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MERLO
1968-2018

CAMERE
DI COMMERCIO
D'ITALIA
AN HISTORIC ITALIAN COMPANY



MACHINE
OF THE YEAR 2014

MEILENSTEINE
DER LANDTECHNIK



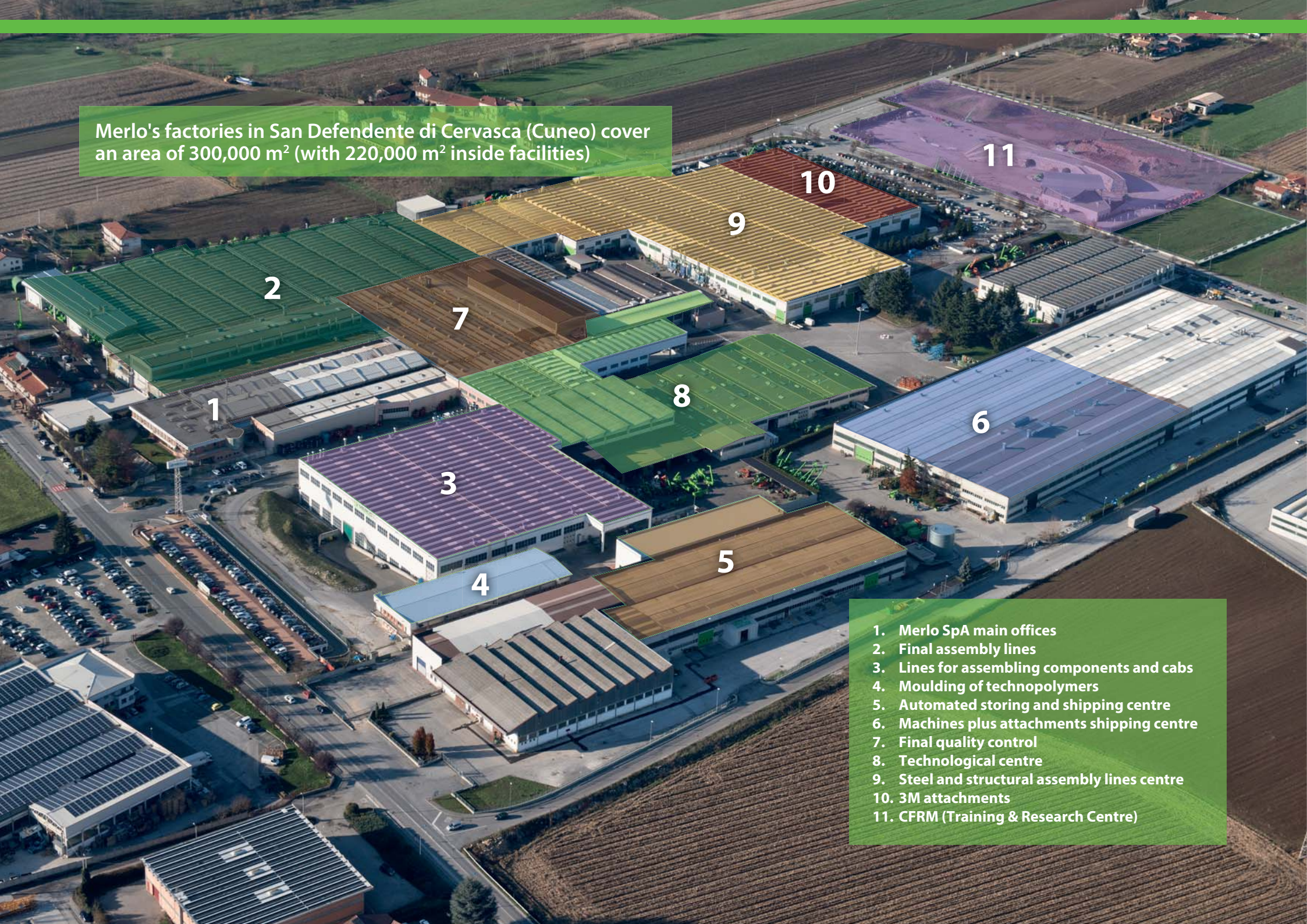
MERLO

ROTO
60.24 MCSS

ROTO TIER 4 INTERIM

XG

Merlo's factories in San Defendente di Cervasca (Cuneo) cover an area of 300,000 m² (with 220,000 m² inside facilities)



1. Merlo SpA main offices
2. Final assembly lines
3. Lines for assembling components and cabs
4. Moulding of technopolymers
5. Automated storing and shipping centre
6. Machines plus attachments shipping centre
7. Final quality control
8. Technological centre
9. Steel and structural assembly lines centre
10. 3M attachments
11. CFRM (Training & Research Centre)

The Merlo Group

N° 1 for technology and safety

The Merlo brand has always been synonymous with advanced technology in the telehandler field and our history, since 1964, is hallmarked by experience based on determination and passion. The development of complex products, from the idea to the result, from design to sales, means being able to propose orientations of the most competitive markets.

The outcome of our efforts are compact, easy to handle telehandlers ensuring incomparable operating performance, comfort, efficiency and safety.

At Agritechnica 2013, three important awards were received that clearly demonstrate the technological and innovative superiority of our products:

- Turbofarmer 42.7 Hybrid: Gold Medal for innovation at Agritechnica.
- Turbofarmer II: Machine of the year 2014 in the “handling and logistics” category.
- Multifarmer: Selected as a “milestone” in agriculture.

- **> 1.100** employees
- Surface area of **300,000 m²** of which **220,000 m²** are indoors
- **90%** exports
- **600** dealers all over the world
- **8%** of turnover invested in R & D
- **54** robots



Automated boom bending workstation



Roto robotised welding of the chassis



The **broadest range on the market.**
14 models for every need, equipped
with 4 cylinder **Tier 4 Interim engines:**

Roto 400 101 HP - 6 models

Roto 600 133 HP - 2 models

Roto MCSS 176 HP - 6 models

**ROTO, the rotating
telehandler designed
and created by Merlo**

New ROTO range

The most complete, performing and safe

We first launched the Roto range with rotating turret in 1991. Today we present the new Roto generation, equipped with Tier 4 Interim engines, even more advanced, versatile and performing.

- + **Comfort** → **Largest cab in its category**
Best comfort level
- + **Efficiency** → **18% consumption, EPD as standard on all Roto**
- + **Performance** → **Models developed to offer the best mechanical, hydraulic and electronic performance**
- + **Versatility** → **Continuous rotation of the turret on MCSS models, by 600 degrees ($\pm 300^\circ$) on the 600° series and 415 degrees ($\pm 218^\circ$) on the 400° series**
→ **Over 30 usable attachments**
- + **Safety** → **FOPS approved cab**
Automatic stabilisation as standard on all models
Integrated anti-overturn systems (400° and 600°)
Merlin (Merlo Interactive Network) as standard on MCSS
MerloMobility as standard on MCSS, opt on 400° and 600°
EAS Electronic Active Suspensions as standard on MCSS and 400° S



- **14 models** for every need
- **Turret at 400°, 600°** and **MCSS** continuous rotation
- **Engines from 101 to 176 HP, Tier 4 Interim**
- **EPD -18%** consumption as standard
- **Automatic stabilisation** as standard
- **Electronic Active Suspensions on MCSS and 400° S** better safety and efficiency
- **Merlo Mobility as standard on MCSS**

ROTO 400°, 600° and MCSS - three complimentary families

Compact, practical and efficient, from 10 to 30 metres

ROTO: Common features

- 1010mm cab. The largest on the market
- EPD (Eco Power Drive as standard)
- Hydrostatic transmission with two gears
- Load sensing pump
- 4-wheel drive is always engaged
- "Finger Touch" reverse shuttle as standard
- Tac-Lock system for attachment clamping

Roto 400° and 600°

- Analogue-digital instrument panel
- Electronic anti-overturn system
- Electromechanical joystick

Roto 400°

- Tier 4 Interim engine, 101 HP, 4 cyl., 3.8 litres equipped with DPF filter
- Stabilisers with hinged opening
- 6 models:
Lifting capacity from 3.8 to 5.0 tons
Maximum height from 10 to 18 metres

ROTO MCSS

- Tier 4 Interim engine, 176 HP, 4 cyl., 4.5 litres equipped with SCR (AdBlue)
- Telescopic boom stabilisers
- Electronic joystick
- Merlin (Merlo Interactive Network)
- Interactive system for safety management telescopic boom, information and diagnostics
- EAS hydropneumatic suspensions for movements in max comfort/safety
- MCSS Made up of 6 models
Lifting capacity from 4 to 6 tons
Maximum height from 16 to 30 metres

Roto 600°

- Tier 4 Interim engine, 133 HP, 4 cyl., 4.5 litres equipped with SCR (AdBlue)
- Stabilisation of extension stabilisers and combined position
- Two models:
Lifting capacity from 4.5 tons
Maximum height from 19 to 21 metres



