

# **MULTIFARMER**

MF34.7 - MF34.9 MF40.7 - MF40.9



# **New Multifarmer Family**

Merlo is the first company on the market to have transformed the concept of a tractor with a telescopic boom into a reality and to have patented this technology. Today, the new Multifarmer ranges (consisting of the MF 34.7, MF 34.9 and the larger MF 40.7 and MF 40.9 models) are designed to offer a telehandler equipped with a boom that can manage loads of 3.4 to 4 tonnes, working at heights of 7 and 9 metres. From a technical point of view, the new Multifarmer models are equipped with M CDC (Dynamic Load Control) anti-tipping system, and with 136 HP and 170 HP engines managed by the EPD system, which enables reductions in diesel fuel consumption. In addition to performing handling operations, Multifarmers can also be equipped with tools that are carried, towed or operated by the PTO, which means they can also be used for field applications such as seeding and transport.

- → BSS hydro-pneumatic boom suspension (on request)
- ✓ M CVTronic transmission. From 0 to 40 km/h without torque interruption
- √ 3000 kg Category II (MF34.7 and MF34.9) and 7000 kg Category III
  (MF40.7 and MF40.9) 3-point linkage, equipped with quick coupling system
- → PTO, electronically-managed mechanical fitting
- → Hydraulic distributors controlled from the cab and rear quick-release couplers
- ✓ Rear differential lock







The new Multifarmer models are fitted with an innovative cab designed to provide customers with a record-breaking comfort, thanks to his unique wide space and window, availables to the operator.

- ✓ The largest cab in its category: 1.010 mm of effective inside width and a window surface area measuring an amazing 4.3 m² which ensure a visibility off the charts
- ✓ New modular cab as standard: pressurised (complies with ISO 10263-3, not suitable for use with pesticides)
- ✓ Structure in line with ROPS and Level II FOPS standards
- ✓ Reverse shuttle at steering wheel command: intuitive and easy to use; it enables fast manoeuvres, being in full control of the steering wheel.
- ▼ The high visibility roof enables direct control of both the boom and the load
- ✓ Door opens by 180° with a separate small upper window: air exchange, visibility and direct contact with the exterior



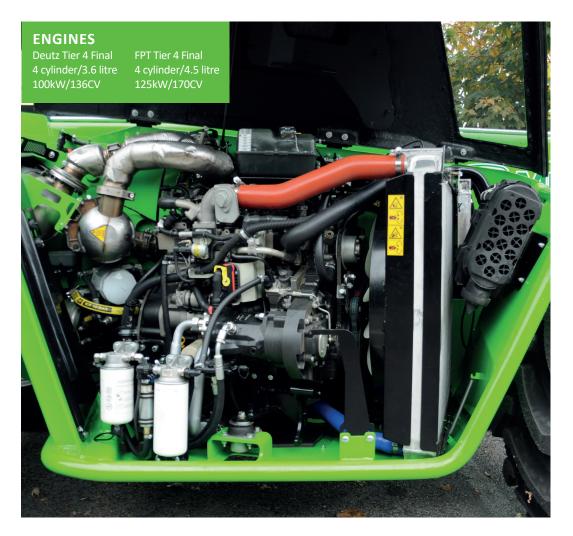
### AIR-CONDITIONING SYSTEM

The air flow is distributed evenly inside the cab and reaches all areas.

### **Engine and transmission**

For the new Multifarmer ranges, Merlo designers have adopted technologically-advanced diesel engines, evolved hydrostatic transmissions and axles equipped with dry disc brakes that help reduce power absorption. Diesel engine/transmission management is electronic, in order to optimise performance and minimise energy expenditure.

- ▼ The Multifarmer range is equipped with two Tier 4 Final engines: Deutz 4 cylinder/ 3.6 litre from 100kW/136CV and FPT 4 cylinder/4.5 litre from 125kW/170CV.
- ✓ Merlo hydrostatic transmission with EPD (Eco Power Drive) system as standard
- Merlo telehandlers are equipped with hydrostatic transmissions that ensure greater precision, increased safety and optimal ease of use
- ✓ The EPD Top is equipped with a "Speed control" 2 button that allows the machine handling speed
  to be memorised, and to be kept constant. The "Heavy Load" function, designed for heavy-duty
  operations, allows the machine to deliver more power
- ✓ When working with the PTO, the potentiometer ① enables the number of revolutions to be set in accordance with the tool being used (540/1000). The system keeps the revolutions within the threshold limit, ensuring that the engine speed is appropriate to the tool, maximising machine performance and productivity
- ✓ The self-accelerating joystick is fitted as standard and can be used to achieve higher hydraulic boom movement speeds, optimising performance. The system is activated once the 20% joystick movement threshold is exceeded









The CVTronic transmission follows Merlo's traditions in the hydrostatic field and ensures smooth acceleration without interrupting torque from 0 to 40 km/h.

