MULTIFARMER 40.9

To build on the success of its Multifarmer series, Merlo introduces two new high performance models

A mobile mechanical, hydraulic and electronic power plant for the farmer

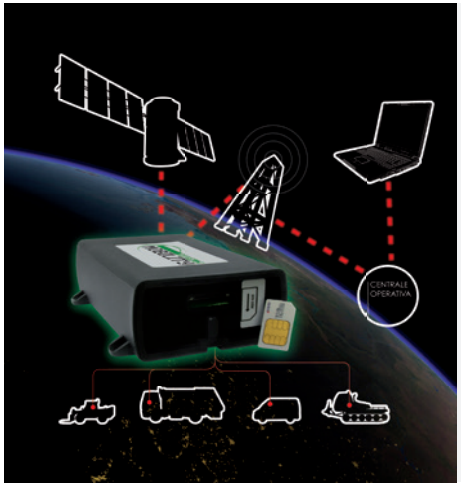
Experience of the agricultural sector gained with the Multifarmer range has lead to the development of two new models, the MF 40.7 and the MF 40.9, with boom lengths of respectively 7 and 9 metres. Equipped with a three-point linkage, mechanical PTO and auxiliary remote valves, just like the current MF series, but designed to compete in the higher class of tractors with over 150 horsepower. The Tier 4 Interim engine delivers 156 hp and 609 Nm: levels of power and torque never before encountered on a telehandler designed for agricultural use, and which allow use of both mounted and trailed implements. The power at the PTO shaft amounts to nearly 90% of the available flywheel power, and is more than adequate for tasks such as soil preparation, hay making and transport; the PTO is complemented by a 20-tonne tow hitch and a trailer braking system.
The top speed of 50 km/h*allows rapid transfer and can be used in total safety, thanks to the low centre of gravity and the cab suspension system. In addition, MF models are equipped with the new M CVTronic transmission, which is Merlo's new interpretation of the continuously variable transmission. The M CVTronic provides superior performance to a conventional CVT and is designed to allow a top speed of 50 km/h* with fluid acceleration and without any interruption in torque delivery. This transmission offers significant benefits in terms of comfort, productivity and fuel consumption, the latter being reduced by the EPD system by an average of 3 litres per hour. The new generation cab and the new cab interior, with multifunction armrest and dedicated 8.5» display for the M CDC system represent the state-of-the-art as regards technological innovation.

- MF 40.7 and MF 40.9: new generation Multifarmer models specifically aimed at a new market sector.
- Strategic company decision to meet a growing market need.
- Two models: with a choice of 7 or 9 metre long telescopic boom and a lifting capacity of 4 tonnes.
- Weight/dimensions: weight of 8800 kg, wheelbase of 2920 mm and 600/55R25.6 tyres with agricultural profile. Appropriate to the performance of the machine.
- Engine: 4 cyl. 4.1 litre, Tier 4 Interim producing 156 hp and 609 Nm of torque, ensuring superior performance.
- Cab: new generation cab offers comfort, good ergonomics and innovative technology.
- Multifunction armrest: incorporates all the controls for the lift and remote valves for greater operator comfort.
- Joystick: equipped with forward/reverse shuttle controls and automatic throttle for operator convenience.
- M CVTronic transmission: the new original solution for continuous transmission of power without any interruption of torque delivery, capable of a top speed of 50 km/h*. Better performance and greater comfort.
- EPD: electronic engine/transmission management system that provides significant fuel savings.
- M CDC: operating safety data displayed on 8,5" screen and automotive type function selector knob.

* Homologated speed in Italy: 40 km/h.

With the Merlo CDC system, safety comes as standard

Created by Merlo for professional users who require practical, effective and intuitive safety systems



MerloMobility

Merlo Group Infomobility

MerloMobility is a new fleet management system, conceived and developed entirely within the Merlo Group, that allows real time location of vehicles via Gps, and makes it possible to monitor vehicle operating parameters and usage, to receive and process alarms in the event of breakdown or theft, as well as to send commands for event management via the internet.