The Roto range

Three families and 14 models for every need

FAMILY ACCORDING TO DEGREE OF TURRET ROTATION	ROTO RANGE	ENGINE		EPD	CAB		OPENING STABILISERS	CHASSIS		LEVELLING STABILISERS	TRANSMISSION	SAFETY		SPEED
	Model	Tier 4 Interim (CV)	System post-treatment	Eco Power Drive	Steady	Tilting	Type	Fixed	EAS suspensions	Automatic	2V hydrostatic	Merlin with Display	Merlin with light indicator	Maximum in km/h
400°	ROT038.14	101	DPF	X	X		Hinged	X		X	X		X	25
400°	ROT038.14S	101	DPF	X	X				X	X	X		X	40
400°	ROT038.16	101	DPF	X	X			X		X	X		X	25
400°	ROT038.16S	101	DPF	X	X				X	X	X		X	40
400°	ROT040.18S	101	DPF	X	X				X	X	X		X	40
400°	ROT050.10S	101	DPF	X	X				X	X	X		X	40
600°	ROT045.19	133	SCR (AdBlue)	X	X		Simultaneous scrolling	X			X		X	25
600°	ROT045.21	133	SCR (AdBlue)	X	X			X			X		X	25
Continuous	ROT045.19MCSS	176	SCR (AdBlue)	X	X		Independent telehandler		X	X	X	X		40
Continuous	ROT045.21MCSS	176	SCR (AdBlue)	X	X				X	X	X	X		40
Continuous	ROT040.26MCSS	176	SCR (AdBlue)	X		X			X	X	X	X		40
Continuous	ROT050.16MCSS	176	SCR (AdBlue)	X	X				X	X	X	X		40
Continuous	ROT060.24MCSS	176	SCR (AdBlue)	X		X			X	X	X	X		40
Continuous	ROT040.30MCSS	176	SCR (AdBlue)	X		X			X	X	X	X		40



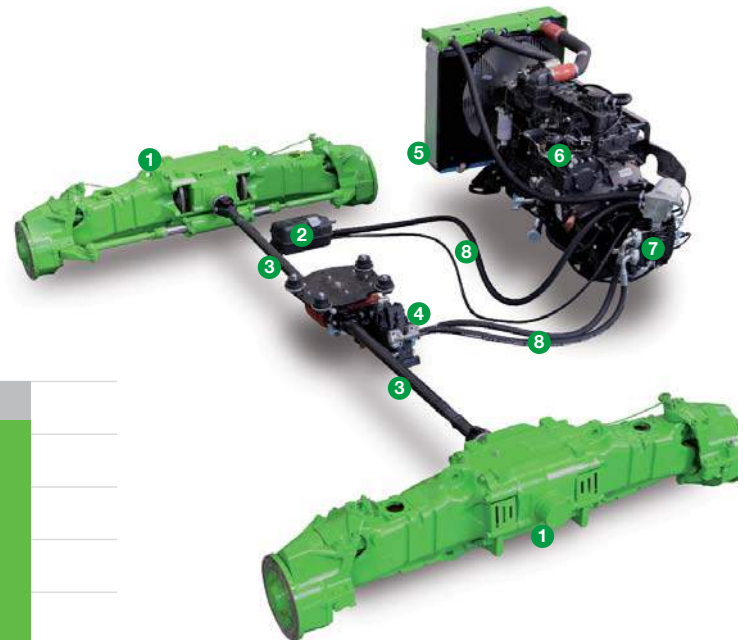
Merlo EPD as standard:
consumption reduced
by 18%

Merlo EPD System - Eco Power Drive

Energy saving of 18% in movement and driving

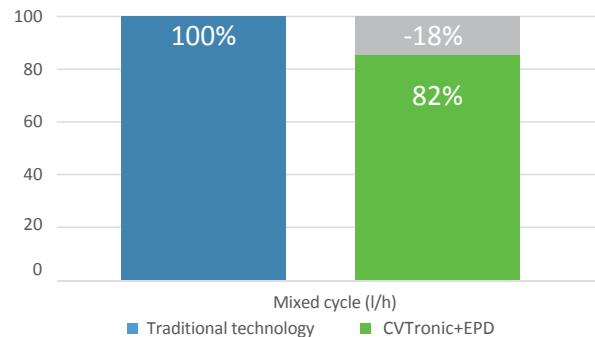
As standard, the entire Roto family comes with the patented Merlo system known as EPD (Eco Power Drive), which automatically manages the hydrostatic transmission and the diesel engine with the EPD control unit, placed between the injection pump and the accelerator pedal. The operator sets the speed and the control unit manages the engine rpm to reach the pre-set speed, optimising the engine rpm. This makes it possible to save energy which results in a reduction in consumption. The driver refers to a potentiometer for manually setting the engine revs in relation to operating requirements.

- 1 - Axle
- 2 - Hydrostatic oil tank
- 3 - Propeller shaft
- 4 - Hydrostatic engine
- 5 - Radiators
- 6 - Diesel engine
- 7 - Hydrostatic pump
- 8 - Hydraulic pipelines



Reduction in consumption

Merlo CVTronic technology + EPD



Potentiometer to manually set diesel engine rpm

- **EPD as standard:** ensures reduced consumption by 18% during movement and driving
- **Electronic rpm** management (top photo)
- Tier 4 Interim engines from **74.5 kW (101 HP)** to **132.3 kW (176 HP)**

Tier 4 Interim ROTO 400° Engines

The charge of 101 HP, compact and reliable

- ✓ 4 cylinders, 3.8 litres, 74.5 kW (101HP) 2,600 rpm
- ✓ Torque 390 Nm at 1600 rpm
- ✓ Common-Rail and direct injection
- ✓ Electronic management.
- ✓ Equipped with DOC (Diesel Oxidation Catalyst) catalytic converter and a particulate filter with active regeneration (DPF)



Practical and intuitive DPF filter regeneration

The particulate filter (DPF) traps the particulate matter (PM) contained in exhaust gas in order to reduce fine particle pollutant emissions by diesel engines.

Two possible regeneration modes:

- ✓ Automatic
- ✓ Manual

Button for manual regeneration

activated by pressing the button for two seconds **1**.



- Roto 400° telehandlers use a compact **Tier 4 Interim** engine, to **reduce consumption**
- Tier 4 Interim Engines **3.8 litres, Common Rail** with **electronic management**
- **Post-treatment of gas with DOC + DPF**
- **DPF filter Regeneration** automatic or manual

Tier 4 Interim ROTO 600° and MCSS Engines

Power and efficiency

Roto 400° and 600° use an engine with 4 cylinders and 4.5 litres, electronically managed Common-Rail direct injection with two dedicated calibrations:

- ✓ ROTO 600 – 89 kW (122 HP) at 2200 rpm – 98kW (133 HP) at 1850 rpm
- ✓ ROTO MCSS – 125 kW (170 HP) at 2200 rpm 129kW (176 HP) at 2000 rpm



SCR (Selective Catalytic Reduction)

This system uses a catalyser that exploits a chemical reaction between the polluting agents and a mixture of Water and Urea, reducing NOx emissions according to the Tier 4 Interim standards.



The Urea tank (A) holds 25 litres, sufficient for two diesel fill-ups. A light on the instrument panel signals whether a refill is needed.

NOTE: the urea is found on the market as AdBlue®

• Roto 600°_e MCSS

Unique **4.5 litre** engine
with **133 HP** Roto 600°
and **176 HP** Roto MCSS

- **SCR post-treatment technology:** reliable, provides excellent performance and low operating consumption

- the cost of the urea is compensated by **energy savings**

ROTO cab 400° and 600° series

- 1. Analogue-digital instrument panel
- 2. Electromechanical joystick
- 3. Stabilisers and levelling management console
- 4. Finger Touch reverse shuttle
- 5. Glove box



The record-breaking cab is more up-to-date than ever

More space on board offered as standard

The Merlo cab is known for ease of access to the driver's side and for its on board roominess. Measuring 1010 mm, it is the largest in the category and allows maximum comfort, even for more robust operators. The machine's architecture, the low centre of gravity and the tapered hood ensure excellent visibility in every direction. The operator can visually follow the load to its maximum height, thanks to the transparent top. The cab is equipped with a powerful A/C and heating system, making it possible to maintain the ideal temperature of 22°, even when operating in extreme external temperatures. The door is fitted with an opening window for better natural ventilation. The controls are practical and reasonably arranged. A new analogue-digital instrument panel has been adopted to provide precise and punctual information.



Analogue-digital instrument panel

Machine stability check indicator



The machine stability condition is constantly displayed on the light signal system in the cab (25), which has 3 information sectors

- 1.: the machine is in stabile operating conditions
- 2.: the machine is reaching its stability limit
- 3.: the machine has reached its stability limit with a corresponding blocking of the aggravating movements switching on of the red LED, the buzzer in the cab and the light (see image below) on the instrument panel



- **1010 mm** wide. The **largest cab** in the **category**
- **Access** to the driver's side **facilitated** by a wide door (770 mm) and steering wheel/seat floor clearance
- **360° visibility**. Transparent top allows you to follow the load to the max height
- New analogue-digital **instrument panel**
- Management **console** for stabilisers and levelling



ROTO MCSS Cab

- 1. Merlin System instrument panel
- 2. Electronic joystick on armrest
- 3. Stabilisers and levelling management console
- 4. Finger Touch reverse shuttle
- 5. Glove box

MCSS cab

Electronic joystick and Merlin system



The MCSS version uses the joystick on the reclining armrest. The right console contains the display, the Merlin interactive instrument panel and the control panel for the telehandler stabilisers.



Interactive Merlin system instrument panel

- The MCSS uses the **Merlin System** (Merlo Interactive Network equipped with digital screen)
- The instrument panel has buttons for interactive management of the main parts of the machine and graphic display
- The **MCSS console** is specifically for telehandler stabiliser management
- Second **armrest with Joystick** (opt) allows multiple operations to speed up operations



The second armrest with joystick (optional) allows extension of the boom, carriage angling and control of the attachments.

The combined action with the basic joystick (image on the right) speeds up operations for better productivity.

