

PANORAMIC 5509 - LUK



The supremacy of ideas.

PANORAMIC

P 55.9 CS





- Hydropneumatic cab suspension
- Axles with epicycloidal reduction gears
- 140HP engine

EXCEEDING EXPECTATIONS



The cutting edge of technology

The new PANORAMIC P 55.9 CS telescopic handler demonstrates Merlo's supremacy in innovation and technology.

The unequalled performance, the common-rail injection aftercooled turbocharged Deutz engine, rated at 140HP complying to Euro 3 standard, the lift capacity, the unbeatable manoeuvrability and, above all, the revolutionary cab suspension

system underline the safety and the comfort for the operator.

The innovative technological contents demonstrate the commitment to the design of high-tech machinery, the result of ongoing research and development, and the experience acquired during forty years of leading the handler market!

THE COMPETITIVE ADVANTAGES

Power where it is needed

A double acting hydraulic distributor with quick couplings is a standard fitting for hydraulic service feed at the boom end.

Outstanding versatility

The front tool-holder carriage complete with hydraulic attachment locking ensures fast attachment changes controlled directly from the cab.

Total protection

The telescopic boom extension components are located inside the boom to guarantee maximum protection and reliability.

High performance in the toughest applications

The new design of the tool-holder carriage heighten the excavating force.

Hydropneumatic cab suspension

A high profile technical choice ensures the best operator comfort and most efficient load carrying.

Frame levelling

Hydraulically operated, allowing the machine and boom to be levelled for safer lifting on uneven ground.

True rear visibility

An outstanding visibility thanks to the reduced pivot point height.

Excellent ground clearance

The Merlo axles with epicycloidal reduction gears were conceived exclusively for use on Merlo telescopic handlers.

Joystick control

The proportional controls allow to activate the movements of the boom and of the auxiliary services.

Energy savings

Thanks to the Load-Sensing variable displacement pump hydraulic system.

Side-mounted engine

The 4-cylinder turbo engine, complying to Euro 3 standard, ensures excellent power ratings and high performance.



The front and rear windows and upper door section can be opened for 'natural' ventilation.



The periphery of the PANORAMIC is protected against impact damage by a solid 'Ring of Steel', which is an integral part of the chassis.



The new design of the front tool-holder carriage ensures better performance in all those applications in which the tear-out force is fundamental.



The PANORAMIC P 55.9 CS handler offers a load capacity up to 5500kg and a lifting height of 8,6 meters. Its exclusive features ensure maximum performance and ease of operation in even the toughest of applications.

Outstanding safety

The longitudinal stability control mechanism locks the telescopic boom movement if the machine's stability limits are approached.

Convenient operator controls and clear instrument panel

All controls are accessible and convenient to operate. The comprehensive instrument panel can be read in all lighting conditions.

Total visibility

From the operator's position, working area visibility is always excellent.

Maximum comfort

The operator has the advantage of the widest handler cab currently available on the market together with the hydropneumatic cab suspension.

Great manoeuvrability

The unique compactness of the machine is the result of the integrated design of all its components. Making it truly top-of-the-range in terms of handling ease and operating accuracy, with the added advantage of a truly dynamic engine.

Maximum accessibility

The location of the engine, of the transmission and of the hydraulic systems make extremely easy the maintenance and assistance. The service technicians can work in total safety with their feet firmly on the ground.

Plastic fuel tank

The fuel tank is formed from plastic, which is more resistant to damage than metal, and easier to service.

Standard battery isolator

A manual battery isolator switch is standard. As an option, an automatic type is available.