The transmission comprises two hydrostatic motors with axial pistons driven by an electronically controlled hydraulic pump.

At low work speeds, they function in conjunction to provide maximum torque with an increase of 12% with respect to conventional hydrostatic transmissions.

During transport, the second hydrostatic engine is automatically disengaged from the control system and the oil from the pump powers the main hydrostatic engine that drives the Multifarmer to maximum speed.

#### Merlo CVTronic + EPD technology



- 1. Tier 4 Final engine
  2. Transmission shaft
- 3. Hydrostatic engine
- 4 CVTronic transmission
- 5. Hydrostatic pump
- **6.** Merlo axles
- 7. Dry disc brakes and parking brake



### The axles

Multifarmer telescopic tractors are equipped with planetary axles which are conceived, designed and built in-house to ensure maximum robustness, excellent steering capacity and "best in class" ground clearance, 450 mm with 500/70-24 and 490mm with 600/55 -26.5 (optional).

All Multifarmers are equipped with 4 dry disc brakes that allow for a consistent decrease in friction when compared with oil bath discs, with a corresponding reduction in fuel consumption. The parking brake is automatically engaged when the engine is switched off. The operator can also engage it willingly when the engine is running for stationary work on slopes.

- ✓ Axles designed and integrated into the design: maximum performance and excellent versatility
- ▼ Three steering modes: front wheels, four wheel and sideways crab for easy handling, efficient and effective working
- ✓ Up to 490 mm clearance off the ground, the best in its category
- ✓ Dry brakes to reduce friction and fuel consumption
- ✓ Automatic parking brake engagement system when engine is turned off
- ✓ Rear axle lock system to prevent oscillation of the axle for operations with 3-point linkage











Merlo produces the booms mounted on its telehandlers in-house, and has developed unique technologies to make them strong and lightweight, protect handling mechanisms against blows and to enable easier and more precise load positioning.

- → BSS hydro-pneumatic boom suspension system: Patented Merlo technology
- ✓ Boom sheet metal welded on the boom's neutral bending axis
- Cartridge: protected extension system inside the boom, thanks to a patented solution that is easy to access if maintenance is required
- ▼ Tac-Lock: hydraulic attachment clamping system from the cab
- Levelling: system for correcting tilt, built into the chassis, enabling the operator to offset sloping ground and work in complete safety

BSS hydro pneumatic suspension of the boom (optional), the operator can active it; automatically deactivates under 3 km/h to ensure maximum precision in the positioning of the loads



### **Merlo Dynamic Load Control**

Safety is an essential value for Merlo Group, and that's why we invented the Merlo CDC system. Our goal is to allow every operator to work in total safety, exploiting the potential of the telehandler and attachment used to the full.

The operator can check the dynamic stability of the vehicle at any time on the dedicated area 3 of the Merlo CDC display or the traffic lights on the front upright in the M CDC Light version.

When performing manoeuvres that place the stability of the telehandler at risk, the M CDC system locks the arm and prevents further movements that could exacerbate the situation.

#### **DISPLAY**

All safety information are clearly shown on the 8.5" colour display (provided as standard on the MF40, available as an option on the MF34).

An indicator on the load chart provides the operator with information on the dynamic stability of the telehandler and the Merlo CDC prevents risks to the longitudinal balance, locking the movements of the boom as necessary, in order to ensure high levels of safety both for people and for the machines in operation.



- 1. Attachment in use
- 2. Boom working area
- Current location of boom load (represented by a coloured dot)
- Load detection menu
- **5.** Operating parameters
- 6. Operating information
- 7. Stability index



The traffic light indicator on the right side pillar provides instant clear information.

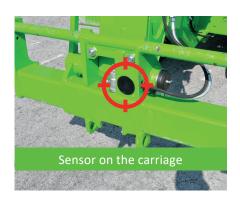
The different colours and audible signals help the operator understand the stability status of the machine as quickly as possible, avoiding potentially risky situations.



- ✓ Safety that goes further than the requirements
  of the EN15000 standard
- ✓ Automatic attachment recognition (for attachments built in Merlo factories and fitted with the M CDC sensor)
- ✓ 8.5" display in cab (optional on MF34)
- ✓ ROPS and FOPS protection, no impact on comfort inside the cab.