Tilting cab as standard on Roto 60.24 MCSS, 40.26 MCSS and 40.30 MCSS

Greater productivity and comfort

From the driver's seat, the operator presses the dedicated button to activate cab tilting. The longitudinal tilting reaches 18° and makes it possible to monitor load movements when working at height. This system (**Merlo exclusive**) guarantees:

- ✓ More comfort
- ✓ Better ergonomics
- ✓ Increased safety



The switch located on the control console allows:

- A) Cab ascent
- B) Cab descent

Advanced pneumatic suspension system and axles

Comfort, versatility and safety



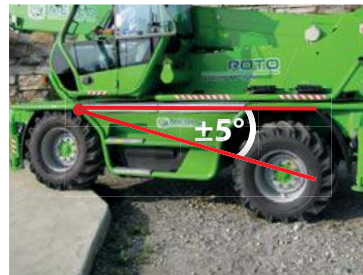
Axles entirely designed and built by Merlo

There are two types of axles: with planetary gear units for 60.24 MCSS and 40.30 MCSS models portal axles for the rest of the Roto range. Every axle has two dry brakes, designed to ensure maximum efficiency, reducing consumption. Merlo also offers parking brakes as standard, which automatically engage when the diesel engine is turned off.

Electronic Active Suspension (EAS) for safe transport

To handle driving on rough terrain, Merlo has designed the EAS System, consisting of 4 hydraulic cylinders, a quadrilateral with longitudinal arms and an electronically managed hydropneumatic circuit.

The system's versatility allows the operator to manually set both lateral and longitudinal tilting as shown in the dedicated box.



Manual EAS set-up Lifting on tyres

When lifting on tyres and on sloping ground, the operator sets the suspensions laterally up to $\pm 9^\circ$, and longitudinally up to $\pm 5^\circ$, so as to lift loads on wheels and in total safety.

ROTO stabilisers

The entire family is equipped with automatic stabilisation and levelling as standard



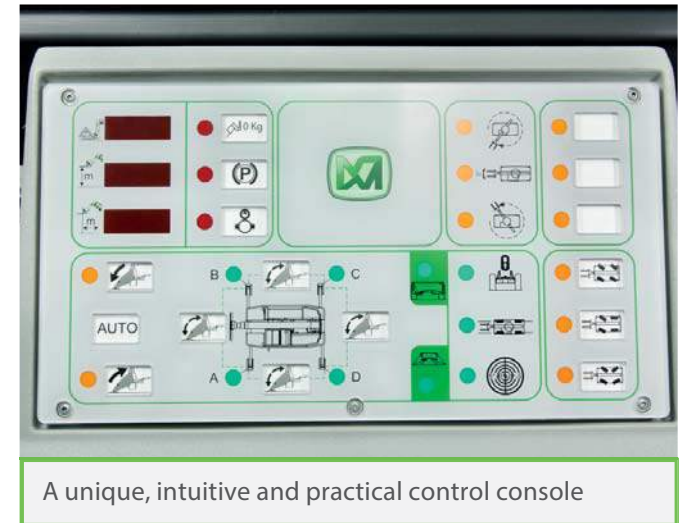
ROTO 400°



ROTO 600°



ROTO MCSS



A unique, intuitive and practical control console

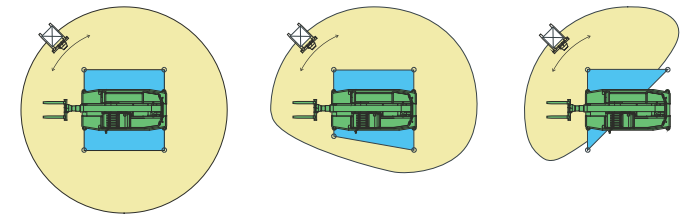
- **Three types of stabilisers**

- The stabilisers are **practical** elements and are **simple** to **activate** by the operator

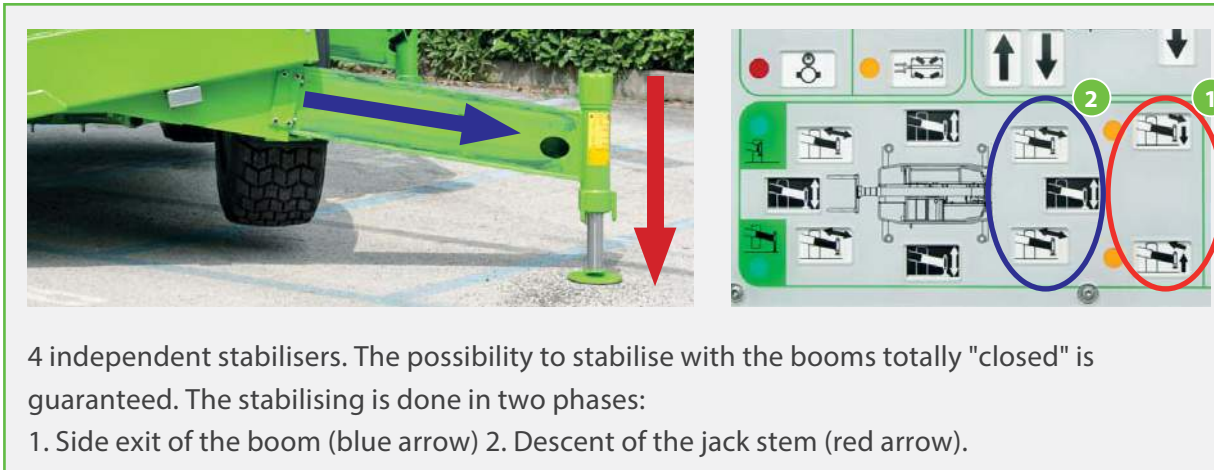
- **The controls** are located in a **safe position**, so as to avoid **accidental activation** of the stabilisers

MCSS stabilisation system

Easy, intuitive and safe



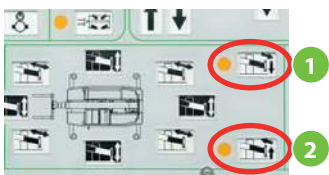
The stabiliser arms can be extended depending on the work area. The Merlin system is also available to manage the dynamic balance of the load, automatically and in real time



4 independent stabilisers. The possibility to stabilise with the booms totally "closed" is guaranteed. The stabilising is done in two phases:
1. Side exit of the boom (blue arrow) 2. Descent of the jack stem (red arrow).



Management of the jacks (independent in the front and in a pair in the back) to obtain chassis levelling.



Keep button 1 pressed for three seconds to activate the **self-stabilising** mode. Button 2 activates self-retraction.



Self-levelling is carried out automatically at the completion of self-stabilisation, ensuring that the chassis is horizontal for maximum operating safety.

- All Roto models are fitted with a **console to manage** the stabilisers
- On the **MCSS** models, the telehandler stabilisers can be positioned at **any width**
- The MCSS models offer **manual levelling** of the stems of the **vertical jacks**
- **Automatically**, the self-stabilising and self-levelling are activated

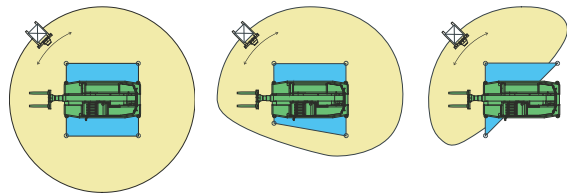
Merlin - Merlo Local Interactive Network

Interactive system that displays several levels of information for safety and productivity



Geometry of the machine and position of load

On a special screen, Merlin shows the position and displacement of the centre of gravity. The system monitors the machine's stability and shows its geometric configuration (position of the load). The stabilisers can be positioned according to the surface available and the morphology of the ground



Footprint of the stabilisers

The Merlin system adjusts the load chart based on the footprint of the stabilisers and verifies the machine's stability automatically and in real time.



Maintenance and diagnostics

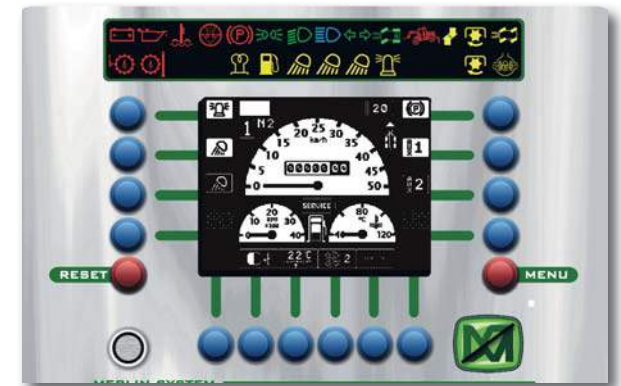
The third and fourth screens of the Merlin system are for monitoring, respectively:

- ✓ Routine maintenance
- ✓ System anomalies (diagnostics)



Work area programming

Allows you to program the work area and rotation angle of the turret to facilitate operations in repetitive jobs and increase operating safety, blocking movements outside the set area



The Merlin system displays the main information of the instrument panel

- The **Merlin instrument panel** comes with buttons and an integrated display
- **Nine menus** that can be selected interactively
- Merlin ensures a **high diagnostic level** on board the machine
- The Merlin system adjusts the load chart, manages the dynamic balance in real time, and graphically and numerically shows the load stability details

MerloMobility: innovative and modern management system

Knowledge is essential; just click!

Merlo offers a dedicated, efficient and punctual service with the data managed by a protected data processing centre.

The MerloMobility functions can be summarised as follows:



Logistics: fleet management

With the main screen, the customers can view all of their vehicles on the map.

