



MONTINI

SPECIAL ELECTRIC FORKLIFT TRUCKS



NEW 3-WHEEL 48V ELECTRIC FORKLIFT TRUCKS
WITH LOAD CAPACITIES FROM 1000 KG TO 2000 KG:
INNOVATIVE **MR SUPER** SERIES WITH **LITHIUM TECHNOLOGY**

MR 1.0 SUPER - MR 1.2 SUPER
MR 1.6 SUPER - MR 1.8 SUPER - MR 2.0 SUPER

A NEW SERIES WITH TOP PERFORMANCE MORE AND MORE... SUPER!

With its new **MR SUPER** series, MONTINI expands its offering with a new range of special electric counterbalanced forklift trucks, featuring **3 wheels, 48V, load capacities from 1000 to 2000 kg**, available with **lead-acid battery** and **lithium-ion battery**.

Thanks to its high efficiency and versatility, this **series of trucks -composed of 10 models-** is the ideal choice **for custom solutions** capable of **satisfying handling requirements** in heavy duty applications, whether **indoors, in narrow aisles, in truck loading and unloading**, and in production logistics tasks.

MR 1.0-1.2 SUPER LITHIUM

48V | nominal capacity 1000 - 1200 kg at load centre 500 mm | lithium battery 48V-525Ah

Wheelbase (y): 1112 mm	Total width (b1/b2): 1084/1002 mm
Length (l2): 1700 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1334 mm	Seat height (h7): 895 mm

MR 1.6 SUPER LITHIUM

48V | nominal capacity 1600 kg at load centre 500 mm | lithium battery 48V-525Ah

Wheelbase (y): 1325 mm	Total width (b1/b2): 1084/1002 mm
Length (l2): 1913 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1547 mm	Seat height (h7): 895 mm

MR 1.6L-1.8 SUPER LITHIUM

48V | nominal capacity 1600 - 1800 kg at load centre 500 mm | lithium battery 48V-525Ah

Wheelbase (y): 1506 mm	Total width (b1/b2): 1084/1002 mm
Length (l2): 2094 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1728 mm	Seat height (h7): 895 mm

MR 2.0 SUPER LITHIUM

48V | nominal capacity 2000 kg at load centre 500 mm | lithium battery 48V-525Ah

Wheelbase (y): 1506 mm	Total width (b1/b2): 1086/1002 mm
Length (l2): 2094 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1728 mm	Seat height (h7): 895 mm

MR 1.6 SUPER

48V | nominal capacity 1600 kg at load centre 500 mm | lead-acid battery up to 560Ah

Wheelbase (y): 1325 mm	Total width (b1/b2): 1084/1002 mm
Length (l2): 1913 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1547 mm	Seat height (h7): 895 mm

MR 1.6L-1.8 SUPER

48V | nominal capacity 1600 - 1800 kg at load centre 500 mm | lead-acid battery up to 840Ah

Wheelbase (y): 1506 mm	Total width (b1/b2): 1084/1002 mm
Length (l2): 2094 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1728 mm	Seat height (h7): 895 mm

MR 2.0 SUPER

48V | nominal capacity 2000 kg at load centre 500 mm | lead-acid battery up to 840Ah

Wheelbase (y): 1506 mm	Total width (b1/b2): 1086/1002 mm
Length (l2): 2094 mm	Overhead guard height (h6): 2100 mm
Turning radius (Wa): 1728 mm	Seat height (h7): 895 mm

AC TWIN-MOTOR TRACTION, ELECTRIC STEERING, ELECTRO-HYDRAULIC CONTROL VALVE

MONTINI's new **MR SUPER** forklift trucks feature numerous technical solutions as standard supply.

Twin-motor traction with innovative alternating current (AC) electronic inverter technology and CAN-Bus communication:

- high efficiency and low energy consumption;
- extended battery autonomy, thanks to the excellent performance of the electric motors, which provide high efficiency over a wide range of speeds;
- energy saving and low maintenance costs;
- no polluting CO₂ emissions, respecting the quality of the environment.



Motors with integrated gearboxes without hydraulic brakes:

- noise-free operation of the forklift;
- electric service brake and electromagnetic parking brake.