## 3-point linkage and mechanical PTO

Three-point linkage, PTO and a 32-tonne towing hook with hydraulic distributors are the specifications which make Multifarmer models perfect for use in the agriculture sector.

A mobile power unit which makes the Multifarmer a versatile machine capable of performing all kinds of tasks: from handling to carrying/towing attachments activated by PTO.

The PTO is managed by the electronic control unit, which progressively engages the clutch depending on the inertia of the attachment. The rate of efficiency is close to 90% of power to flywheel.

- ✓ Electronically-controlled PTO
- √ 540/1000 can be selected from cab
- ✓ EPD: potentiometer enables constant PTO speeds
- ✓ Handler can be operated from the cab and from the ground
- ✓ Lifting capacity of 3000 kg and 7000 kg
- ✓ Hydraulic distributors operated by proportional controls
- ▼ Three-point linkage: cat. II for Multifarmer 34.7 and 34.9, cat. III for Multifarmer 40.7 and 40.9











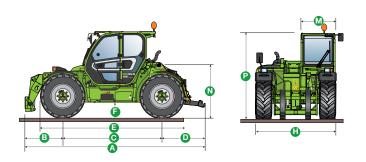


We are determined to ensure that Merlo telehandlers are increasingly multi-purpose, in order to maximise return on investment for our clients.

With the new Multifarmer range, we push the limits of this concept even further, indeed, in addition to the traditional uses for our telehandlers (generally in handling, logistics and maintenance operations), the new Multifarmer can also be used for towing, courtesy of the tow hooks (type-approved up to 32 tonnes) and the pneumatic and hydraulic trailer's braking system.

	SPECIFICATIONS	MF 34.7 140	MF 34.7 140 CS	MF 34.7 CS 140 CVT	MF 34.9 140	MF 34.9 140 CS	MF 34.9 CS 140 CVT	MF 40.7 CS	MF 40.9 CS
POWERTRAIN	Total unladen weight (kg)	7900	8000	8000	8400	8500	8500	8700	9150
	Maximum capacity (kg)	3400	3400	3400	3400	3400	3400	4000	4000
	Lifting height (m)	6.8	6.8	6.8	8.8	8.8	8.8	6.8	8.8
	Maximum reach (m)	3.8	3.8	3.8	6	6	6	3,6	5.8
	Lifting height at maximum capacity (m)	6.8	6.8	6.8	8,1	8,1	8,1	6.8	8.8
	Maximum operating reach (m)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	Capacity at the maximum lifting height (Kg)	3400	3400	3400	3000	3000	3000	4000	4000
	Capacity at maximum reach (kg)	1500	1500	1500	750	750	750	1800	1000
	Engine (Displacement/cylinders)	Deutz 3.6/4	Deutz 3.6/4	Deutz 3.6/4	Deutz 3.6/4	Deutz 3.6/4	Deutz 3.6/4	FPT 4.5/4	FPT 4.5/4
	Engine Power (kW/HP)	100/136	100/136	100/136	100/136	100/136	100/136	125/170	125/170
WE	Maximum speed (km/h)	40	40	40	40	40	40	40	40
PO	Fuel tank (I)	140	140	140	140	140	140	140	140
	Hydrostatic transmission	2 speeds	2 speeds	CVTronic	2 speeds	2 speeds	CVTronic	CVTronic	CVTronic
	EPD - Eco Power Drive	Тор	Тор	Тор	Тор	Тор	Тор	Тор	Тор
	Automatically locking parking brake	•	•	•	•	•	•	•	•
HYDRAULIC	Load Sensing + Flow Sharing hydraulic pump	•	•	•	•	•	•	•	•
	Flow rate/pressure (I/min – bar)	145 - 210	145 - 210	145 - 210	145 - 210	145 - 210	145 - 210	150 - 210	150 - 210
	Hydraulic oil tank (I)	100	100	100	100	100	100	96	96
	Rear hydraulics socket	2	2	2	2	2	2	4	4
CAB	Cab configuration	ECO	ECO	ECO	ECO	ECO	ECO	PREMIUM	PREMIUM
J	MCDC (Dynamic Load Control)	Light	Light	Light	Light	Light	Light	•	•
	Electronic joystick commands in cab	•	•	•	•	•	•	•	•
	Dual Control Reverse Shuttle (joystick/steering wheel)	•	•	•	•	•	•	•	•
Z	CS - Cab suspension	-	•	•	-	•	•	•	•
RATI	BSS - Boom suspension	0	0	0	0	0	0	0	0
CONFIGURATION	Work headlights on cab	•	•	•	•	•	•	•	•
	Tac-lock	•	•	•	•	•	•	•	•
	Provision for a platform	0	0	0	0	0	0	0	0
	Inching-Control	•	•	•	•	•	•	•	•
	Four-wheel drive	•	•	•	•	•	•	•	•
	Four-wheel steering	•	•	•	•	•	•	•	•
	Three steering modes	•	•	•	•	•	•	•	•
	Standard tyres	460/70-R24	460/70-R24	460/70-R24	460/70-R24	460/70-R24	460/70-R24	500/70 - R24	500/70 - R24
	Type approval as an agricultural tractor	•	•	•	•	•	•	•	•
	PTO	•	•	•	•	•	•	•	•
	3-point linkage	•	•	•	•	•	•	•	•