Anti-theft device

Allows customers to receive notification whenever a "theft risk" event occurs, such as:

- ✓ Ignition override
- ✓ Cutting of cables
- ✓ Entrance/Exit from work area



• Telemetry

This function provides access to the following functions:

- ✓ Virtual instrument panel: monitors the geometric status of the machine in real time
- ✓ Logbook: access to the entire machine history, exported by Excel.
- ✓ Maintenance management
- ✓ Planning of routine maintenance to ensure maximum efficiency
- ✓ Possibility to carry out remote pre-diagnosis by authorised warehouses



- The system uses a **GSM module** to communicate with the centre and a **GPS module** for localisation.

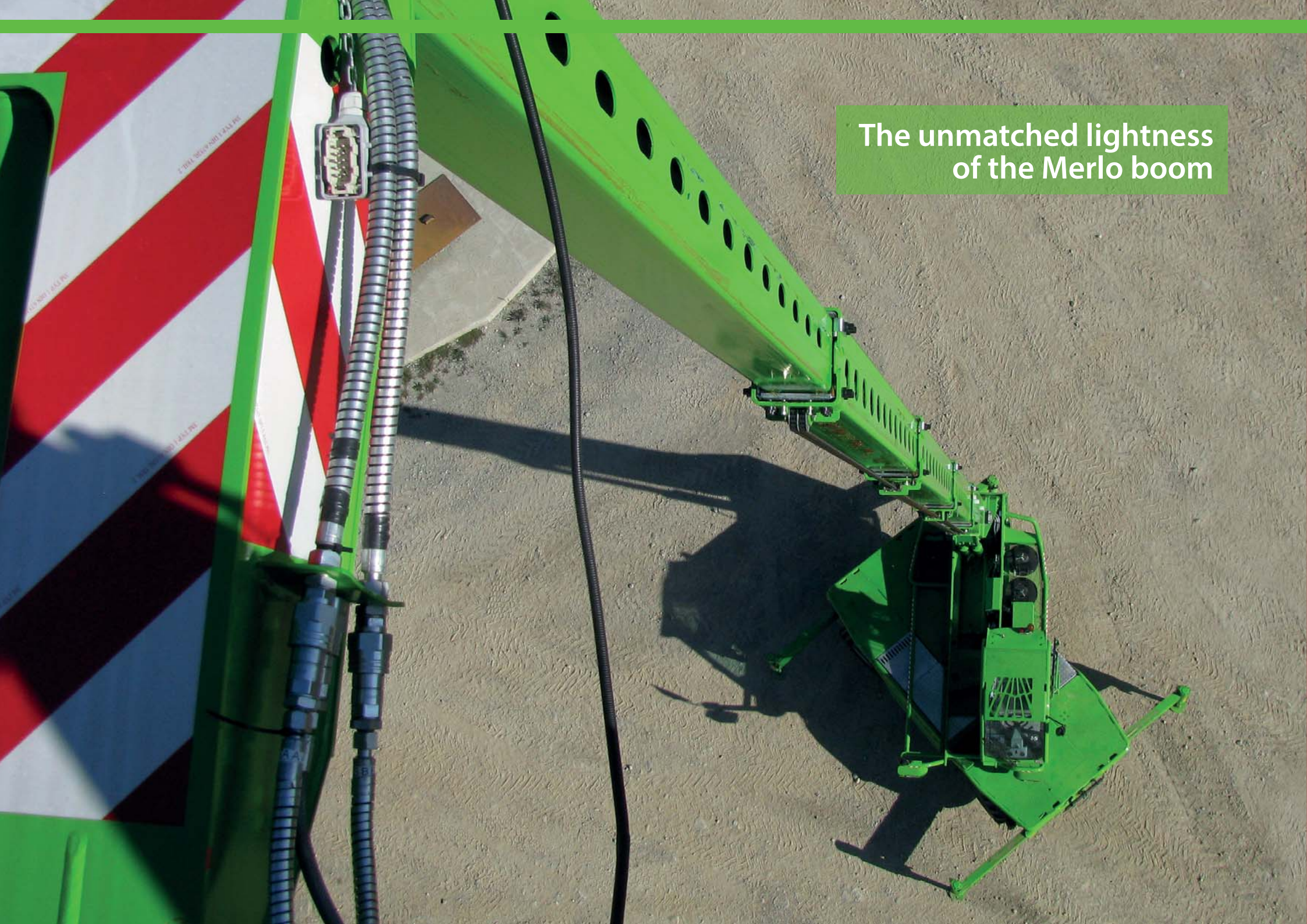
- **Access** to the system through a **protected** internet connection

- **Services** offered by MerloMobility:

- Logistics
- Anti-theft
- Diagnostics
- Telemetry

- Allows **monitoring** of all the parameters and functionalities **remotely** using internet access from a PC or dedicated Apps for handheld devices or Smartphones

The unmatched lightness
of the Merlo boom



Merlo precision and technology

An original, effective and cutting-edge boom

Merlo produces the booms mounted on its telehandlers in-house and has developed unique technologies to make them strong yet lightweight. The panels of the boom are welded on the neutral axis, an area with less strain. The stem movement cartridge system is well protected inside the boom, thanks to a patented solution, while the pipes and cables are also located inside the boom, protected from accidental impact. With the Merlo boom, the operator can place the load as precisely as possible, trusting in its maximum reliability and durability.



The two-way radio control allows the operator to remotely manage the machine



The Tac-Lock system allows hydraulic locking of the attachment from the cab, making it possible to change attachments quickly and safely.



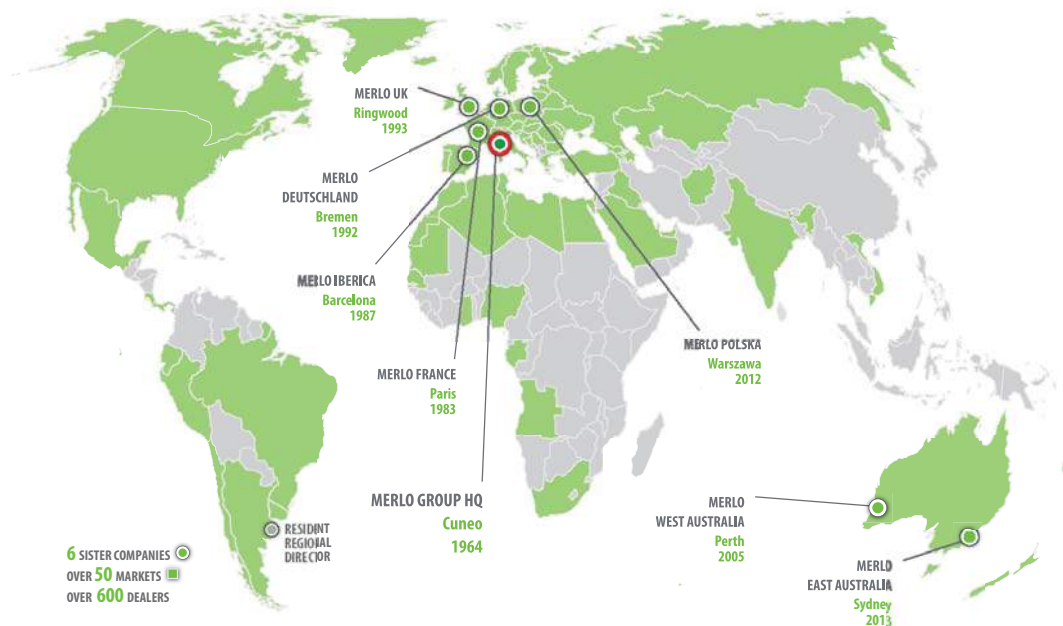
Pipes, electric cables and auxiliary hydraulic sockets are located inside the boom to ensure maximum protection.



Variable displacement pump with Load Sensing distributor and Flow-sharing allows:

- ✓ • Multiple movements with high precision
- ✓ • Energy savings / lower consumption
- ✓ • Reduced wear of components.

- **Lightweight structure** with high torsional stiffness
- Cartridge system to **facilitate maintenance**
- Extension system and components are well **protected** inside the boom
- **Tac-Lock**: hydraulic attachment clamping system from the cab
- **Flow-Sharing** distributor: to manage three movements together

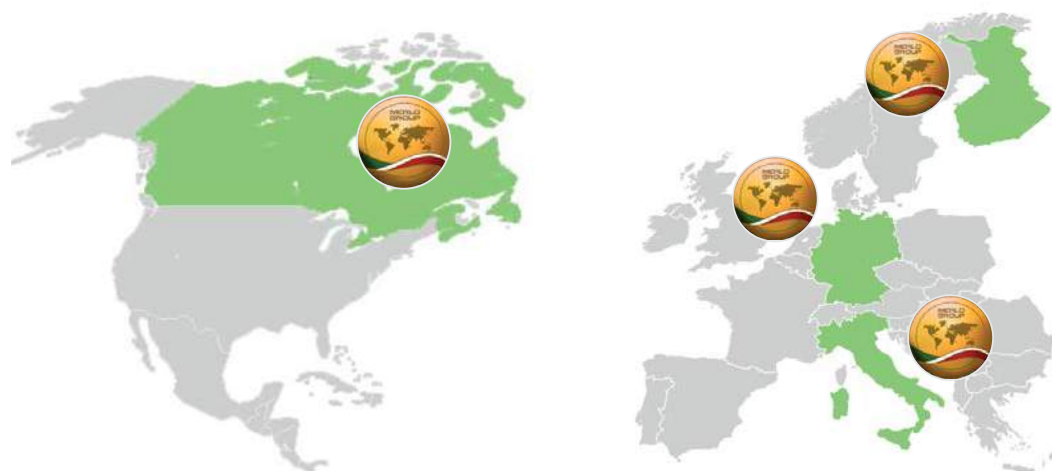


TRAINING CENTRE

The Merlo Training and Research Centre (CFRM) has made safety training and instruction in the use of the machine its mission. The CFRM provides training courses for operators of person-carrying overhead platform, forklift trucks, telehandlers, cranes, earth-moving machinery, agricultural and forestry tractors, snow ploughs and urban cleaning vehicles.