The PANORAMIC P 55.9 CS offers much more

- The largest cab currently available on the handler market
- Common-rail 4 cylinder turbo aftercooled engine rated at 103kW (140HP)
 - Hydropneumatic cab suspension system
 - Incomparable visibility
 - Frame levelling device
- Electronically controlled hydrostatic transmission
 - 2-speed mechanical gearbox
- Permanent four wheel drive and three steer modes
 - Maximum travel speed 40kph (where permitted)



Lifting

Digging

Handling



THE WINNING CHOICES



Hydropneumatic Cab Suspension - A new standard to beat

The cab, of modern design, has been conceived to ensure the highest levels of safety and comfort, the ultimate in high-tech ergonomic design. The structure complies with ISO 3449 (FOPS) and ISO 3471 (ROPS) directives, both the driving wheel and the seat are adjustable to suit individual driving needs, whilst the road driving controls are designed so that they can be used without removing hands from the wheel.

The whole arrangement complies with the latest concepts in driver ergonomics and functionality. The interior dimensions are one of the most spacious on the market.

Sun blinds on the overhead window and the upper part of the windscreen and the manually-controlled air conditioning system are available as an option.

- ❶ Main instrument panel
- ❷ Finger-Touch forward/reverse direction lever
- ❸ Multi-purpose joystick
- ❹ Gear selector
- ❺ Lighting control
- ❻ Storage compartments

The option air conditioning system ensures a very agreeable environment for the operator.



The joystick provides proportional control of all functions for easy and precise use.



Fully adjustable forwards and backwards, the new Merlo seat also features seat back and seat angle adjustment to comfortably accommodate any driver.



The ultimate in handler cab comfort

- 995mm interior working width
- 360° all-round visibility
- Structure complies with ISO 3449 (FOPS) and ISO 3471 (ROPS) standards
- Thinner window sealing to increase the practical glass area
- Ergonomic controls with intuitive actions
- Electronic multi-purpose joystick for all boom controls

Optimum comfort

The hydropneumatic CS - Cab Suspension provides the most effective reduction of the shocks produced by the unevenness of the ground.

Easy access

Cab access is by means of a fully-opening and is further facilitated by self-cleaning steps. The floor is flat and obstacle-free.

Everything to hand

Inside the cab are a number of boxes and shelves for personal storage. When fitted, the radio is housed in a secure compartment, out of sight.

Sound-reduction

An exceptional degree of cab sound-proofing results from detailed studies in active and passive sound-reduction engineering.



Side-mounted engine

4-cylinder, Euro 3, Deutz common-rail turbo aftercooled engine. Water-cooled, it develops 103 kW (140HP) at 2400rpm.

Not surprisingly, with the high level of power and torque available, the speed and the performance have to be experienced to be believed!

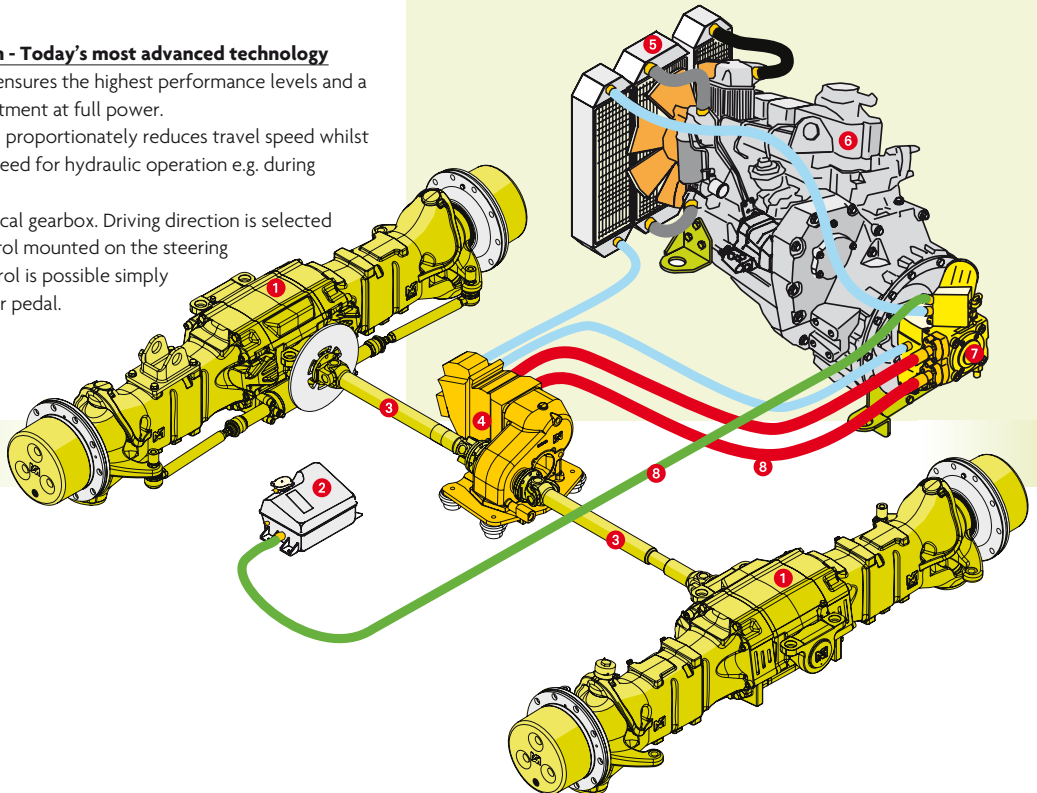
The engine is mounted to the right side of the chassis, ensuring safe, easy access and maintenance from ground level.