Electro-hydraulic control valve:

- simplified hydraulic system with a hydraulic pump that delivers the fluid directly to the control valve;
- helical gear pumps, which not only reduce noise and thus increase hydraulic efficiency, but also offer a better driving experience and unbeatably low cost operation.



Wired electric steering:

- no hoses, which also means reduced service requirements for safe, effective operation;
- outstanding energy efficiency;
- reduced consumption;
- eco-sustainability;
- silent operation.

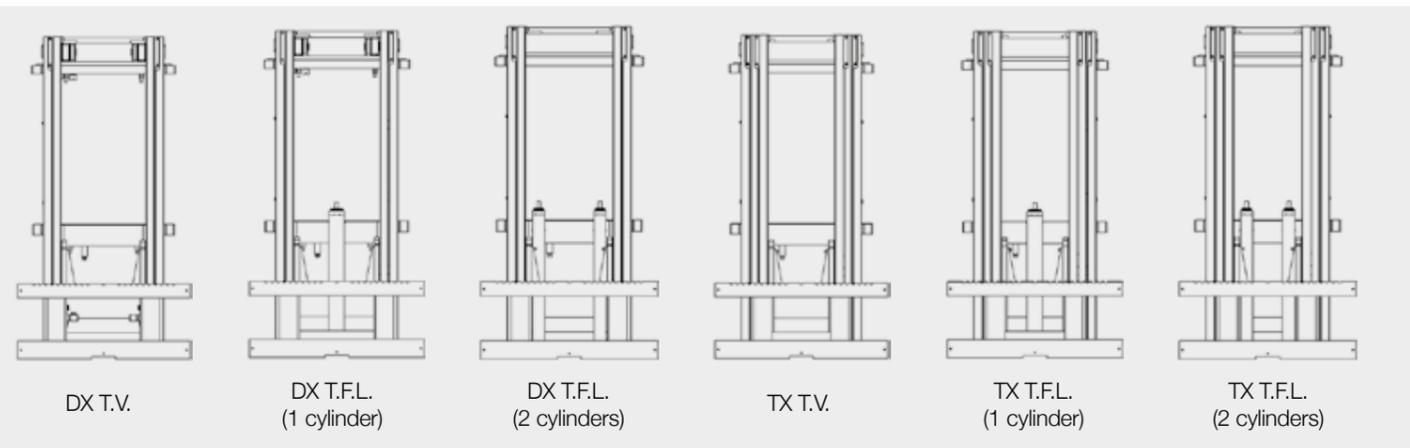


AN INIMITABLE MAST FOR GREAT STRENGTH AND LOAD CAPACITY

The masts, entirely designed and manufactured by MONTINI, feature ground bearing slides and angular guide shoes to assure:

- high residual load capacity at high lifts;
- excellent visibility in all working conditions;
- concrete response to the most varied operational requirements;
- exceptionally low friction operation;
- great stability.

A wide range of masts is available, in both DX (Duplex) and TX (Triplex) versions, with total visibility (T.V.) or total free lift (T.F.L.).



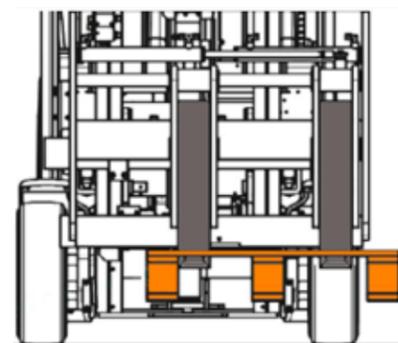
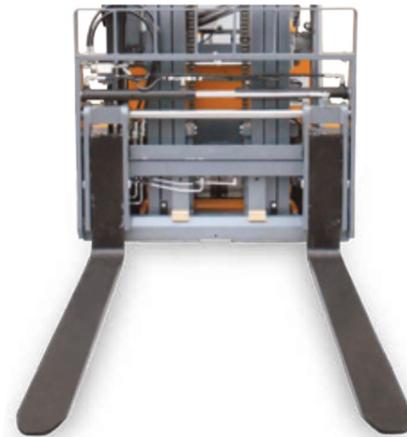
Option of **customised mast solutions**.

