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Merlo is an important family-run industrial group founded in Cuneo in 1964 that designs, produces and markets its own products under the “Merlo” and “Treemme” brands.

People and the territory are at the center of the project; the Merlo Group is committed to respecting the environment and 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.

The product portfolio consists of a complete range of telescopic handlers, both fixed and rotating, DBM self-loading concrete mixers, Treemme municipal and forestry tool carriers and Cingo multi-purpose tracked transporters.

All products in the Merlo range are characterized by innovation, technology and reliability, which have always been distinctive features of the Group and have gained market confidence.
Merlo has always offered telescopic handlers able to meet every customer’s need. The compact telescopic handlers range has been designed bearing this in mind: small-size lifts, with high-profile performance in the total comfort of the largest cab in its category.
Merlo Compact telescopic handlers are recognized worldwide as the all-purpose par excellence, offering models that can be used both in agriculture - farming, haymaking, fruit growing and forestry - and in construction and industrial sectors, without neglecting more specific contexts such as recycling, municipalities and mines.

The compact telescopic handlers range is made up of three models that differ in terms of equipment and dimensions.

The P27.6 is the reference model in the compact segment: with a width of 6 feet and a height of 6.4 (ft.in.) this telescopic handler offers unparalleled maneuverability and accessibility, lifting up to 5952 lbs. and reaching lifting heights of 19.4 (ft.in.).

The TF30.9 won the “Machine of the Year 2015” award at the SIMA exhibition in Paris. This model represents the ideal compromise between performance and size; the lifting capacity increases up to 7275 lbs. with lifting height up to 28.3 (ft.in.) while maintaining reduced overall dimensions thanks to a targeted engineering study.

**POWERTRAIN:**
Hydrostatic transmission with permanent four-wheel drive, 75 and 115 HP engines and maximum speed of 25 mph on all models. Exclusive position of the side and longitudinal engine.

**TELESCOPIC BOOM:**
Heights of 19-29 ft. with load-bearing capacities from 5952-7275 lbs. Exclusive design that ensures lightness, precision and sturdiness. Unified implement- holder carriage equipped with hydraulic Tac-lock locking system, controllable from the cab.

**HYDRAULIC SYSTEM:**
Downsized hydraulic system to minimize maneuvering times. Hydraulic pump with fixed displacement - gears - or variable - Load sensing and Flow Sharing distributor - according to the machine equipment.

**USER INTERFACE:**
Cab display to view all operating parameters. Single-lever ergonomic joystick for hydraulic controls and reverse shuttle for changing travel direction.

**CAB:**
Level II FOPS and ROPS certified, designed to maintain the maximum level of ergonomics and ensure high protection for the operator. The 3.3 (ft.in.) width and the wide glass surface ensure unparalleled comfort and full visibility.

**STEERING WHEEL:**
Four-wheel steering and three types of steering. The steering range is minimized in order to maximize machine maneuverability.
SAFETY

The Merlo cab is certified according to standards ISO 3449 FOPS Level 2 and ISO 3471 ROPS, to ensure top-range safety levels for the operator. The FOPS protection grille is outside the glass roof to improve roominess and safeguard the integrity of the structure and windscreen. All models of the compact telescopic handlers range are equipped with built-in Merlo safety system that monitors and manages safety-related parameters in real time, allowing the operator to work in complete peace of mind. The models equipped with hydraulic system with Load Sensing variable displacement feature the exclusive ASCS (Adaptive Stability Control System) safety system. Together with the built-in safety system, the ASCS is able to recognize the attachment being used and to measure the handled load in order to maximize the speed of the hydraulic movements without any risk for the operator’s safety. Machine safety is enhanced by an automatic management of the parking brake that brakes the machine if the engine switches off, so as to avoid unintentional movements. Moreover, to ensure the maximum protection of operator and mechanical parts in case of impacts and accidents, an exclusive steel belt made of a metal section bar with 55 mm diameter is positioned outside the frame.

The Merlo designers have devised a sturdy, compact and lightweight telescopic boom, today a benchmark for design, load capacity and speed when carrying out work. The steel is of the high-resistance type and the welds are along the neutral bending axis, offering a rectilinear boom in any extension or loading condition. By inserting the hydraulic hoses inside the boom, the external shape is clean and free of grips that cause possible damage. These features preserve the components and extend the life of the boom.
To ensure maximum precision in movement and high torque to the wheels, the telescopic handlers in the compact range are equipped with the latest generation hydrostatic transmission characterized by permanent four-wheel drive. This solution also makes it possible to ensure extreme precision in movement with millimetric management of machine movements and load positioning while maintaining an excellent braking capacity upon the release of the accelerator control.