Hydrostatic transmission - Today's most advanced technology

This type of transmission ensures the highest performance levels and a wide range of speed adjustment at full power.

The Inching-Control pedal proportionately reduces travel speed whilst maintaining high engine speed for hydraulic operation e.g. during loading operations.

Two speed range mechanical gearbox. Driving direction is selected via the Finger-Touch control mounted on the steering column, while speed control is possible simply by pressing the accelerator pedal.



- 1 Axle
- 2 Hydrostatic oil tank
- 3 Propshaft
- 4 Hydrostatic pump
- 5 Heat exchanger
- 6 Diesel engine
- 7 Hydraulic pump
- 8 Pipes

THE STRENGTH OF TECHNOLOGY



Hydropneumatic CS - Cab Suspension - system

It provides efficient reduction in dynamic stress upon the vehicle independent of the payload carried and without operator involvement. Merlo suspension systems add greatly to driver comfort and can significantly reduce whole body vibration levels, increase dynamic stability improve roading performance, speed and productivity.

Ongoing innovation

Merlo is the first manufacturer to propose the hydropneumatic cab suspension on telehandlers. The comfort reaches the maximum levels thanks to the innovative CS - Cab Suspension - system which reduces the stress and the vibrations sent by the ground. The perfect integration of the hydraulic and pneumatic devices enhance the performances of the machine even in the toughest environments. Recycling, agriculture and cereals handling and earthmoving are the toughest testing grounds. The suspension is activated by a simple device in the cab and can be switched on or off according to the working needs, even while the machine is moving.

CS system - Exclusive to Merlo



Frame levelling

Acting hydraulically upon the front axle, frame levelling allows the chassis to be tilted relative to the front axle, ensuring truly vertical lift on uneven surfaces.

PANORAMIC

Frame levelling

P 55.9 CS

±16%



The new axles with epicycloidal reduction gears have been fully designed and manufactured in Merlo.



Total safety

The longitudinal stability control system includes a key-operated function that activates an automatic lockout if the movements of the boom approach preset stability limits. The operator is also notified with audible and visual warning signals.

The hydraulic system

The hydraulic system has a single variable displacement piston pump with Load-Sensing control. This system permits the regulation of the hydraulic oil flow to immediately adapt it to the demands at any given time. The oil flow is always equal to the request made by the control joystick stroke so that power wastage is reduced to a minimum. The advantages being reduced power consumption and longer component life.

The maximum operating capacity is 150 lpm and the working pressure is 225 bar.

The telescopic boom

The sections comprising the telescopic boom are constructed of U-shaped steel fabrications welded together longitudinally close to their neutral axis.

The hydraulic extension mechanism, hydraulic hoses and electrical cables are totally enclosed within the boom for maximum protection against damage.