Created by Merlo for professional users who require practical, effective and intuitive safety systems. Merlo has always been a leading exponent of the use of safety systems. And in this spirit, Merlo has created the Merlo Dynamic Load Control (M CDC) system for use on its own telehandlers. Merlo engineers have developed an «automatic attachment recognition system» that consists of a sensor applied to every attachment produced by the Merlo Group. These sensors relay the relevant attachment data to the M CDC electronic control unit. The system has also been designed to recognise new Merlo attachments that will become available in the future. The Control unit receives the data and installs the corresponding load diagram in the M CDC system. In this way the telescopic boom operates in conditions of maximum dynamic safety. The main operating parameters, including the weight of the load, the overhang, the boom inclination angle, and the stability index are on displayed on the screen in the cab. The operator is kept informed of the level of safety by a «traffic light» warning system displayed on the load diagram. A green light indicates conditions of maximum safety. A yellow light means that the operator must proceed with caution; if the red light appears, the M CDC system will block any manoeuvres that could compromise safety. The operator may only continue working once the operating parameters have returned within normal safety limits. The M CDC system is always activated, even when the machine is moving, and therefore exceeds the requirements of the EN15000 safety standard, ensuring maximum safety in all situations.

- State-of -the-art system: unrivalled performance, exceeding requirements of the EN15000 standard
- Covered by three international patents: Merlo original solutions are worth protecting.
- Merlo attachments equipped with automatic load recognition. Guaranteed operational safety and functionality.
- Attachment sensor: the control unit installs the specific load diagram for the attachment, thereby ensuring maximum operational safety
- Display: shows the main operating parameters in real time. Enables the operator to respond immediately to conditions with an informed decision.
- Intuitive user interface: traffic light system informs operator of safety status at glance.
- Non-CDC attachments: manual selection of attachments not equipped with sensors. Greater versatility.
- Free zone: allows appropriate operating speeds. Greater performance, less stress.
- Weighing: detects and saves to memory the weight of the load; displays a summary of work performed.
- Possibility to set the weight of the attachment as the tare value: for simpler, more effective use.

Merlo technology allows you to save up to 3 litres of fuel per hour

The Eco Power Drive system allows you to quantify the effective fuel savings

Merlo has responded to the need to minimise energy consumption with innovative, practical and effective solutions that can save three litres of fuel per hour. Working on a hypothetical usage of a thousand hours per year and a fuel cost of 1.2342* Euros per litre, this equates to savings of 3700* Euros a year. To achieve this result, Merlo engineers have developed the exclusive EPD system, protected by international patent, in which engine rpm is no longer controlled directly by the accelerator pedal, but by the EPD system. By pressing the accelerator, the operator communicates the desired speed and torque to the EPD control unit, which manages engine rpm in such a way as to obtain maximum performance from minimum fuel consumption. The EPD system also provides three manual operating modes: Transport and Tow, aimed at attaining or maintaining the desired speed with minimum fuel consumption; Heavy Load, used to obtain maximum performance during particularly demanding work such as excavation or snow clearance, with maximum torque delivered to the wheels for minimum fuel consumption; and Inching mode, for manoeuvring with maximum precision. In addition,there is a second potentiometer which allows the operator to set the engine idle speed, which is particularly useful when you need to ensure that the PTO shaft rotates at exactly 540 or 1000 rpm in order to get the best performance from implements. Merlo is the only telehandler manufacturer in the world offering an effective solution capable of significantly reducing energy consumption.