Sideshift integrated into the fork carriage, extremely compact and with excellent visibility.

Sideshift with grease nipples for easier guide shoes lubrication.

Hydraulic fork positioner integrated into the forklift truck (optional) for precise and synchronized movement of the forks, without reducing the load capacity.

MONTINI fork positioner with independent forks (optional) which, when loading and handling euro-pallets 800x1200 mm with pick-up side 800 mm inside a lorry, permit to place the pallet snug with the edge of the load bed, without the need for additional positioning manoeuvres and without the risk of colliding with and damaging its side panels.



NEW DISPLAY DESIGNED FOR THE OPERATOR

The **new, large digital colour display**, with multi-functional navigation buttons, provides access to all basic forklift functions, diagnostics and maintenance alert logs, in a wide choice of languages, all clearly displayed to facilitate service jobs.



The display, which is easy to read thanks to its ambient lighting sensor which automatically controls its backlighting with day and night modes, offers access from its start page to the following information:

- truck model and serial number;
- date and time;
- speedometer and operating hour meter (partial and total);
- hour meter which counts down to scheduled maintenance deadlines;
- battery voltage and charge indicator;
- maximum truck speed;
- compass to indicate the direction of travel of the truck;
- status led (green, yellow and red) to indicate whether the truck is working properly or not;
- inverter and motor temperatures;
- alarm messages, with date and time of alert.

Exclusive and customizable operator password (optional).

The display can be customised with the logo of the Technical Service Centre (optional).

PEDAL BOARDS

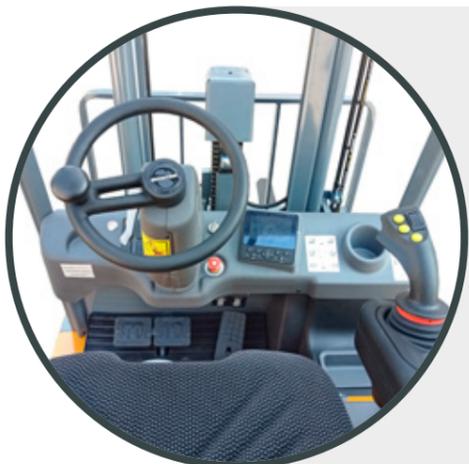
With a view to offering personalisation options for **MR SUPER** forklift trucks so that they can suit the individual operator's requirements, MONTINI offers different types of **pedal boards**.



Pedal board with a **rocker-type forward/reverse pedal** and a wide, comfortable brake pedal, to assure a safe and secure foothold.



A large, spacious pedal board with a **single drive pedal** (with forward/reverse switch button on the provided hydraulic control armrest) combined with a large brake pedal.



The **cab** is spacious and equipped with a large platform and comfortable seat. The **dashboard** is equipped with a multifunctional display. The steering wheel is height- and tilt-adjustable, and is small in size to facilitate handling.

HYDRAULIC CONTROLS

MR SUPER forklift trucks can also be equipped at choice with **different types of hydraulic controls**, to ensure precise performance and excellent operator comfort.



The user-friendly, ergonomic **hydraulic control with joystick** enables the operator to control all hydraulic functions with a single controller. Maximum productivity thanks to the use of two simultaneous operating functions of the lifting unit.



The simple to use and easily accessible **hydraulic control with fingertips** (mini-levers) is installed in an ergonomic and adjustable armrest. Simply operate the fingertip controls gently to drive the truck in an agile, precise and safe manner.



The **hydraulic control with pilot levers** (mini-joysticks) makes driving the forklift truck easy and reliable. Easily accessible and simple to use, it is installed in an ergonomic, adjustable armrest to guarantee comfortable driving positions.

HIGHER PERFORMANCE... SIMPLY SUPER!

MONTINI MR SUPER forklift trucks combine operator comfort with **efficient operation**, thus offering **extremely high performance when working**.

They are the ideal solution for a wide range of handling requirements and the perfect choice for companies wanting an unbeatable combination of performance, eco-sustainability and efficiency.

Their stand out feature is the **excellent travel speed**, which makes MR SUPER forklift trucks the ideal solution for quick handling even over long distances, ideally suited to use in a vast range of mixed indoors/outdoors applications.