Four wheel braking

Transmission braking is immediately available, simply by releasing the accelerator pedal. In addition, four large hydraulic service disc brakes are located on the exit shafts of the differential, inside the axle casings.

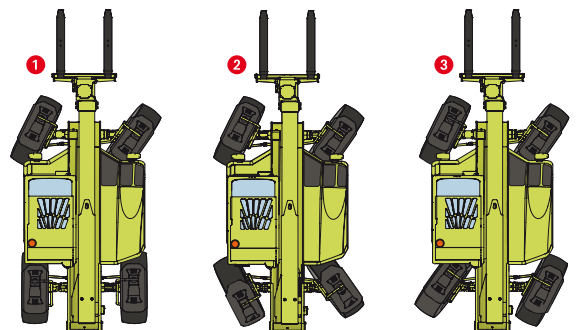
The braking system has two independent hydraulic circuits for safety and ease of operation.

An independent disc parking brake is located on the main transmission shaft. It is a spring operated automatic locking type which is hydraulically unlocked on subsequent start-up. The operator is also free to engage the park brake as required.

Three steering modes

The four drive wheels are all steered using a hydraulic servo-assisted system. The operator has a choice of three steering modes, as well as automatic wheel re-synchronisation in the event of misalignment.

- 1 Front wheel steer (for road use).
- 2 All wheel steer (for best manoeuvrability).
- 3 Crab steer (for sideways motion without losing the longitudinal alignment).



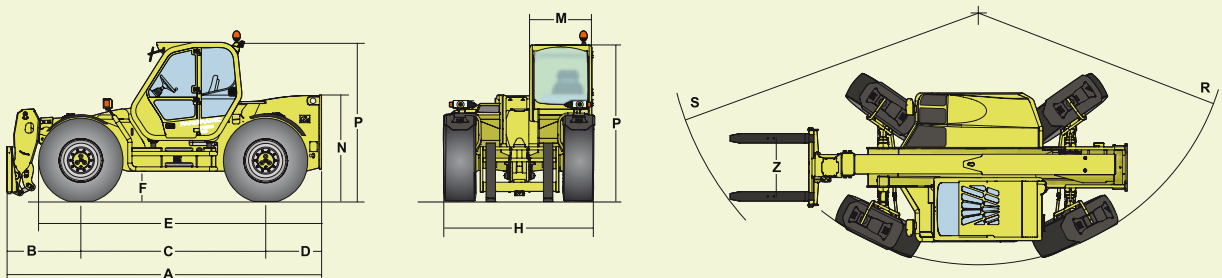
PERFORMANCE AND DIMENSIONS



PANORAMIC		P 55.9 CS
Weight		
Total empty weight (with forks)	kg	10320
Performance		
Rated maximum load	kg	5500
Maximum lift height	m	8.6
Maximum forward reach	m	4.6
Lift height at full capacity	m	8.6
Reach at full capacity	m	1.4
Capacity at full lift height	kg	5500
Capacity at full forward reach	kg	2000
Low emission (Euro 3) engine		turbo aftercooler
Power at 2400 rpm (97/68/CE)	kW/HP	103/140
Speed ratios		
1 st gear	kph	11
2 nd gear (self-limiting maximum speed)	kph	40

PANORAMIC		P 55.9 CS
Dimensions		
A	mm	5100
B	mm	1190
C	mm	3000
D	mm	910
E	mm	4610
F	mm	450
H	mm	2400
M	mm	995 ⁽¹⁾
N	mm	1685
P	mm	2485
R	mm	3820
S	mm	4850
Z	mm	850

⁽¹⁾ Internal useful width
⁽²⁾ ±55 mm. Suspension mid stroke



Cab with hydropneumatic suspension

- Complies with ISO 3449 (FOPS) and ISO 3471 (ROPS) standards.
- Hydropneumatic suspension system.
- Electro-proportional joystick control.

Boom

- Telescopic sliding on adjustable anti-friction pads.
- Hydraulic extension system mounted internally inside the boom for maximum reliability and protection.