Finally, the two-speed hydrostatic transmission (a single ratio for the P27.6 models) guarantees a maximum speed of movements of 25 mph and is driven, depending on the model, by three different combustion engines with powers between 75 and 115 HP, installed on the right side of the frame with longitudinal arrangement to maximize accessibility to the components in the event of scheduled or extraordinary maintenance. The axles, designed and developed internally by the Merlo Group, are designed to offer tailor-made dimensions. They are equipped with epicyclic gear reducers so as to guarantee a lower center of gravity to increase machine stability and ensure great reliability and excellent traction qualities.

Thanks to the latter and the high torque available, all telescopic handlers in the compact range, unique on the market, can be approved for towing trailers on the road.

**PERFORMANCE**

**HYDRAULIC SYSTEM**

The range of compact telescopic handlers includes two hydraulic attachments dedicated to the specific needs of each model:

- Fixed displacement hydraulic pump: the maximum working pressure is 3046 psi with the aim of limiting component wear and reducing hydraulic oil overheating.

- Hydraulic pump with load-sensing variable displacement and flow-sharing distributor: allows up to three simultaneous movements without any difficulty for the operator while maintaining high performance.
The air conditioning system is completely new and has been developed according to automotive standards, halving the warm-up and cool down times so as to ensure the optimal temperature even in extreme weather conditions. The inlet vent is placed on the side of the cab, away from potential sources of dust and dirt to maximize the service life of the filters. Inside there are eight vents, three of which are dedicated to defrosting the windscreen, for optimal climate comfort.

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

**COMFORT**

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 3.3 (ft.in.) and a large glass surface of 46 sq. ft. ensuring the best roominess in its class. In addition, all models can be fitted with a pneumatic suspension seat to further increase driving comfort.

Acoustic and thermal comfort have also been taken care of down to the smallest detail, thanks to intensive research into the most innovative technical solutions and materials, ensuring optimal soundproofing and thermal insulation. The latest generation air conditioning system guarantees ideal temperatures to work all year round and prevents the entry of dust into the cab, thanks to the cab pressurization in compliance with ISO 10263-3* standards.

To increase operating comfort, all models in the compact telescopic handlers range are fitted as standard with a Tac-lock implement locking device, hydraulically controlled from the cab. To make it easier for the operator to enter and exit the cab, the exclusive door can be opened by 180°. In addition, the upper part of the window can be locked during opening to facilitate air exchange and direct contact with those working outside.
The active boom suspension system (BSS) is available as an option, which protects the load during transfer and maintains a high level of driving comfort on rough terrain. The suspension is automatically deactivated at low speed (below 2 mph), for boom maximum precision and power.

The cab has a new design that favors functionality and comfort. The information to the driver and the controls of the different systems and devices is grouped into functional areas, in order to maximize the ergonomics of activation. The reverse shuttle at steering wheel, intuitive and within easy reach, increases safety and maneuvering agility while maintaining full control of the steering wheel. The TF30.9 model has a second reverse shuttle control even on the joystick, thus maximizing operating efficiency.
Merlo has developed the widest range of compact telescopic handlers with 10 versions available, characterized by compact dimensions and light weights that guarantee reduced maneuvering space and lower impact on the ground. Operational safety and high maneuverability are ensured by the 4-wheel steering system with three types of steering, reducing maneuvering times, all to the benefit of productivity, reduced fuel consumption and machine wear.

Merlo telescopic handlers are designed to offer the best visibility on the market, maximizing travel efficiency and customer safety. Boom position, bonnet design and over 46 sq. ft. of glass surface ensure fast, safe and precise operations, reducing maneuvering time.

The Merlo models in the compact telescopic range are equipped with a double-acting hydraulic service line and an electrical socket for machine-implement communication, located at the top of the boom, making them compatible with a wide range of attachments, specifically designed for Merlo telescopic handlers. The attachments are easily interchangeable, thanks to the exclusive Tac-Lock system.

Models with 115 HP engines are equipped with the latest generation engine and transmission control system, i.e. the EPD (Eco Power Drive) system. The exclusive EPD technology automatically controls and adjusts the engine revolutions based on operating conditions, disconnecting it from the accelerator pedal and allowing a reduction of up to 18% in fuel consumption. The operator only has to operate the accelerator pedal and all functions are fully automated.
Eco Power Drive

The patented Merlo EPD System includes three modes of use that apply to different operating needs: “Heavy Load”, “Eco” and “Speed Control”. The “Eco” mode optimizes performance according to consumption and can be used for light-duty operations; the “Speed Control” mode, which is fundamental for transport and towing conditions, allows the traveling speed to be set and maintained constant regardless of the variation in operating conditions; the “Heavy Load” function, optimized for performance, allows the full potential of the machine to be exploited in the most harsh environments, making it particularly useful for those who carry out heavy-duty work.