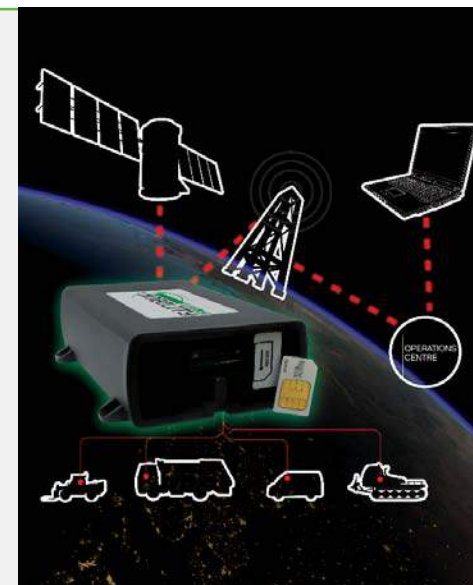


Countries where Merlo is a market leader



MOVIMATICA MERLO INFOMOBILITY

Is the new system, conceived and built within the Merlo Group, for managing vehicles: it enables GPS radio-localisation in real time, monitoring operation and use, receive and manage malfunction or burglar alarms and also send commands for handling events via the internet.



THE MERLO WORLD

In a globalised world, **the customer always comes first!**

From excellent products to excellent service. In 2008, Merlo has adapted its production process to meet the needs of the ISO 9001 quality control system. The process is perfected and improved continuously.

At the same time, the foundations have been laid to put the Customer first, implementing investments aimed at Services such as Financing, Training Assistance, Spare parts and Telematic Means such as remote diagnostics, thanks to the Merlo Mobility project.

Automatic spare parts warehouse	2011	2014
Storage volume	1000 m ³	10.000 m ³
Filling	100%	85%
Percentage of codes managed	50%	86%
Percentage of Lines managed	65%	94%
Pick-up time	90"	30"
Number of codes	8.000	17.000

NEW PARTS CENTRE

The new spare parts warehouse covers an area of 7,000 m², with storage capacity for of 10,000 m³ for a total of 20,000 different codes. Furthermore, it can automatically manage 94% of the order lines that are processed daily, with an average withdrawal time of 30" per line.

The first fill per order line is over 99% with delivery times for urgent orders within 24 hours.



Order processing and shipment area

Space System and overhead platform

Safety above ground

The successful use of Roto telehandlers in the most varied movements in building sites has been confirmed by the numerous Merlo systems for living people and attachments: from the Space System - the high-tech overhead platform equipped with independent telescopic boom and swing - to the countless other lifting devices with person-carrying platforms.



The hydraulic rotation around the vertical axis of many Merlo overhead platforms allows work with the machine tilted



Regardless of the type of platform being used, the operator controls all movements from on board the platform



The swing of the Space System platform handling boom allows access to points that would otherwise be difficult to reach



The Space System can be transported directly on the road on the Roto handler



In some Merlo overhead platforms, the useful width is variable, thanks to the practical and patented extension system, which can be operated even at height



The Space System makes it possible to operate at a negative level of over 9 meters below street level

From the idea to development of multi-applicability

More efficiency and productivity thanks to Merlo

Merlo adopts simple and effective guidelines in the evolution of the product.

From conception to development, everything is studied, designed and created in the Group's plants. This simple "rule" also applies to attachments.

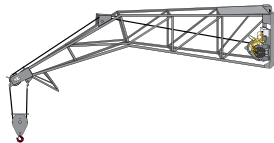
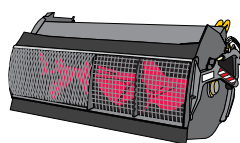
Backed by years of experience, Merlo's technicians have developed a wide range of attachments, divided by type and load capacity.

The multi-function Merlo systems, immediately operative in a multitude of different applications, are among the most advanced technology to offer efficiency, comfort and above all, safety in everyday work.

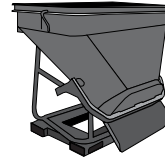
CARRIAGE-MOUNTED HOOK



FLY JIB WITH WINCH

MIXING BUCKET
FOR CONCRETE

CONCRETE BUCKET



LIFTING BOOM



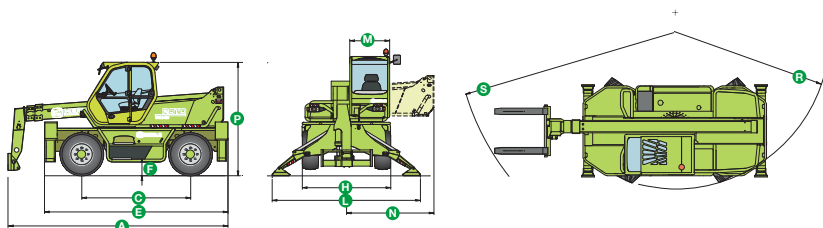
WINCH



THREE-SIDED EXTENDIBLE PLATFORM



ROTO 38.14, ROTO 38.14 S

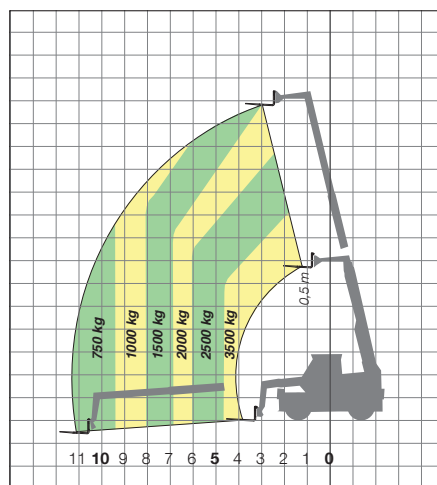
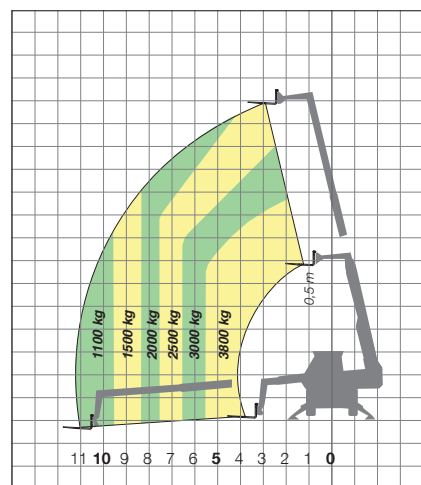


DIMENSIONS ROTO 38.14 / ROTO 38.14 S

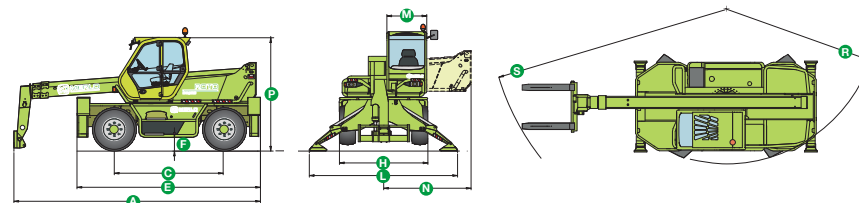
A (mm)	5565	H (mm)	2240	P (mm)	2850
C (mm)	2760	L (mm)	3750	R (mm)	3920
E (mm)	4645	M (mm)	995	S (mm)	5380
F (mm)	350	N (mm)	2220		

ROTO 38.14, ROTO 38.14 S
FORKS ON STABILISERS ON 360°

ROTO 38.14, ROTO 38.14 S
FORKS ON FRONT TYRES



ROTO 38.16, ROTO 38.16 S

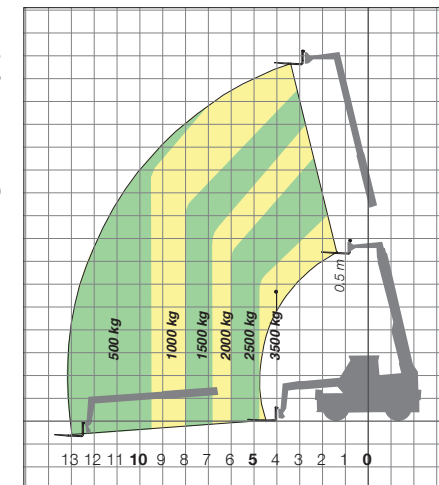
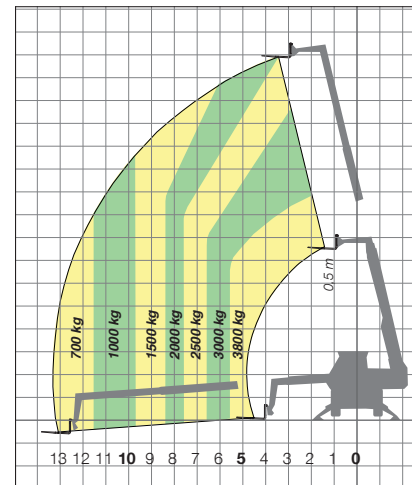


DIMENSIONS ROTO 38.16 / ROTO 38.16 S

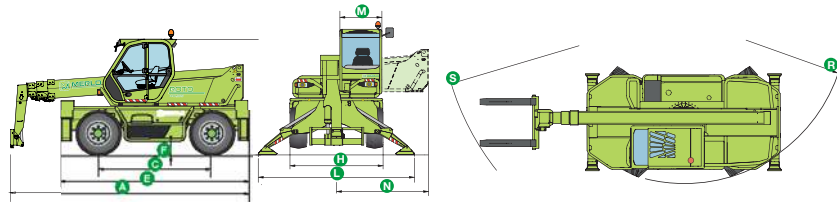
A (mm)	6240	H (mm)	2240	P (mm)	3020
C (mm)	2760	L (mm)	3750	R (mm)	4050
E (mm)	4645	M (mm)	995	S (mm)	6000
F (mm)	350	N (mm)	2220		