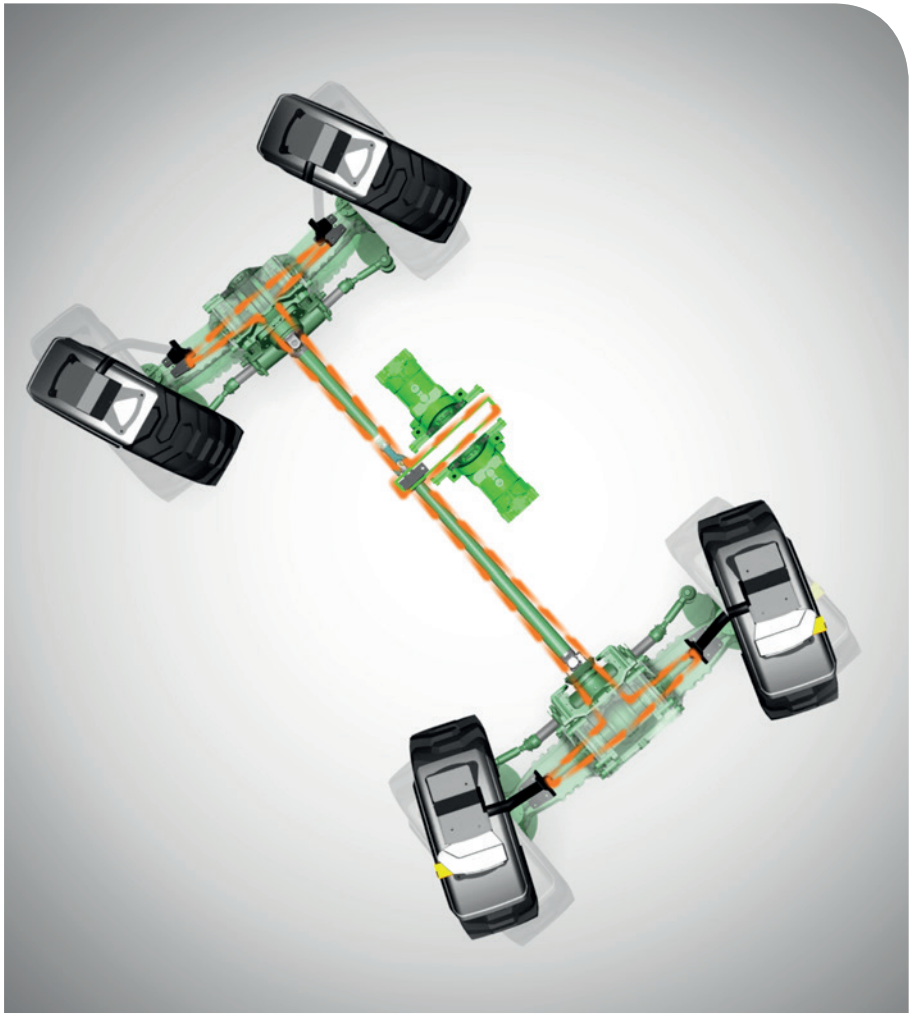
- EPD system: a patent protected Merlo innovation.
- Energy savings: the EPD system manages the diesel engine and transmission to obtain fuel savings of up to three litres per hour.
- Annual savings: with an estimated annual usage of one thousand hours, the fuel saved amounts to around 3000 litres.
- Objectives: EPD manages engine rpm applying parameters designed to obtain maximum energy savings.
- Wireless accelerator pedal: the pedal is connected directly to the EPD system and is used by the operator to setl the required speed.
- Manually selected modes: the operator can manually select three operating modes according to the task at hand; Transport & Tow, Heavy Load and Inching.
- Diesel engine idle speed: the operator sets the ratio between engine rpm and PTO shaft rpm, choosing either the 540 or the 1000 rpm PTO.

* 1.449 € per litre -21.48 cent/litre refund for farming sector. Quoted on February 2013 by ADAC (German automobile club).

The EPD system also provides three manual operating modes: Transport and Tow, aimed at attaining or maintaining the desired speed with minimum fuel consumption; Heavy Load, used to obtain maximum performance during particularly demanding work such as excavation or snow clearance; and Inching mode.

CVTronic transmission: fluid and gradual acceleration without interruption of torque delivery

The first telehandler with integrated electronic systems for maximum productivity and performance



Maximum synergy is achieved with a new transmission that combines Merlo's experience in the field of hydrostatic transmissions with new technical solutions that afford the same performance, consumption and productivity as a conventional Continuously Variable Transmission.
This system, designated Merlo CVTronic, is comprised of two hydrostatic motors with axial pistons and variable displacements that are supplied with oil by a load sensing hydrostatic pump driven directly from the diesel engine.
Both motors work together to deliver the maximum amount of torque within the speed bands used for materials handling and open field work.
In transport, the second hydraulic motor, which is connected to the gearbox via a clutch, is completely disengaged by the electronic control unit.
The transition is performed automatically with no torque interruption.
All the oil from the pump is then directed to the main hydraulic motor, which drives the MF 40.9 at speeds of up to 50 km/h, where local restrictions permit.
These solutions will be gradually extended to all the models in the Turbofarmer range, making them even more competitive.
These solutions will be gradually extended to all the models in the Turbofarmer range.