Finally, EPD includes the control of the engine revolutions proportionally to the use of the joystick (the greater the inclination of the joystick, the greater the engine revolutions). Functionality optimised for material handling.

This exclusive solution adopted on the axles guarantees the maximum steering angle to perform maneuvers in tight spaces.

front wheel steering

pivot steering

crab steering

REDUCED CONSUMPTION

Merlo EPD technology

This chart shows the reduction in fuel consumption compared to traditional technology. The EPD technology reduces consumption by 18% compared to traditional technology in mixed cycle conditions.
The P27.6 represents the smallest model in the compact telescopic handlers family. This feature, combined with high maneuverability, makes it extremely easy to use during material handling and positioning, also in small spaces. Equipped with the exclusive Merlo cab, already a favorite on the higher segment models, it guarantees the most spacious and comfortable driving position available on the market. The large glass surface, the level of soundproofing and the exclusive roominess allow you to make the most of the capacities of this model, reducing fatigue and guaranteeing maximum safety.
The 27.6 model is available in two versions: Plus and Top

The P27.6 Plus offers power and essential features, developed to meet the needs of each customer ensuring performance and efficiency applicable to any context of use. The P27.6 Top version differs from the Plus version in the installation of an oversized hydrostatic drive with the aim of delivering greater torque to the wheels, reaching 8818 lbs. of drive force. It is, therefore, a perfect model for those who need superior performance without sacrificing on the extraordinary compactness and comfort qualities.

1. Joystick
2. Reverse shuttle
3. Display
4. Air conditioning system
5. Inching - Brake - Accelerator
6. Curved windscreen
7. Glove compartment

The P27.6 models are equipped with the new 75 HP (55 kW) four-cylinder KOHLER KDI2504TCR 2,500cc engine. The engine complies with Stage V anti-pollution regulations with DOC (Diesel Oxidation Catalyst) and DPF (Diesel Particulate Filter) system.
The TF30.9 is the result of a long and accurate work of modular design and production. This model is recognized for the high and innovative technological content that Merlo engineers have enclosed in machines of small sizes but with high performance levels. The model in this range has a capacity of 6613 lbs. with a lift height of 28.3 (ft.in.) The strength of this model is the wide range of versions that allows you to choose among numerous specifications and exclusive technological content to meet every customer’s need.
This model is equipped with:

- **115 HP (85 kW)** Deutz four-cylinder 3,600cc engine. The engine complies with Stage V anti-pollution regulations with SCR (Selective Catalysis Reduction), DOC (Diesel Oxidation Catalyst) and DPF (Diesel Particulate Filter) system.

TF30.9 telescopic handlers are also available in the "Low Profile" cab version, which allows the machine's height to be reduced by 3 inches without compromising on the cab’s internal size and operator’s comfort. Optimized for work in environments with limited heights as poultry farms, underground car parks, mines.
ATTACHMENTS

The attachments, designed and manufactured in the Merlo Group’s plants, are the real operational tools of Merlo telescopic handlers: they are the result of the great experience of our technicians who interpret the operational needs of our customers and create solutions capable of enhancing the performance of the machine in different operating situations. Attachments with dedicated dimensional and performance characteristics have been developed also for the compact telescopic handlers range. The entire Compact range is equipped with the ZM2 implement-holder carriage, which allows attachments to be shared on several models. The exclusive and patented attachment recognition system and the efficient hydraulic locking system allow for quick implement changeover and automatic configuration of the operating parameters, all to the benefit of versatility and safety.

TRAINING CENTER

The Merlo Training and Research Center (CFRM) has made safety and machine training its mission. The CFRM provides training courses for operators of aerial platforms for people, forklifts, telescopic handlers, cranes, earthmoving machines, agricultural and forestry tractors, snow ploughs and urban hygiene vehicles.

MERLOMOBILITY

The Merlo telescopic handler range offers exclusive technology, making their telescopic handlers even smarter and more connected. The customer, through the MerloMobility 4.0 connectivity system, can fully utilize the information detected by the machines and transferred to a portal. Merlo Mobility is a flexible tool able to optimize the machine’s operational monitoring in the various sectors of activity.
Whoever buys a Merlo machine chooses a product that meets the highest standards of quality, reliability and innovation. The customer can count on first-class assistance and maintenance services offered by our network of official dealers.

Merlo Service offers a complete range of services thanks to the constant training and continuous updating of specialized technicians who work in the various service centers, located throughout the country.

We manufacture more than 90% of our machine components internally; thanks to this, we can guarantee original spare parts that are made ad hoc for our machinery. In addition, our spare parts are subject to continuous and rigorous quality controls. The careful and periodic maintenance, combined with the use of original spare parts, becomes an economic advantage and reduces the number of interventions required; in this way your Merlo telescopic handler will maintain its level of performance unchanged over time.