ROTO 38.16, ROTO 38.16 S
FORKS ON STABILISERS ON 360°

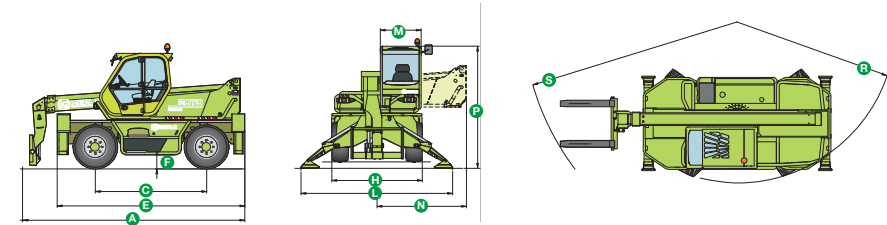
ROTO 38.16, ROTO 38.16 S
FORKS ON FRONT TYRES



ROTO 40.18 S



ROTO 50.10 S



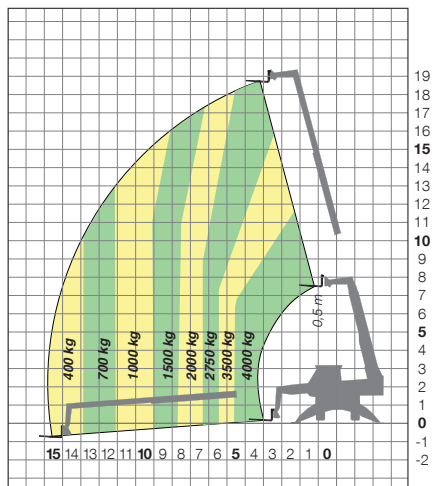
DIMENSIONS ROTO 40.18 S

A (mm)	5977	H (mm)	2240	P (mm)	2960
C (mm)	2760	L (mm)	3750	R (mm)	3920
E (mm)	4645	M (mm)	995	S (mm)	5750
F (mm)	350	N (mm)	2220		

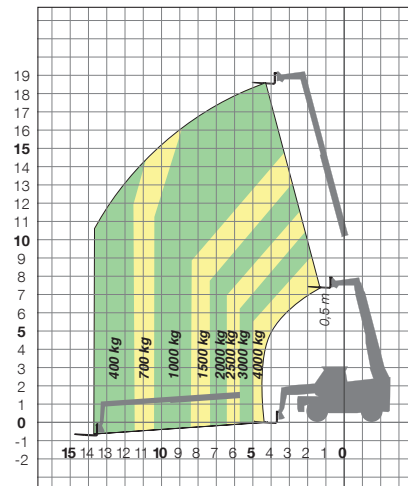
DIMENSIONS ROTO 50.10 S

A (mm)	5340	H (mm)	2240	P (mm)	2850
C (mm)	2760	L (mm)	3750	R (mm)	3920
E (mm)	4645	M (mm)	995	S (mm)	5190
F (mm)	350	N (mm)	2220		

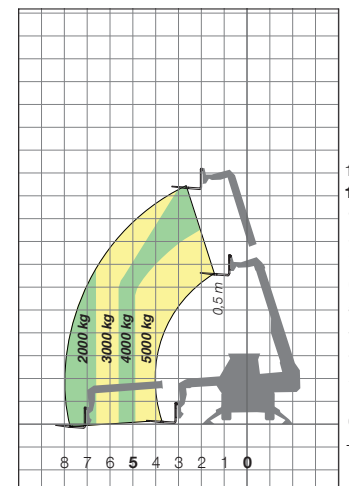
ROTO 40.18 S
FORKS ON STABILISERS ON 360°



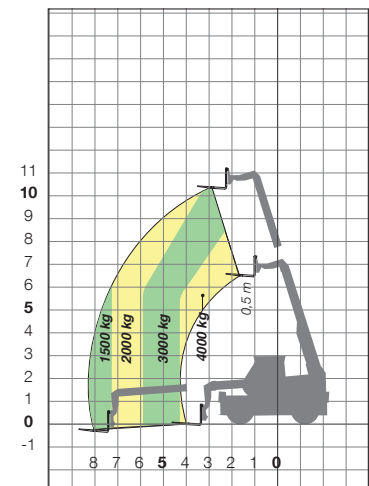
ROTO 40.18 S
FORKS ON FRONT TYRES



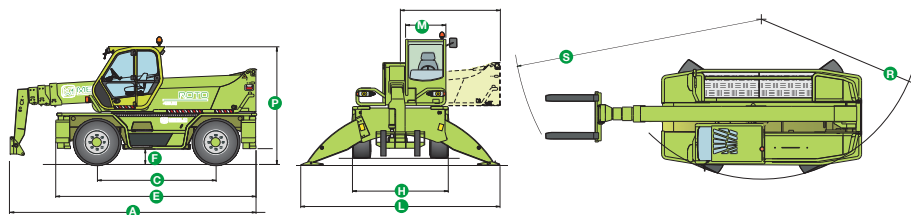
ROTO 50.10 S
FORKS ON STABILISERS ON 360°



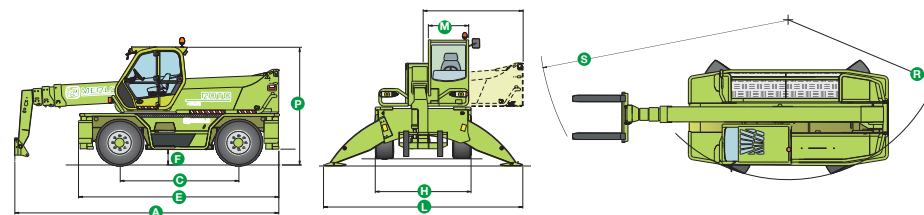
ROTO 50.10 S
FORKS ON FRONT TYRES



ROTO 45.19



ROTO 45.21



ROTO 45.19 DIMENSIONS

A (mm)	6075	H (mm)	2400	P (mm)	2980
C (mm)	2970	L (mm)	5030	R (mm)	4050
E (mm)	5060	M (mm)	995	S (mm)	5150
F (mm)	430	N (mm)	2505		

ROTO 45.21 DIMENSIONS

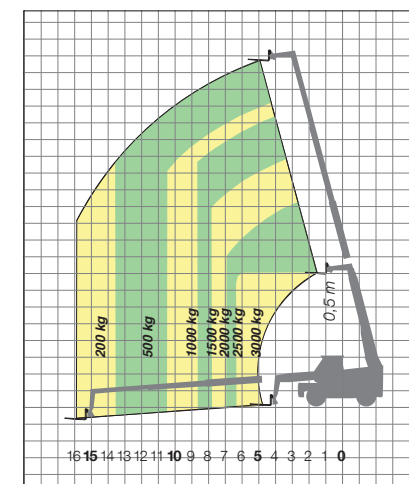
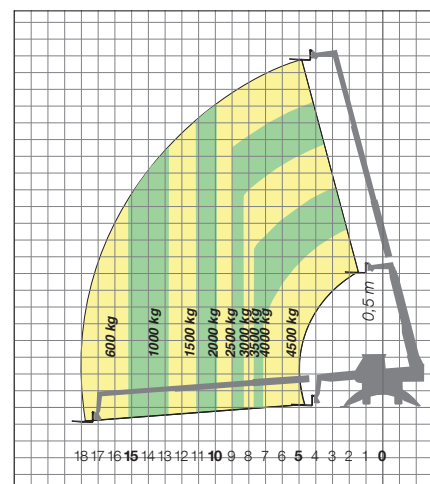
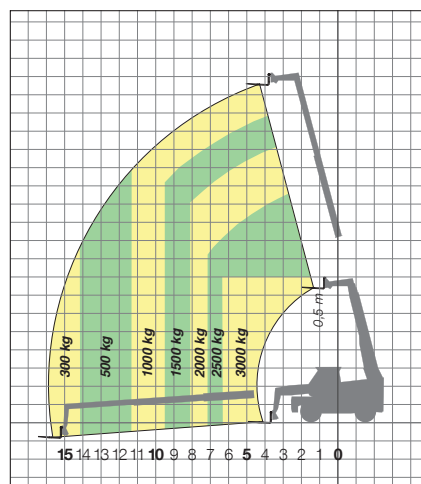
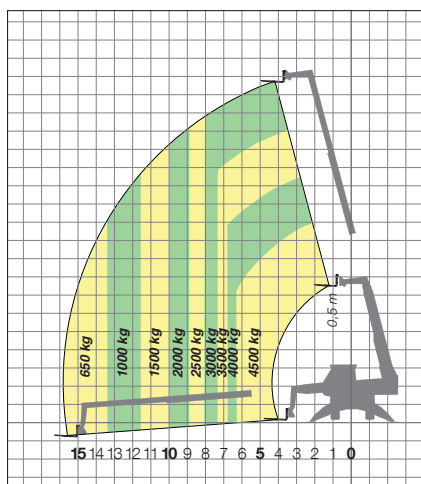
A (mm)	6600	H (mm)	2400	P (mm)	2980
C (mm)	2970	L (mm)	5030	R (mm)	4050
E (mm)	5060	M (mm)	995	S (mm)	6100
F (mm)	430	N (mm)	2505		