It is possible to select the preferred performance profile from the three available ones.



ECO

ECO:

this is the **energy saving mode**, characterised by low acceleration and slow lifting speeds.



STANDARD

STANDARD:

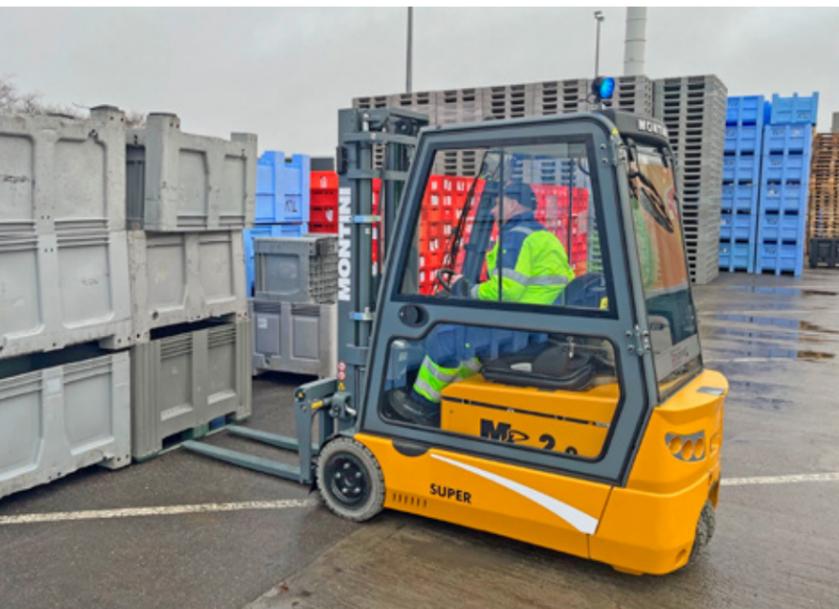
a profile customised for **optimised performance**.



RAPID

RAPID:

this profile offers **top of the range performance**.



COMFORT AND MANOEUVRABILITY

Thanks to its **new and modern design** derived from MR heavy forklifts, MONTINI's new MR SUPER series offers forklift trucks which are **easy to manoeuvre** and **decidedly silent** since equipped with **electric steering**.

They offer **lasting and reliable performance and comfort for the user**.

The driving position has been optimised to offer excellent comfort and easy handling, with comfortable **seats** that reduce stresses and attenuate vibration and shock to prevent them being transmitted to the operator, thus improving comfort and boosting productivity.

Grammer seat "Primo M" in PVC as standard supply.

- 1 Lumbar support
- 2 Safety belt
- 3 Backrest adjustment
- 4 Weight adjustment
- 5 Longitudinal adjustment



As standard, possibility to set **various configurations of seat belt parameters** to prevent, and even eliminate, the hazards attendant on improper use of the seat belt by the operator when working.

Grammer seat "Primo M" complete with armrests and headrest, in fabric (optional).



Grammer seat "Primo L" complete with armrests and headrest, in PVC or fabric, with heating (optional).

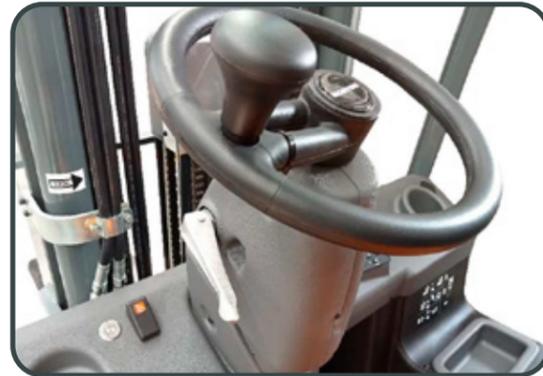
- 1 Headrest
- 2 Heating
- 3 Tilting left armrest
- 4 Tilting right armrest
- 5 Fabric cover
- 6 Pneumatic suspension



ERGONOMICS, COMFORT AND VERSATILITY

Designed for handling loads in a wide range of applications, both indoors and outdoors, for clients looking for **high performance, robust construction and reliability**, these trucks stand out for:

- new steering column, electric steering and new, responsive steering wheel adjustable in height and tilt, which offer outstanding manoeuvrability and unparalleled comfort;
- cell-phone holder with integrated USB socket (standard);
- large digital colour display with protective housing;
- new wide control dashboard, offering safer operation and high-tech driving experience;
- spacious accessories holder;
- new fenders with a streamlined design;
- two handles for the operator, one at the front (standard) to facilitate access to the driving position and one at the back (optional) to act as a support when reversing and with horn button;
- large panoramic window with wiper on the overhead guard, offering the best possible view;
- well-lit comfortable cab, with a new non-slip rubber footboard and a comfortable seat, available with a wide range of options to minimise operator fatigue.



EQUIPMENT VARIATIONS

Overhead guard designed to be easily fitted with cab at any time, without the need to modify or replace the original frame.

The overhead guard can be optionally equipped with:

- full panelling consisting of front and rear windows with wipers, lexan cover on top and side doors;
- front window and openable rear window with wipers, and PVC side doors;
- large upper panoramic window with wiper, to offer the best view when storing loads at high lifts;
- heated (or thermal) windows, which are anti-fogging and extremely transparent;
- heating system;
- radio installation kit.



In addition, the overhead guard can be offered in **drive-in version** and with an **upper iron grid** for protection against dropped loads.

The **wide range of optional extras** (including lamps, indicators and mirrors) enable users to customise **MR SUPER** forklifts to suit the application and its operational demands:

- adjustable LED working lights, including a bar-shaped type, installed on the mast or on the overhead guard;
- LED warning spotlight (blue or red);
- LED flashing light, also with appropriate protection;
- rearview mirror, also in panoramic version.



HIGH BATTERY AUTONOMY

MR SUPER forklifts can be equipped with conventional lead-acid batteries or modern lithium-ion batteries.

48V lead-acid batteries up to 840Ah.

The well-known lead-acid battery option is suitable for any application, offering high capacity Amp/h and a considerable work autonomy.

MONTINI batteries offer a wide choice of optional set-ups:

- **centralised water top-up system** with tank for filling up the battery cells;
- **electrolyte level indicator** on the battery plug or battery cell;
- **electrolyte level indication on the display**;
- **air circulation system in the cells** and specific plug;
- **special battery box** with integrated handles and openable side guard on the forklift's right-hand side for easy removal of the battery.



High capacity lithium-ion batteries 48V-525Ah.

These batteries offer higher performance and are more efficient and versatile than their conventional lead-acid counterparts:

- **maintenance-free**;
- no gas emissions;
- **fast recharging in just a few hours**, so that the forklifts can be recharged when not in use or during work pauses, thus ensuring that the truck can be used throughout the day;
- **no need for a special charging room**, since recharging requires no more than a normal plug and the external charger, which considerably reduces space and running costs.



DIRECT CHARGING

On the new MR SUPER LITHIUM forklifts the battery is charged in direct mode, using the easily accessible connector protected by a convenient cover flap, as with electric cars.



SERVICES AND SAFETY

MR SUPER forklift trucks can be supplied in a "smart" version, intelligent and perfectly suited to the client's specific requirements, by equipping them with the latest generation 48V high frequency MONTINI intelligent battery charger.

The MONTINI intelligent battery charger automatically tops up the water in the battery without the need for an operator that performs this task.

The charger communicates with the battery BMS via CAN-Bus connection.

The BMS (Battery Management System), located on the battery, informs the battery charger about the battery capacity and electrolyte level.



The MONTINI intelligent battery charger automatically adjusts its current to suit the battery capacity, and memorises the need to top up the electrolyte if necessary.

The charger remotely sends the charge and discharge data to a dedicated controller, which thus monitors the efficiency of the battery itself.

Another option is that of equipping the trucks with the innovative REMOTE CONTROL system.

