



NEW 120V FORKLIFT TRUCKS WITH LOAD CAPACITIES FROM 14000 KG TO 18000 KG FOR HANDLING HEAVY LOADS

# MR 14 - MR 16 - MR 18

#### THE NEW HEAVY DUTY FORKLIFT TRUCKS WITH OUTSTANDING PERFORMANCE, POWER AND ROBUSTNESS

MONTINI expands its range of heavy duty counterbalanced electric forklift trucks with three new 120V models for handling loads from 14000 kg to 18000 kg at load centre 600 mm.

MONTINI's forklifts MR 14, MR 16 and MR 18 are designed for heavy duty applications including steel and wood mills, beverage companies, mechanical and metal fabrication, iron foundries and heavy carpentry.

#### **POWERFUL, ROBUST, ZERO EMISSIONS** FOR HEAVY-DUTY WORK

These high-performance electric lift trucks have been designed to achieve optimum capabilities when handling and storing heavy loads, both inside the warehouses and out in the yard.

They are the perfect choice for anyone who needs an ecological, quiet, zero-environmental-impact lift truck with the same level of performance as an internal combustion vehicle and with no compromises in terms of results.

MR 14, MR 16 and MR 18 are designed for handling bulky and heavy loads and offer great versatility of use, thus providing real solutions that enable companies to achieve the best in efficiency, performance and sustainability.



#### **ALTERNATE CURRENT TWIN MOTOR TRACTION** WITH PERMANENT MAGNETS (PM) **BETTER PERFORMANCE, GREATER AUTONOMY**

These new forklift trucks feature key technical solutions as standard supply.

The twin-motor traction, with innovative 120V alternating current electronic system with inverters and **CAN-Bus communication**, reduces wiring complexity by increasing reliability and ensures:

- extended battery autonomy, thanks to the excellent performance of the high-efficiency permanent range of speeds;
- incredible torgue and superior performance for acceleration, lifting and travelling; •
- high efficiency and low energy consumption; •
- excellent functionality and performance of the electronic system;
- no polluting emissions released into the atmosphere, respecting the quality of the environment.



magnet electric motors, with reduced weight and size, which provide high efficiency over a wide

#### **MASTS GREAT STRENGTH AND LOAD CAPACITY**

MONTINI's forklifts MR 14, MR 16 and MR 18 are designed to meet any challenge with absolute efficiency and reliability.

For this reason they can be equipped with a wide range of masts available in the following versions:

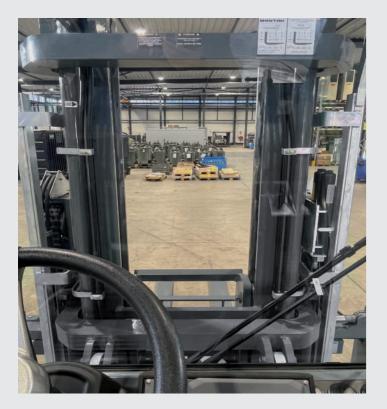
- DX (Duplex) with total visibility (TV) and with total free lift (TFL);
- TX (Triplex) with total free lift (TFL)

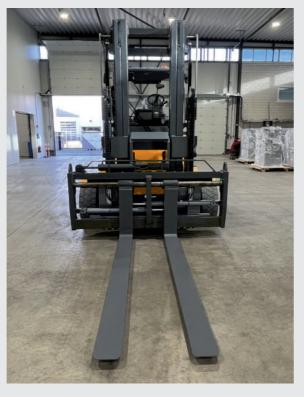
for optimal load capacities for all types of performance.

#### **HIGH BATTERY AUTONOMY** FOR LONG WORK SHIFTS

MR 14, MR 16 and MR 18 are available with high-performance 120V lead-acid batteries for long work shifts in the most challenging applications, or with advanced LFP lithium-ion batteries.

The battery is supplied in two individual blocks, positioned on the sides of the sturdy forklift chassis, for easy removal and handling.





Changing the battery is quick, easy and customizable to the needs of each warehouse, and can be done in the following ways:

- mechanically (standard) using a second lift truck or a pallet truck;
- hydraulically (optional) with automatic battery extraction controlled directly from the operator's seat.

Hydraulic accumulator on the mast fitted as standard to dampen vibrations when handling heavy and voluminous goods.