- M CVTronic: Merlo's own original interpretation of the continuously variable transmission. Merlo's new transmission matches the performance of a conventional CVT.
- M CVTronic low speeds: two hydrostatic motors working together to deliver maximum torque. Excellent drawbar power.
- M CVTronic high speeds: all the oil flow from the pump is directed to the main hydrostatic motor to attain speeds of up to 50 km/h. Maximum performance and a higher top speed than the competition.
- M CVTronic/EPD: the synergy between the two integrated systems makes for superior performance and a reduction in fuel consumption of up to 3 litres per hour.
- No interruption in torque delivery: maximum efficiency and driving comfort.
- Electronic management of the M CVTronic system and speed control: maximum performance and comfort.
- Accelerator pedal: connected to the EPD system to minimise fuel consumption.
- From 0 to 50 km/h: gradual acceleration with no interruption of torque delivery.

The Multifarmer is the most versatile agricultural telehandler in the world

Since 2000, Merlo has been a firm believer in the Multifarmer concept and currently offers the most powerful models on the market

The three-point linkage, the PTO, the 20 tonne tow hitch and the hydraulic remote valves are the characteristics make the MF 40.7 and the MF 40.9 true agricultural machines. A mobile power plant makes the Multifarmer a versatile machine capable of tackling any task, from materials handling to the operation of mounted or trailed PTO-driven implements. The PTO is managed by the electronic control unit, which modulates clutch engagement in accordance with implement inertia. The power at the PTO is nearly 90% of the flywheel power, and can drive implements requiring up to 135 horsepower. The 6 and 21 spline stub shafts are interchangeable to suit the power requirements of the implement. The EPD system allows the operator to set the desired engine idle speed, which is particularly useful when working with PTO-driven implements. The operator sets the engine rpm corresponding to the required PTO speed of 540 or 1000 rpm. The EPD system controls the engine rpm so that it does not fall below the required value, thus ensuring optimum performance from the implement and top quality results. The four remote valves are easy to operate using the proportional microswitches with detent positions located on the multifunction armrest. The Category III three-point linkage has a hydraulic top link. lower links with quick-attach link arm ends and adjustable lift rods and stabilisers to limit lateral oscillation. The lower links are also equipped with a practical floating system. For transport work, the Multifarmer can be equipped with a hydraulic or air trailer braking system, ensuring safety at the top speed of 50 km/h, where permitted by the regulations in force in the country of use.

- Multifarmer: created by Merlo for maximum versatility in farming applications.
- PTO power: nearly 135 horsepower, ensuring top performance.
- Electronic PTO control: smooth, gradual engagement of the PTO clutch.
- PTO stub shaft: the 6 and 21 spline stub shafts are interchangeable to suit the power requirements of the implement.
- EPD: manual setting of engine rpm to obtain a constant 540 or 1000 rpm at the PTO, for better implement performance and top quality results.
- Electronic lift: can be operated from the armrest and from the ground for maximum practicality.
- Lifting capacity: 7000 kg, consistent with this class of machine.
- Remote control valves: with proportional controls for maximum functionality and ergonomics.
- Three-point linkage: with cat. III quick-attach link arm ends for maximum performance.
- 20 tonne capacity tow hitch. D3 tow hitch designed for maximum towing performance.
- Braking system: hydraulic or air braking, both of which are versatile effective and safe.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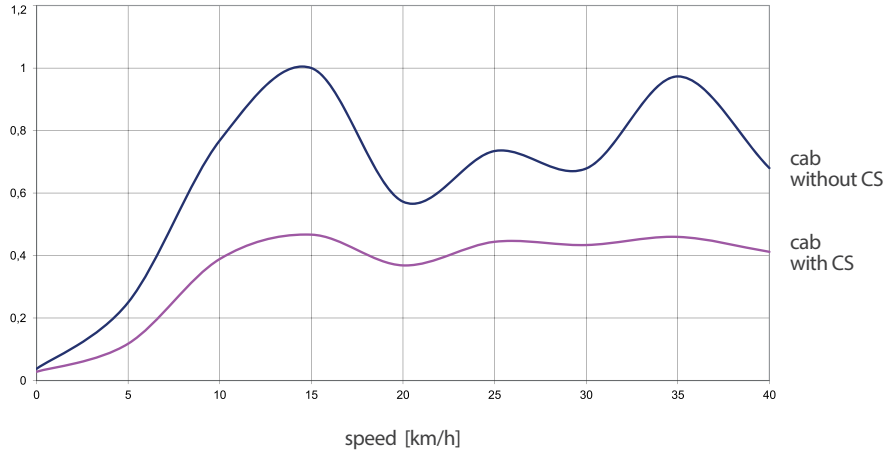
Design, space, ergonomics and comfort are the advantages of the new record-breaking cab