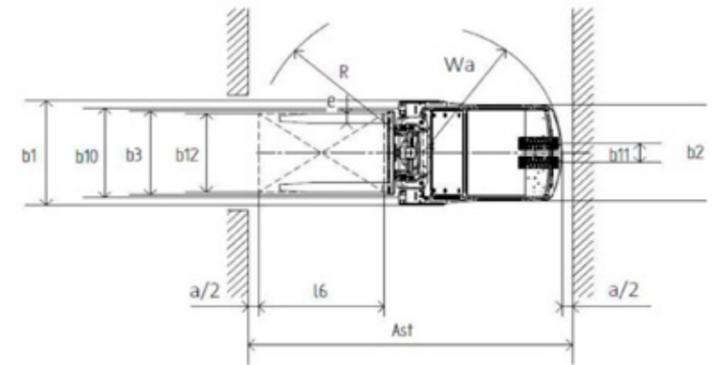
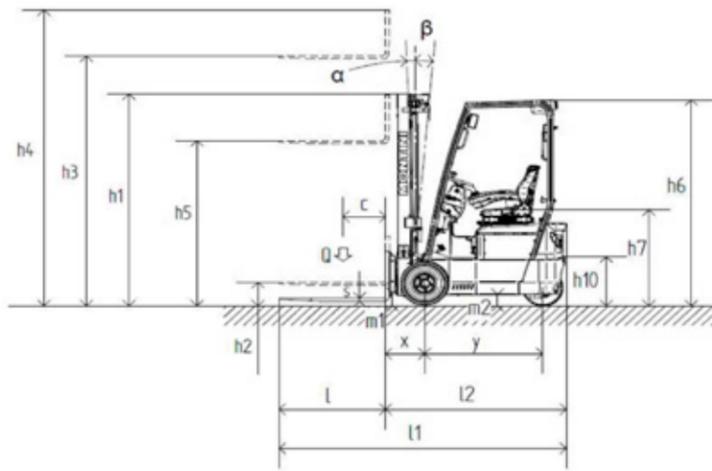
The REMOTE CONTROL system connects the forklift trucks to the factory computer system, thus enabling reliable tracking in line with production operations.

The REMOTE CONTROL offers:

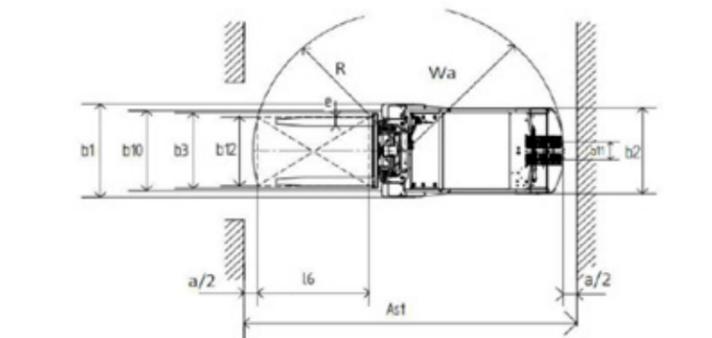
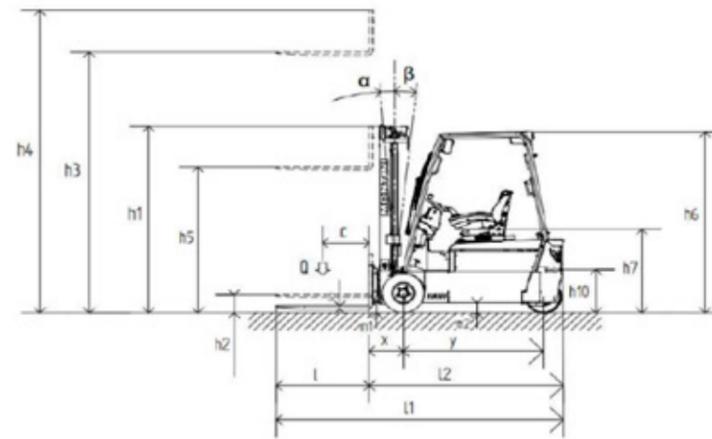
- **fault diagnostics** via remote data transmission;
- **forklift truck localization**;
- **anti-theft system activation** and **block of forklift operation**.