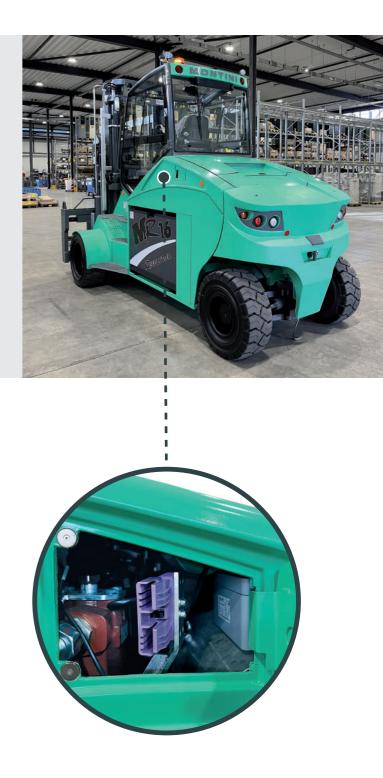
Customized mast solutions for reliably handing important loads and suited to meet the user's specific production needs.

Mast configurations with specific additional equipments for every need.



The battery is charged in direct mode, using the easily accessible connector protected by a convenient cover flap, as with electric cars.



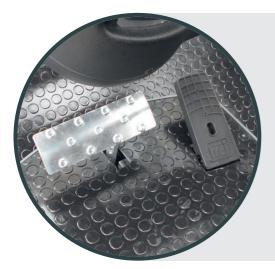


#### **PEDAL BOARDS** STANDARD OR OPTIONAL

With a view to customizing the lift trucks to suit the operator's requirements, MONTINI offers different types of **pedal boards**, available as standard or as an optional.

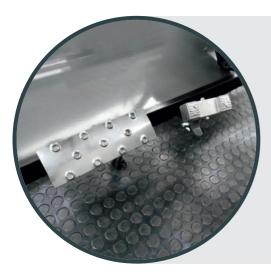
### **PRECISION AND PERFORMANCE** THANKS TO THE HYDRAULIC CONTROLS

**MR 14**, **MR 16** and **MR 18** can be equipped at choice with **different types of hydraulic controls** to ensure maximum efficiency and productivity as well as exceptional driving comfort.



#### **STANDARD**

Standard, large and spacious pedal board with a single drive pedal (forward/reverse direction buttons on the joystick) and large brake pedal. The intuitive and ergonomic hydraulic control with **joystick** allows the operator to activate all the hydraulic functions of the lift truck using a single control lever. Maximum productivity thanks to the use of two simultaneous operating functions of the lifting unit.



#### **OPTIONAL**

As an optional, a pedal board with a rocker-type forward/reverse pedal and large brake pedal is available.

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 for agile, precise and safe handling.



#### **OPTIONAL**

For the comfort and efficiency of the operator, a foot control area with two drive pedals (forward and reverse) and a central brake pedal can also be supplied as an optional.

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 and adjustable armrest to guarantee comfortable driving positions.



#### **DRIVING COMFORT** FOR THE BENEFIT OF THE OPERATOR

The potential of the forklifts MR 14, MR 16 and MR 18 is also expressed in its offering total comfort for operators.

In designing these new forklifts, MONTINI paid a great deal of attention to ergonomics, focusing on the needs of end users.

The driving position is spacious and easily accessible, thanks to the convenient and wide steps. It offers ample foot space and an extremely comfortable seat and is designed to ensure excellent visibility, even when handling the bulkiest of loads.

In order to improve visibility, operator comfort and safety, the cab has been designed with full-glass as an option, to ensure an all-round view, thanks to the large windshield that extends from the front to the rear passing over the roof.

The comfortable driver's cab is positioned on special antivibration mounts (silent blocks), designed to reduce noise in the cab and vibrations coming from the ground.





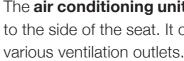
Every technical aspect has been designed to make forklift operation easy in any working situation: from the unique sloping of the counterweight, which guarantees perfect visibility when reversing, to the large grab handle, for getting into the operator's seat with ease.

The seat, together with all the main controls, can hydraulically rotate up to 90 degrees, ensuring maximum comfort and visibility for the operator in all working conditions.