Tool-carrier carriage

- Hydraulic quick coupling/detachment device directly controlled from the cab.
- New design for a higher tear-out force.
- Standard double acting hydraulic service at boom head for hydraulic attachment operation.

Frame levelling

- Hydraulically operated from the cab.
- Frame levelling: $\pm 16\%$.

Forks

- Floating type. Length 1200mm. Section 150 x 60mm.
- Fork spacing is manually adjustable between 450 and 1010mm.

Steering

- Four drive/steer wheels, with automatic wheel synchronisation in the event of any misalignment and selection of three steering modes from the cab.

Engine

- 4 cylinder Deutz common-rail turbo aftercooled Euro 3 diesel engine. Water-cooled, rated at 103kW (140HP) at 2400rpm (97/68/CE).

Transmission

- Hydrostatic with electronically controlled variable displacement pump.
- Continuous and automatic speed variation, from zero to maximum speed, solely with the accelerator pedal.
- Two-speed mechanical range gearbox.
- Inching-Control pedal to proportionately reduce travel speed whilst maintaining high engine speed for hydraulic operation.

- Finger-Touch system makes it possible to change between forward and reverse direction with the driver keeping both hands firmly on the steering wheel.
- Permanent four-wheel drive.
- Axles with epicycloidal reduction gears.

Braking system

- Disc service brakes on all 4 wheels, hydraulically operated and acting on the differential output shafts.
- Disc parking brake with automatic locking feature and hydraulic release control, acting on the main transmission shaft.

Hydraulic system

- Variable delivery Load-Sensing pump.
- Maximum operating capacity: 150lpm.
- Working pressure: 225bar.

Electrics

- 12V system with 100Ah battery and 90A alternator.
- Full road lighting and rotating beacon.
- Manual battery isolator switch (optional automatic switch).

Capacities

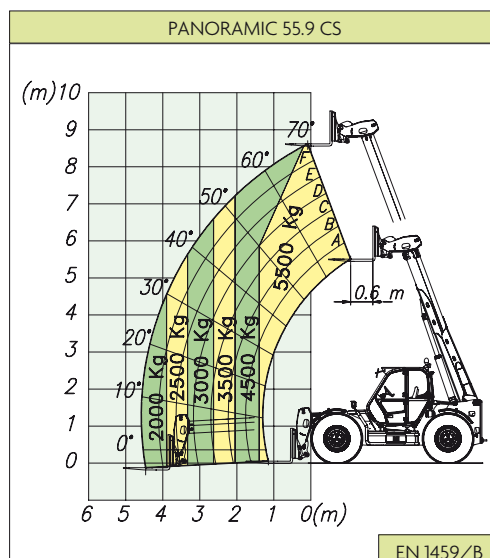
- Hydraulic system: 110l
- Fuel tank: 150l
- Hydrostatic oil: 12l
- Engine oil: 8,5l
- Engine cooling: 12l

Tyres

- 17.5-25EM20 (optional 500/70-24).

Available options

- Rear axle differential lock.
- Automatic battery isolator.
- Manual control air conditioning.
- Windscreen wiper on the roof window.
- Four working lights on the cab (two front lights and two rear).
- Pneumatic seat.
- Roof and front window mounted sun blinds.





Help is always nearby

Day after day, choosing a Merlo product brings the advantages of the most advanced technology and the practicality of safe and comfortable equipment, of which the very best can be expected.

Merlo Service ensures a close and continuing bond with the customer, provided by a worldwide network of more than 500 Service Centres guaranteeing experienced and trained technical assistance close at hand.

Building professionalism

Evidently, carelessness and a lack of respect for the basic principles of safety are often the causes of accidents with lifting equipment, often through the lack of an adequate training scheme. The close link between training and safety is a part of everyone's experience and must be continually updated as part of our professional development, a role for which the new Merlo Research and Training Centre is admirably suited.

MERLO has a policy of continual product research and development and specifications are subject to change without notice. Models illustrated may include attachments and options that are not standard.



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