ROTO 45.19
FORKS ON STABILISERS ON 360°

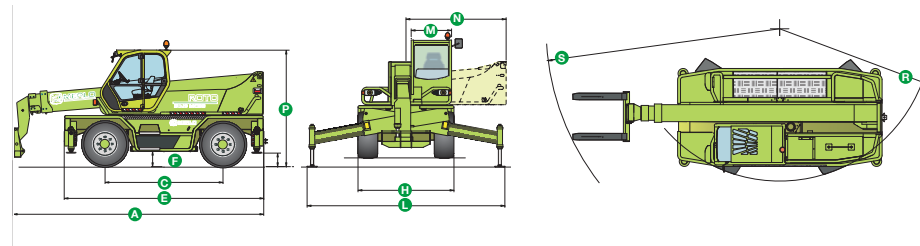
ROTO 45.19
FORKS ON FRONT TYRES

ROTO 45.21
FORKS ON STABILISERS ON 360°

ROTO 45.21
FORKS ON FRONT TYRES



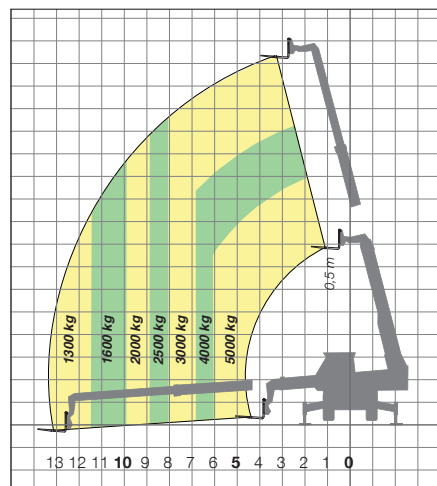
ROTO 50.16 MCSS



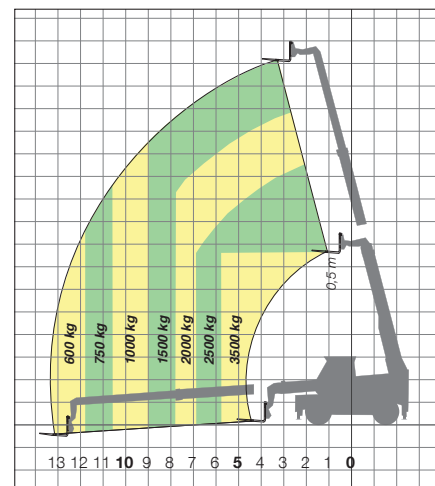
DIMENSIONS - ROTO 50.16 MCSS

A (mm)	6380	H (mm)	2400	P (mm)	2950
C (mm)	2990	L (mm)	4950	R (mm)	4050
E (mm)	5030	M (mm)	995	S (mm)	5900
F (mm)	330	N (mm)	2505		

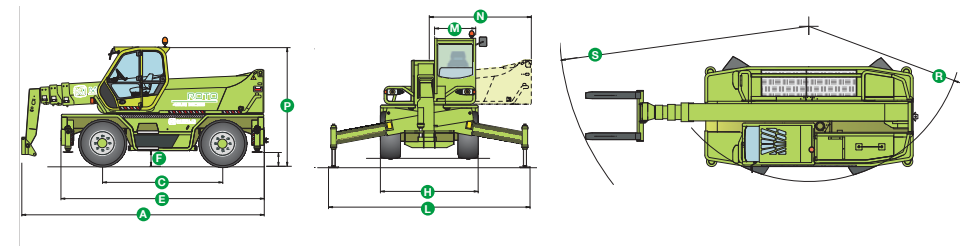
ROTO 50.16 MCSS
FORKS ON STABILISERS ON 360°



ROTO 50.16 MCSS
FORKS ON FRONT TYRES



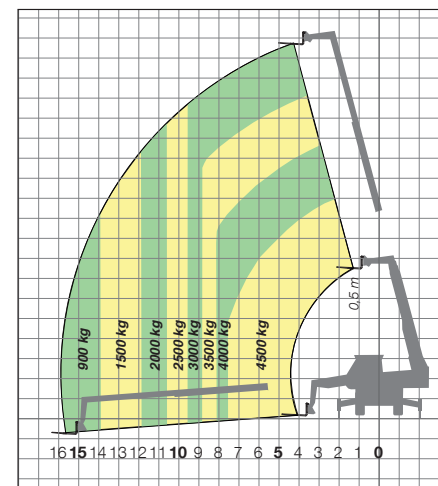
ROTO 45.19 MCSS



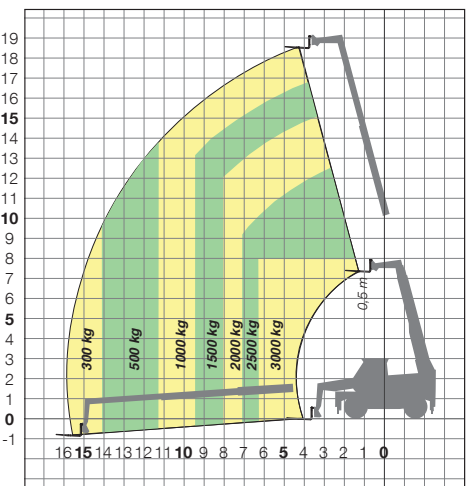
DIMENSIONS - ROTO 45.19 MCSS

A (mm)	6075	H (mm)	2400	P (mm)	2950
C (mm)	2990	L (mm)	4950	R (mm)	4050
E (mm)	5030	M (mm)	995	S (mm)	5150
F (mm)	330	N (mm)	2505		

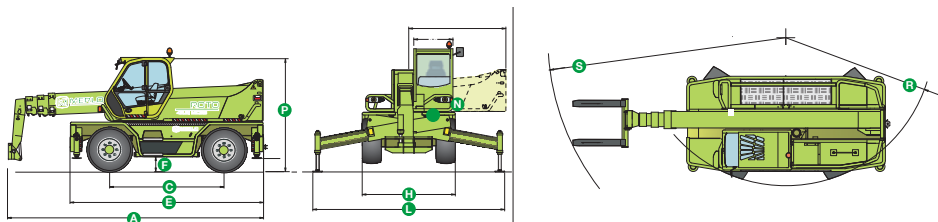
ROTO 45.19 MCSS
FORKS ON STABILISERS ON 360°



ROTO 45.19 MCSS
FORKS ON FRONT TYRES



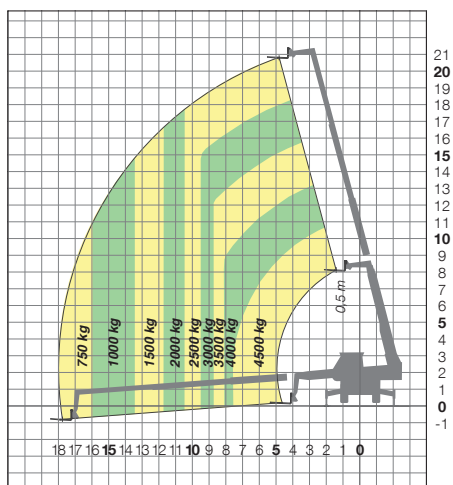
ROTO 45.21 MCSS



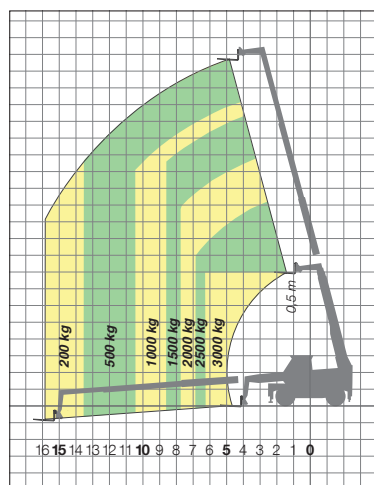
DIMENSIONS - ROTO 45.21 MCSS

A (mm)	6980	H (mm)	2400	P (mm)	2990
C (mm)	2990	L (mm)	4950	R (mm)	4050
E (mm)	5030	M (mm)	995	S (mm)	6580
F (mm)	330	N (mm)	2505		

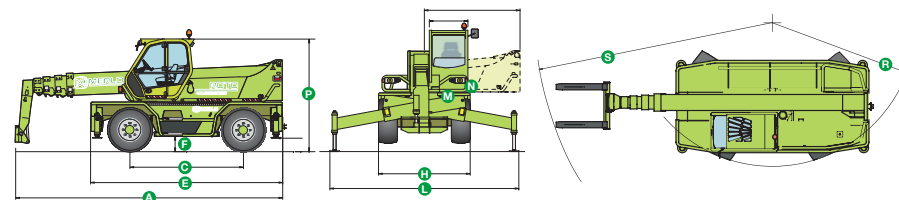
ROTO 45.21 MCSS
FORKS ON STABILISERS ON 360°