#### **DESIGNED FOR WORKING IN FULL COMFORT**

MONTINI's forklifts MR 14, MR 16 and MR 18 can be customized with a wide range of standard and optional accessories and equipment, to meet the demands of end users.





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The **heater** (optional) directly and quickly heats up the cab interior thanks to the hot air vents, thus making sure that the temperature inside the cab is always comfortable.

The driver's seat has been optimized for maximum ease with comfortable seats to meet the ergonomic needs of the operator.



The air conditioning unit (optional) is located in a handy position to the side of the seat. It creates a pleasant climate thanks to the

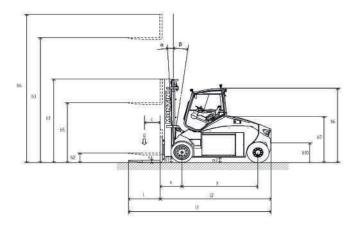
The large digital colour **display** with multifunction buttons:

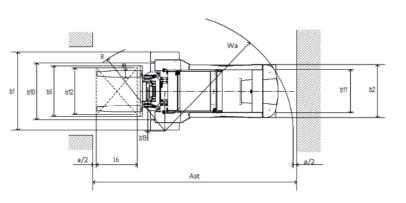
 allows accessibility and control of the basic lift truck functions, identified by figures displayed on the icon bar;

 shows the date and time, allows the operator to monitor battery charge status, reports any faults and is equipped with a speedometer and a service hours counter.