Merlo cabs are packed with innovative, practical and functional features

Merlo telehandlers are renowned for their spacious cabs, and taking this as their inspiration, the Merlo designers decided to make the new cab even roomier than before, with new distinctive styling that will be applied to all our future products. The new cab employs the "Controller Area Network" or CAN-bus, the communication protocol that facilitates the transfer of data between different control units; the system features quick-connect electrical connections and incorporates the Merlo Mobility systems for remote diagnostics. Visibility has always been one the key features of Merlo vehicles, and the new Multifarmer models are no exception; in fact, the new cab has a curved windscreen designated the Merlo Sky-View, which allows the operator an unobstructed view of the load, even when the boom is raised to the full extent. Driving position ergonomics are enhanced by the tilt adjustment facilities of the steering wheel and digital instrument panel, complemented by the 8.5» screen dedicated to the display of M CDC functions, which can be selected using the automotive style selector knob. The 14 switches on the right-hand console include the PTO control and the potentiometers of EPD system, as well as the controls for selecting the three steering modes and cab suspension. The joystick on the multifunction armrest incorporates the forward/reverse shuttle control, which is replicated on the steering column, as well as the electronic lift control functions and the proportional microswitches of the remote control valves. The radio system has Bluetooth technology allowing hands free operation of a mobile phone. The new Merlo cab has redefined the state-of-the art, setting a new standard for innovative features, spaciousness and comfort, and fully lives up to the claim of "Merlo Technology inside".

- Cab: new generation designed for maximum ergonomics, visibility and safety.
- Cab suspension: a hydro-pneumatic system that smooths out the bumps to give a comfortable ride over the roughest terrain.
- Operator position: plenty of space for the operator to move his/her arms, shoulders and legs.
- Curved windscreen: unique on a machine of this type. Allows the operator a clear view of boom movements.
- Digital instrument panel: specifically designed for the vehicle, providing clear, accurate information. The panel also displays the instantaneous fuel consumption.
- 8.5» display: dedicated to the M CDC system. Easy to read.
- M CDC functions. The operator can select the required function using the practical, automotive style selector knob.
- Manual EPD: the tractive force and engine rpm can be set manually for maximum versatility
- Multifunction armrest: incorporating controls for the lift, PTO and remote control valves.
- Joystick: equipped with forward/reverse shuttle control for maximum operator convenience.




MERLO UK
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Bremen
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MERLO IBERICA
Barcelona
1987
MERLO FRANCE
Paris
1983
MERLO GROUP HQ
Cuneo
1964
MERLO POLSKA
Warszawa
2012
MERLO
WEST AUSTRALIA
Perth
2005
MERLO
EAST AUSTRALIA
Sydney
2013
RESIDENT
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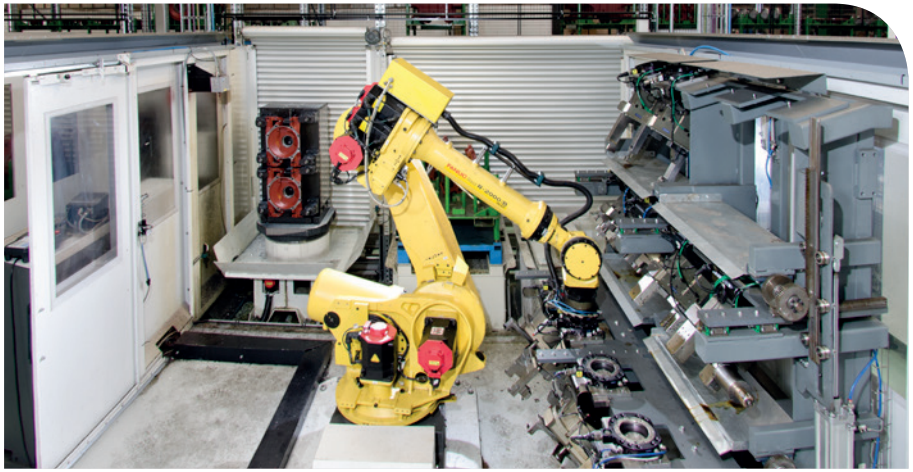
DIRECTOR
6 SISTER COMPANIES
OVER 50 MARKETS
OVER 600 DEALERS