ROTO 45.21 MCSS
FORKS ON FRONT TYRES



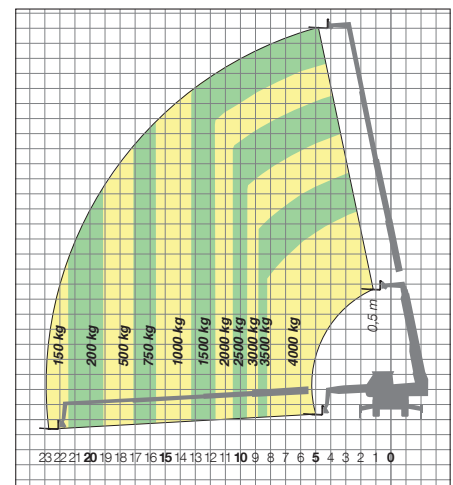
ROTO 40.26 MCSS



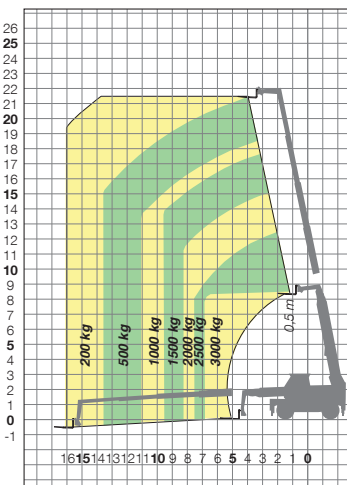
DIMENSIONS - ROTO 40.26 MCSS

A (mm)	6980	H (mm)	2400	P (mm)	2990
C (mm)	2990	L (mm)	4950	R (mm)	4050
E (mm)	5030	M (mm)	995	S (mm)	6580
F (mm)	330	N (mm)	2505		

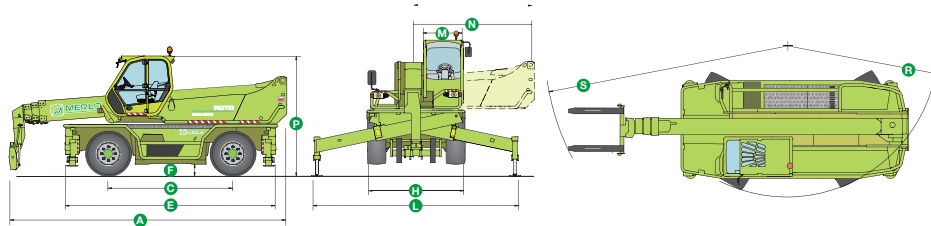
ROTO 40.26 MCSS
FORKS ON STABILISERS ON 360°



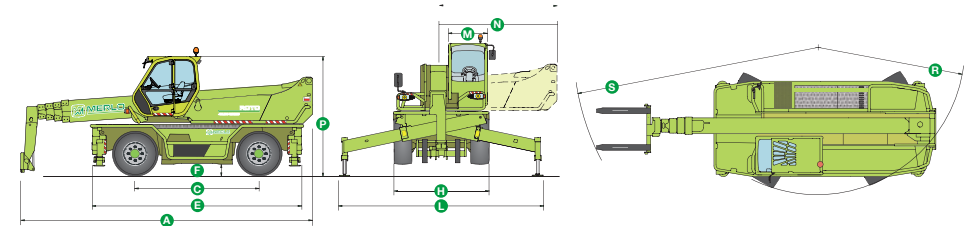
ROTO 40.26 MCSS
FORKS ON FRONT TYRES



ROTO 60.24 MCSS



ROTO 40.30 MCSS



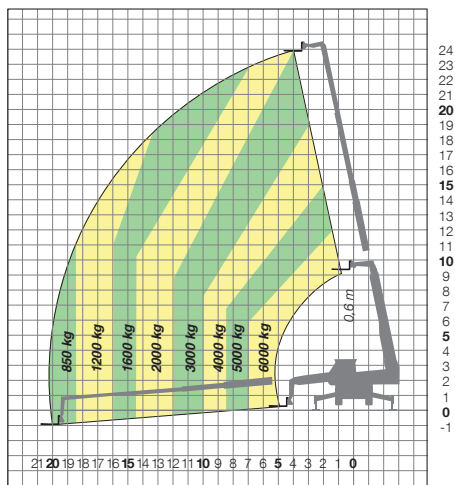
DIMENSIONS - ROTO 60.24 MCSS

A (mm)	7430	H (mm)	2490	P (mm)	3100
C (mm)	3200	L (mm)	5275	R (mm)	4450
E (mm)	5540	M (mm)	995	S (mm)	6500
F (mm)	300	N (mm)	3000		

DIMENSIONS - ROTO 40.30 MCSS

A (mm)	7560	H (mm)	2490	P (mm)	3100
C (mm)	3200	L (mm)	5275	R (mm)	4450
E (mm)	5540	M (mm)	995	S (mm)	6700
F (mm)	300	N (mm)	3000		

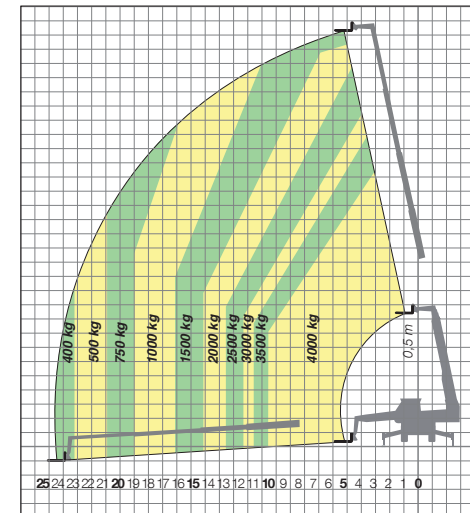
ROTO 60.24 MCSS
FORKS ON STABILISERS ON 360°



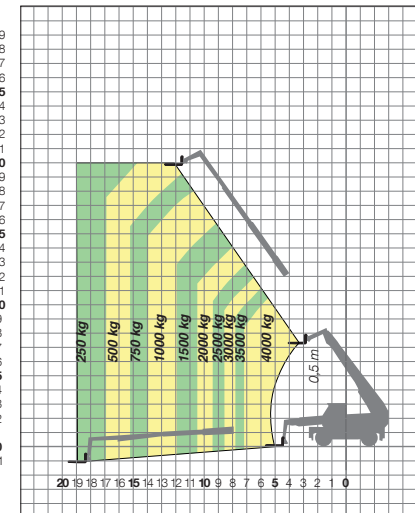
ROTO 60.24 MCSS
FORKS ON FRONT TYRES



ROTO 40.30 MCSS
FORKS ON STABILISERS ON 360°



ROTO 40.30 MCSS
FORKS ON FRONT TYRES



TECHNICAL INFORMATION	50.10S	38.14 38.14S	38.16 38.16S	40.18S	45.19	45.21	50.16 MCSS	45.19 MCSS	45.21 MCSS	60.24 MCSS	40.26 MCSS	40.30 MCSS
Auxiliary hydraulic service on boom	●	●	●	-	●	●	●	●	●	●	●	●
Two floating forks (length 1200 mm)	●	●	●	-	●	●	●	●	●	●	●	●
Hydrostatic transmission	●	●	●	-	●	●	●	●	●	●	●	●
Hydrostatic oil tank (l)	12	12	12	12	12	12	12	12	12	12	12	12
Finger-Touch reverse shuttle	●	●	●	●	●	●	●	●	●	●	●	●
Permanent four-wheel drive	●	●	●	●	●	●	●	●	●	●	●	●
Four-wheel steering	●	●	●	●	●	●	●	●	●	●	●	●
Disc service brakes	●	●	●	●	●	●	●	●	●	●	●	●
Automatic parking brake	●	●	●	●	●	●	●	●	●	●	●	●
Tyres	405/70-20				18-22.5				445/65-22.5	18-22.5	445/65-22.5	
Remote control	○	○	○	○	○	○	○	○	○	○	○	○
Tyre seat	○	○	○	○	○	○	●	●	●	●	●	●
Rear differential locking	○	○	○	○	○	○	○	○	○	○	○	○
Four working headlights on cab (2A + 2P)	○	○	○	○	○	○	○	○	○	○	○	○
Manual air conditioning	○	○	○	○	○	○	○	○	○	○	○	○
Windscreen wiper on roof window	○	○	○	○	○	○	○	○	○	○	○	○
Provision for platform	●	●	●	●	●	●	●	●	●	●	●	●
Front and upper blinds	○	○	○	○	○	○	○	○	○	○	○	○

Performances refer to the machine equipped with forks, operating on stabilisers.

- (1) S version. In the basic models the weight is 300 kg less; (2) Tower-Jib version with maximum capacity of 800 kg and max lifting height of 31.7 m;
 (3) $\pm 208^\circ / \pm 300^\circ$ compared to the longitudinal axis of the vehicle; (4) S version. The basic model offers a maximum speed of 7 km/h;
 (5) S version. The basic model offers a maximum speed of 25 km/h; (6) Version S. The basic model does not have suspensions.
 ● As standard. ○ On request.

The Telehandlers outlined in this documentation can be equipped with optional or special accessories that are not included in standard equipment but only on request.

In certain countries, not all models or attachments may be available because of market or regulatory restrictions.

Technical data and information are up-to-date at the time of printing this documentation. Merlo reserves the right to make modifications arising from natural technological evolution without any obligation on its part.

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50 YEARS OF CONSTANT COMMITMENT TO WORKING TOGETHER WITH YOU

- 1964** - Establishment of the Merlo Group
- 1966** - DM and DBM: the first dumper and the first self-loading concrete mixer
- 1981** - SM: the world's first telescopic handler
- 1987** - Panoramic: the world's first telehandler with side engine
- 1991** - Roto: the world's first telehandler with rotating turret
- 1996** - Turbofarmer: the first telehandler in Europe type-approved as an agricultural tractor
- 1998** - P26: the ultra-compact telehandlers
- 2000** - Multifarmer: the first agricultural tractor with telescopic boom
- 2001** - MM: the first forestry attachment-carrier
- 2010** - Hybrid: the first diesel/electric hybrid telehandler
- 2012** - Modular: a new concept of telescopic handler
- 2013** - Three important awards at the Agritechnica in Hanover:
 - Hybrid 42.7: gold medal for technological innovation
 - Turbofarmer II range: machine of the year 2014
 - Multifarmer 40.9: a milestone in agricultural machinery



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