MR 1.0 - 1.2 SUPER LITHIUM



MR 1.6 - 1.6L - 1.8 - 2.0 SUPER | SUPER LITHIUM



FEATURES	1.1		
	Manufacturer		
	Model		
WEIGHTS	1.3	Power supply: electric, diesel, petrol, LPG, electric mains	
	1.4	Drive type: hand-guided, pedestrian, stand-on, sit-on, order picker	
	1.5	Capacity/Load	Q (t)
	1.6	Load centre	c (mm)
	1.8	Load distance	x (mm)
	1.9	Wheelbase	y (mm)
	2.1	Weight	Kg
	2.2	Axle load, front/rear, laden	Kg
	2.3	Axle load, front/rear, unladen	Kg
EQUIPMENT	3.1	Tyres: superelastic (SE), cushion (C), pneumatic (PN)	
	3.2	Tyre size, front	
	3.3	Tyre size, rear	
	3.5	Wheels, number front/rear (x=driven wheel)	
	3.6	Track width, front	b10 (mm)
	3.7	Track width, rear	b11 (mm)
	OVERALL DIMENSIONS	4.1	Max. tilt of mast/fork carriage, forward/backward (α-β)
4.2		Lowered mast height	h1 (mm)
4.3		Free lift	h2 (mm)
4.4		Lifting height	h3 (mm)
4.5		Extended mast height	h4 (mm)
4.7		Overhead guard height	h6 (mm)
4.8		Seat height	h7 (mm)
4.12		Tow coupling height	h10 (mm)
4.19		Total length	l1 (mm)
4.20		Length to face of forks	l2 (mm)
4.21		Overall width	b1/b2 (mm)
4.22		Forks dimensions	s/e/l (mm)
4.23		Fork carriage (ISO 2330, class/type A, B)	
4.24		Min. fork carriage width	b3 (mm)
4.31		Ground clearance, under mast, laden	m1 (mm)
4.32		Ground clearance, centre of wheelbase, laden	m2 (mm)
4.33		Aisle width with pallet 1000x1200 (l6xb12) (pick-up side 1200)	Ast (mm)
4.34		Aisle width with pallet 800x1200 (b12xl6) (pick-up side 800)	Ast (mm)
4.35		Turning radius	Wa (mm)
4.36	Distance from turning centre and truck centre axis	b13 (mm)	
DATA AND PERFORMANCE	5.1	Travel speed, laden (Eco/Standard/Rapid)	Km/h
	5.1.1	Travel speed, unladen (Eco/Standard/Rapid)	Km/h
	5.2	Lift speed, laden (Eco/Standard/Rapid)	m/s
	5.2.1	Lift speed, unladen (Eco/Standard/Rapid)	m/s
	5.3	Lowering speed, laden/unladen	m/s
	5.5	Drawbar pull, laden/unladen	N
	5.6	Max. drawbar pull, laden/unladen	N
	5.7	Gradeability, laden/unladen	%
	5.8	Max. gradeability, laden/unladen	%
	5.9	Acceleration time, laden (Eco/Standard/Rapid)	s
5.9.1	Acceleration time, unladen (Eco/Standard/Rapid)	s	
5.10	Service brake		
ELECTRIC MOTOR	6.1	Traction motor, output S2 60'	Kw
	6.2	Lift motor, output S3 15%	Kw
	6.3	Battery according to DIN 43531/35/36 A, B, C	
	6.4	Rated voltage/capacity 5h	V/Ah
	6.5	Battery weight, min./max.	Kg
	6.6	Energy consumption according to VDI cycle	KWh/h
MISCELLANEA	8.1	Type of electronic control	
	8.2	Working pressure for auxiliary equipment	bar
	8.3	Oil flow rate for auxiliary equipment	l/min
	8.4	Noise level at operator's ear	db (A)
	8.5	Tow coupling, model/type	