#### **MULTIFARMER 34.7 - 34.9 - 40.7 - 40.9 DIMENSIONS**





	MF34.7	MF34.9	MF40.7	MF40.9
A (mm)	5440	5440	5310	5490
B (mm)	1325	1325	1110	1290
C (mm)	2850	2850	2920	2920
D (mm)	1265	1265	1280	1280
E (mm)	4100	4100	4270	4270
F (mm)	430	430	450	450
H (mm)	2240	2240	2350	2350
M (mm)	1010	1010	1010	1010
N [mm]	1645	1645	1550	1550
P (mm)	2485*	2485*	2535*	2535*
R (mm)	3280	3280	4210	4210
S (mm)	4898	4898	4890	5030
Z (mm)	850	850	850	850

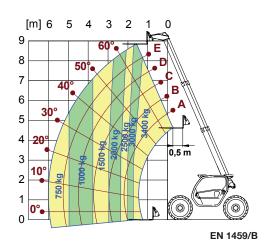
Tyres 460/70 R24 Tyres 460/70 R24

\*CS deactivated, +60 mm CS activated

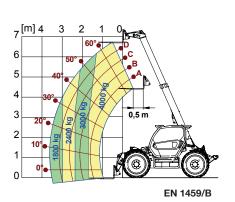
#### MF 34.7 WITH FORKS

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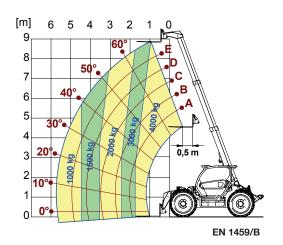
#### MF 34.9 WITH FORKS



#### MF 40.7 WITH FORKS



#### MF 40.9 WITH FORKS



## **Attachments**

Merlo applies a simple and effective principle when developing its products.

From the design to the build: everything is conceived, designed and built in the Merlo Group Research Centre. This simple principle also applies to our attachments.

Armed with years of experience, Merlo's engineers have developed a wide range of attachments of various types and load capacities.

This work method ensures a broad range of tested and interchangeable attachments that help save time and effort.

BALE FORKS

MANURE FORKS WITH CLAW

PINCERS FOR ROUND BALES

MULTI-PURPOSE LOADER WITH CLAW







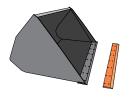


LOADERS

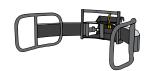
HOOKS/LIFTING BOOMS

PINCERS FOR ROUND WRAPPED BALES

PLATFORMS













- 1400 employees
- Overall surface area of 300,000 m<sup>2</sup> of which 220,000 m<sup>2</sup> is covered
- Approximately 90% of turnover from export
- More than 50 markets across the world
- 6 branches and more than 600 dealers
- 8% of turnover invested in R & D
- 60 production robots
- 90% of production in-house

The Merlo brand has always been a leader in advanced technology in the telehandler field. Since 1964, we have brought experience, determination and passion to everything we do.

Developing complex products, from the idea to the result, from design to sales, means being able to anticipate trends in the most competitive markets.

Merlo Group's dedication has resulted in the design and manufacture of compact, easy-to-handle telehandlers which offer market-leading performance, comfort, efficiency and safety.









### Multifarmer MF34.7 - MF34.9 MF40.7 - MF40.9

The data, features and illustrations contained in this document are for indicative purposes only, and are not binding. Merlo Spa pursues a policy of continual research and development, and as such, our products may feature characteristics that differ from those described or may be subject to modification without prior notice.

The products illustrated may include optional equipment.



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