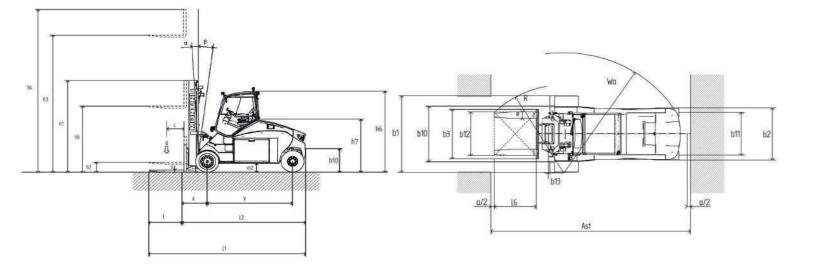
## **TECHNICAL FEATURES**

**MR 14** 

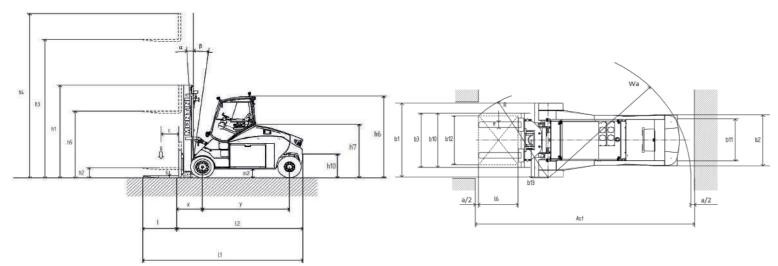




**MR 16** 







	1.1	Manufacturer		MONTINI	MONTINI	MONTINI
	1.2	Model		MR 14	MR 16	MR 18
ŝ	1.3	Power supply: electric, diesel, petrol, LPG, electric mains		electric	electric	electric
FEALURES	1.4	Drive type: hand-guided, pedestrian, stand-on, sit-on, order picker		sit-on	sit-on	sit-on
Ę	1.5	Capacity/Load	Q (t)	14	16	18
-	1.6	Load centre	c (mm)	600	600	600
	1.8	Load distance	x (mm)	796 <b>1.</b>	796 <b>1.</b>	880
	1.9	Wheelbase	y (mm)	2800	3015	3500
WEIGHTS	2.1	Weight	Kg	21260	23352	22625
	2.2	Axle load, front / rear, laden	Kg	32290 / 2970	35700 / 3652	37320 / 330
	2.3	Axle load, front / rear, unladen	Kg	11310 / 9950	12293 / 11059	11710 / 109
L	3.1	Tyres		SE	SE	SE
	3.2	Tyres size, front		355/50-20	355/50-20	355/50-20
EQUIPMEN	3.3	Tyres size, rear		355/65-15	355/65-15	355/65-15
	3.5	Wheels, number front/rear (x=driven wheel)		4x/2	4x/2	4x/2
J L	3.6	Track width, front	b10 (mm)	1795	1795	1795
	3.7	Track width, rear	b11 (mm)	1365	1365	1365
	4.1	Max. tilt of mast/fork carriage, forward / reverse (α-β)	Degrees	5° / 7°	5° / 7°	5° / 7°
	4.2	Lowered mast height	h1 (mm)	3275	3275	3070
	4.3	Free lift	h2 (mm)	-	-	-
	4.4	Lifting height	h3 (mm)	4000	4000	3200
	4.5	Extended mast height	h4 (mm)	4800	4800	4825
	4.7	Overhead guard height	h6 (mm)	3081	3081	3120
	4.8	Seat height	h7 (mm)	1826	1826	1826
2N	4.12	Tow coupling height	h10 (mm)	774	774	774
		Total length	l1 (mm)	5276	5476	6060
		Length to face of forks	l2 (mm)	4076	4276	4860
	4.21	Overall width	b1 / b2 (mm)	2453 / 1650	2472 / 1650	2453 / 16
OVERALL	4.22	Forks dimensions	s / e / I (mm)	80 / 200 / 1200	80 / 200 / 1200	90 / 200 / 1
		Fork carriage ISO 2330, class/type, A, B		-	-	-
C		Min. fork carriage width	b3 (mm)	1800	1800	1800
	4.31	Ground clearance, under mast, laden	m1 (mm)	220	220	220
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	335	335	335
		Aisle width with pallet 1000x1200 (l6xb12) - pick-up side 1200	Ast (mm)	5994	6099	6598
		Aisle width with pallet 800x1200 (b12xl6) - pick-up side 800	Ast (mm)	6194		6798
					6299	
		Turning radius	Wa (mm)	3998	4103	4518
		Distance from turning centre and truck centre axis	b13 (mm)	1652	1661	1652
ų	5.1	Travel speed, laden / unladen	Km/h	18/20	18/20	18/20
AN	5.2	Lift speed, laden / unladen	m/s	0,38 / 0,40	0,23 / 0,48	0,32 / 0,3
PERFURMANCE	5.3	Lowering speed, laden / unladen	m/s	0,50 / 0,40	0,40 / 0,30	0,50 / 0,4
	5.5	Drawbar pull, laden / unladen (S2 60')	N	30500 / 33200	29900 / 33000	29500 / 330
	5.6	Max. drawbar pull, laden / unladen (S2 5')	N	63600 / 66300	63000 / 66100	62500 / 66
	5.7	Gradeability, laden / unladen (S2 30')	%	11,5 / 20,8	10,5 / 19,8	9,8 / 19,5
	5.8	Max. gradeability, laden / unladen (S2 5')	%	18,7 / 33,5	17/31,7	15,9/31,
5	5.9	Acceleration time, laden / unladen	S		6 / 5,1	
	5.10	Service brake		hydraulic/electric	hydraulic/electric	hydraulic/ele
5	6.1	Traction motor, output S2 60'	Kw	2x53	2x53	2x53
MOTOR	6.2	Lift motor, output S3 15%	Kw	2x62	2x62	2x62
≥ د	6.3	Battery according to DIN 43531 / 35 / 36 A, B, C		DIN 43536 A	DIN 43536 A	DIN 43536
	6.4	Rated voltage / capacity 5h	V / Ah	120 / 1240	120 / 1240	120 / 124
í	6.5	Battery weight, min. / max.	Kg	4260 / 4720	4260 / 4720	4260 / 472
Li I	6.6	Energy consumption according to EN 16796	KWh/h	30	29,7	30
MISCELLANEA	8.1	Type of electronic control		inverter	inverter	inverter
	10.1	Working pressure for auxiliary equipment	bar	180	180	180
	10.2	Oil flow rate for auxiliary equipment	l/min	-	-	-
	10.7	Noise level at operator's ear	db (A)	<70	<70	<70
		Tow coupling model/type				

1. Without sideshift

This technical data sheet, compliant with Directive VDI 2198, indicates the values for standard equipment only. Different tyres, masts, equipments etc. may alter these values.



# Choose specialization.

Choose MONTINI special electric lift trucks.

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