TECHNICAL FEATURES

	MONTINI	MONTINI	MONTINI	MONTINI	MONTINI	MONTINI	MONTINI	MONTINI	MONTINI
	MR 1.0 SUPER LITHIUM	MR 1.2 SUPER LITHIUM	MR 1.6 SUPER LITHIUM	MR 1.6 SUPER	MR 1.6L SUPER LITHIUM	MR 1.6L SUPER	MR 1.8 SUPER LITHIUM	MR 1.8 SUPER	MR 2.0 SUPER LITHIUM
1.1	Manufacturer								
1.2	Model								
1.3	Power supply: electric, diesel, petrol, LPG, electric mains								
1.4	Drive type: hand-guided, pedestrian, stand-on, sit-on, order picker								
1.5	Capacity/Load	Q (t)							
1.6	Load centre	c (mm)							
1.8	Load distance	x (mm)							
1.9	Wheelbase	y (mm)							
2.1	Weight	Kg							
2.2	Axle load, front/rear, laden	Kg							
2.3	Axle load, front/rear, unladen	Kg							
3.1	Tyres: superelastic (SE), cushion (C), pneumatic (PN)								
3.2	Tyre size, front								
3.3	Tyre size, rear								
3.5	Wheels, number front/rear (x=driven wheel)								
3.6	Track width, front	b10 (mm)							
3.7	Track width, rear	b11 (mm)							
4.1	Max. tilt of mast/fork carriage, forward/backward (α-β)	Degrees							
4.2	Lowered mast height	h1 (mm)							
4.3	Free lift	h2 (mm)							
4.4	Lifting height	h3 (mm)							
4.5	Extended mast height	h4 (mm)							
4.7	Overhead guard height	h6 (mm)							
4.8	Seat height	h7 (mm)							
4.12	Tow coupling height	h10 (mm)							
4.19	Total length	l1 (mm)							
4.20	Length to face of forks	l2 (mm)							
4.21	Overall width	b1/b2 (mm)							
4.22	Forks dimensions	s/e/l (mm)							
4.23	Fork carriage (ISO 2330, class/type A, B)								
4.24	Min. fork carriage width	b3 (mm)							
4.31	Ground clearance, under mast, laden	m1 (mm)							
4.32	Ground clearance, centre of wheelbase, laden	m2 (mm)							
4.33	Aisle width with pallet 1000x1200 (l6xb12) (pick-up side 1200)	Ast (mm)							
4.34	Aisle width with pallet 800x1200 (b12xl6) (pick-up side 800)	Ast (mm)							
4.35	Turning radius	Wa (mm)							
4.36	Distance from turning centre and truck centre axis	b13 (mm)							
5.1	Travel speed, laden (Eco/Standard/Rapid)	Km/h							
5.1.1	Travel speed, unladen (Eco/Standard/Rapid)	Km/h							
5.2	Lift speed, laden (Eco/Standard/Rapid)	m/s							
5.2.1	Lift speed, unladen (Eco/Standard/Rapid)	m/s							
5.3	Lowering speed, laden/unladen	m/s							
5.5	Drawbar pull, laden/unladen	N							
5.6	Max. drawbar pull, laden/unladen	N							
5.7	Gradeability, laden/unladen	%							
5.8	Max. gradeability, laden/unladen	%							
5.9	Acceleration time, laden (Eco/Standard/Rapid)	s							
5.9.1	Acceleration time, unladen (Eco/Standard/Rapid)	s							
5.10	Service brake								
6.1	Traction motor, output S2 60'	Kw							
6.2	Lift motor, output S3 15%	Kw							
6.3	Battery according to DIN 43531/35/36 A, B, C								
6.4	Rated voltage/capacity 5h	V/Ah							
6.5	Battery weight, min./max.	Kg							
6.6	Energy consumption according to VDI cycle	KWh/h							
8.1	Type of electronic control								
8.2	Working pressure for auxiliary equipment	bar							
8.3	Oil flow rate for auxiliary equipment	l/min							
8.4	Noise level at operator's ear	db (A)							
8.5	Tow coupling, model/type								

All MONTINI products comply with Machinery Directive 2006/42/EC, Directives 2014/35/EU and 2014/30/EC.

1. Ast = Wa + x + l6 + a (a = 200 mm)
2. Other capacities available on request



MONTINI

SPECIAL ELECTRIC FORKLIFT TRUCKS

Choose specialization.

Choose MONTINI special electric lift trucks.

MONTINI s.r.l.

IT - 48022 Lugo RA
Via A. da Barbiano, 8-10
Tel. +39 0545 991001



info@montini.biz
www.montini.biz