of advanced research. **This is where today's concepts and plans turn into tomorrow's technologies**, as well as into strong machines that are impressive when they are standing still and truly amazing when in operation.



**SAFETY FIRST**

Dynamic **crash tests**, **falling object protection** and **structural strength tests** expose all machine systems to stress factors. A Panoramic telehandler must pass all these tests and many others before being manufactured in mass production and be delivered to sites all over the world.

**CFRM - MERLO TRAINING AND RESEARCH CENTRE**

The best technical skills and the most effective educational tools - certified by **INAIL (Italian National Institute for Insurance against Accidents at Work)** - are available to learn safe machine operation, irrespective of its kind, make or model. Visit [www.cfrm.it](http://www.cfrm.it).



ISTITUTO NAZIONALE PER L'ASSICURAZIONE  
CONTRO GLI INFORTUNI SUL LAVORO  
DIPARTIMENTO TECNOLOGIE DI SICUREZZA - EX IPSES



**MERLO NEWS**

This magazine, **rich in technical information and interesting articles**, is aimed at all those who work with telehandlers and lifting machines/equipment. Register on [www.merlo.com](http://www.merlo.com) to receive it for free.

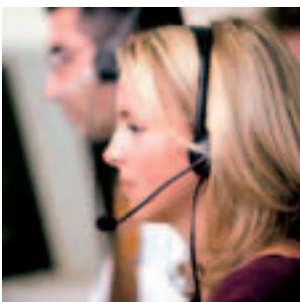
**ISO 9001:2008**

Through the application of strict management procedures to each business process, our **Quality Assurance System** ensures those results that have allowed us to gain the trust of thousands of customers all over the world.



**TECHNOLOGICAL RECORD**

Our **modern manufacturing facilities** are the best available in the industry today: laser cutting centres, electrostatic powder coating, robotised processes, modern automated working centres. All of this allow us to set **a technological record**, without parallel.



**MERLOMOBILITY**

It's your personal assistant, meeting all your **infomobility** needs and allowing you to manage all your vehicles and machines in real time, **24/7 all year round**. It's your telecommunications partner for diagnostics, logistics and operational planning.

# TECHNICAL DATA

## LET FIGURES SPEAK FOR THEMSELVES

CHARACTERISTICS AND PERFORMANCE	P 39.10	P 38.12	P 38.13	P 38.14	P 40.16	P 40.17
Base Model	Base	Base	Base	Base	Base	Base
Plus Model		Plus	Plus	Plus		
Total weight unladen, with forks (kg)	8350	8550	8650	9050	10250	10350
Maximum load capacity (kg)	3900	3800	3800	3800	4000	4000
Lift height (m)	10.3	11.6	12.6	13.6	15.6	16.7
Maximum forward reach (m)	6.9	7.6	8.6	9.1	11.4	12.5
Lift height at maximum load capacity (m)	8.1	9.2	11	8	7	8.1
Forward reach at maximum load capacity (m)	1.3	2.6	3	3.3	3.7	4
Load capacity at maximum height (kg)	3000	3500	3500	2500	2000	2500
Load capacity at maximum forward reach (kg)	1000	1000	800	900	600	500
Boom side-shift (mm)	±265	±330	±340	±345	±410	±435
Frame levelling (%)	±10	±10	±10	±10	±10	±10
Turbo diesel engine (make/cylinder)	Deutz/4	Perkins/4	Perkins/4	Perkins/4	Perkins/4	Perkins/4
Tier 3 engine power (kW/HP)	74.9/102	74.5/101 <sup>(1)</sup>	74.5/101 <sup>(1)</sup>	74.5/101 <sup>(1)</sup>	74.5/101	74.5/101
Speed in 1st gear range (kph)	7	14 <sup>(1)</sup>	14 <sup>(1)</sup>	14 <sup>(1)</sup>	16	16
Speed in 2nd gear range (kph)	25	40 <sup>(1)</sup>	40 <sup>(1)</sup>	40 <sup>(1)</sup>	40	40
Hydro-pneumatic suspension EAS <sup>(2)</sup>	○	○	○	○	○	○
Hydro-pneumatic suspension BSS <sup>(2)</sup>	○	○	○	-	-	-
Fuel capacity (l)	150	150	150	150	150	150
Hydraulic gear pump (bar-l/min)	210-102	-	-	-	-	-
Load-Sensing hydraulic pump (bar-l/min)	-	210-108	210-108	210-108	210-115	210-115
Hydraulic oil capacity (l)	105	105	105	105	140	140
Electrical circuit (V)	12	12	12	12	12	12
Battery (Ah)	100	100	100	100	100	100
FOPS (ISO 3449) and ROPS (ISO 3471) cab	●	●	●	●	●	●
Hydraulic lever controls	-	●	●	●	●	●
Electro-mechanical joystick controls	●	○	○	○	○	○
Electronic joystick controls	-	○	○	○	○	○
Tac-Lock attachment coupling	●	●	●	●	●	●
Auxiliary boom hydraulic service	●	●	●	●	●	●
Hydrostatic transmission	●	●	●	●	●	●
Finger-Touch direction reversing control	●	●	●	●	●	●
Inching Control	●	●	●	●	●	●
Permanent four-wheel drive	●	●	●	●	●	●
Automatically locking parking brake	●	●	●	●	●	●
Manual battery isolator	●	●	●	●	●	●
Tyres	405/70-24	405/70-20	405/70-20	405/70-20	405/70-24	405/70-24
Four cab working lights (2 f. + 2 r.)	○	○	○	○	○	○
Differential lock (front + rear or rear only)	○	○	○	○	○	○
Manual air conditioning system	○	○	○	○	○	○

(1) Plus version only. The basic model has a speed of 7-25 kph and an engine of 62.5 kW (85 HP); (2) BSS and EAS suspension can not be fitted together. ● Standard. ○ Option.

The Panoramic telehandlers shown in this document may feature optional or special equipment, which is not part of the standard equipment and is supplied upon request. Not all models or versions are available in all countries, due to regulatory restrictions. For further information on models and their equipment please contact your local Merlo dealer. Information and technical data are those available at the time of printing. Merlo reserves the right to modify and update the contents of this document without notice following technological evolution. Your Merlo dealer will keep you posted on our products and services.





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