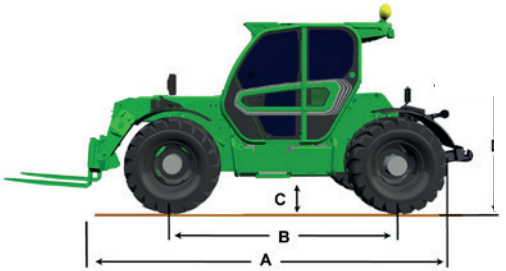
Technical data

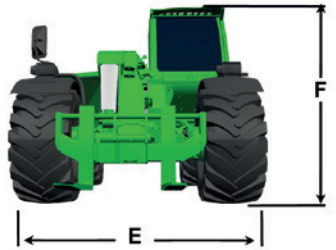
Dimensions and weights of the new Multifarmer 40.9

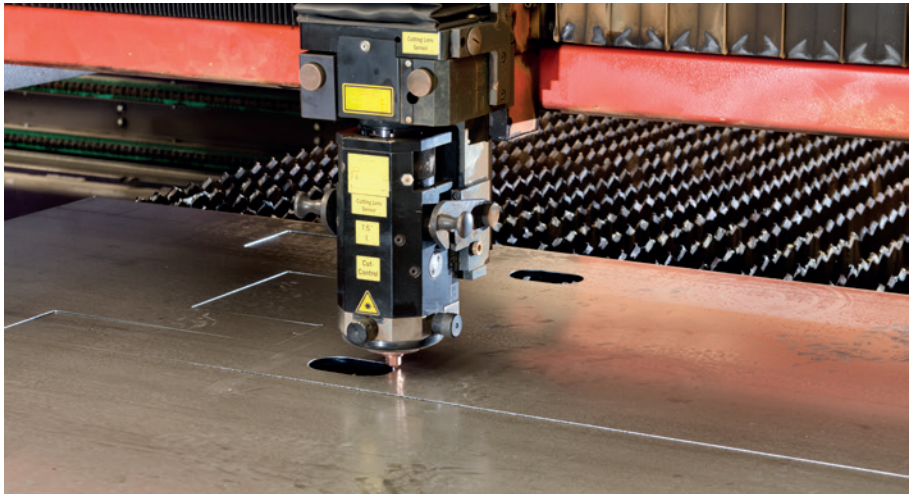
MACHINE	TYRES	DIM	A	B	C	E	F
MF 40.9	600/55 R26,5	mm	5295	2920	480	2520	2560

WEIGHT OF THE MACHINE	8800 kg
MAXIMUM LIFTING CAPACITY	4000 kg

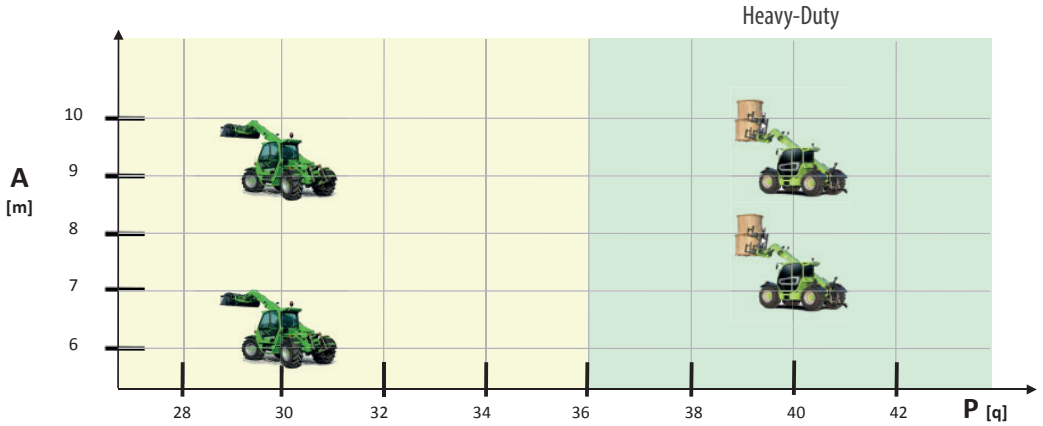








The new MF 40.9 within the current Multifarmer range:



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