

MANISCOPIC

MRT 2150 **PRIVILEGE**

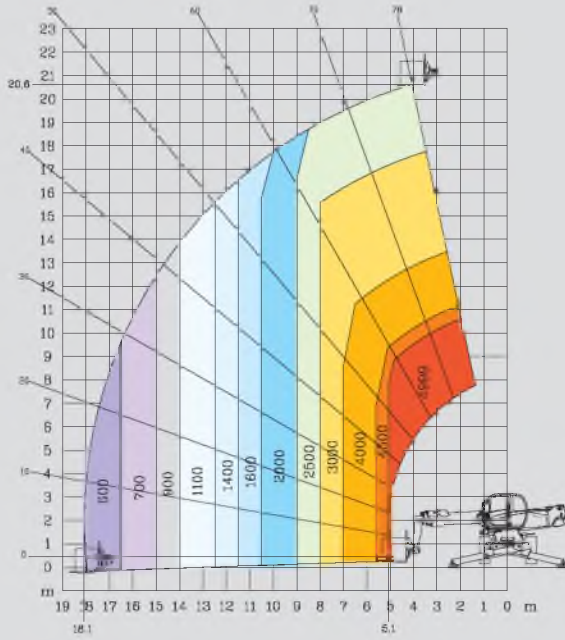


- Lift height : 20.60 m
- Max. reach : 18.10 m
- Engine : 150 HP - 110 kw
- 4 wheel drive - 4 wheel steer
- Hydrostatic transmission
- Levelling system

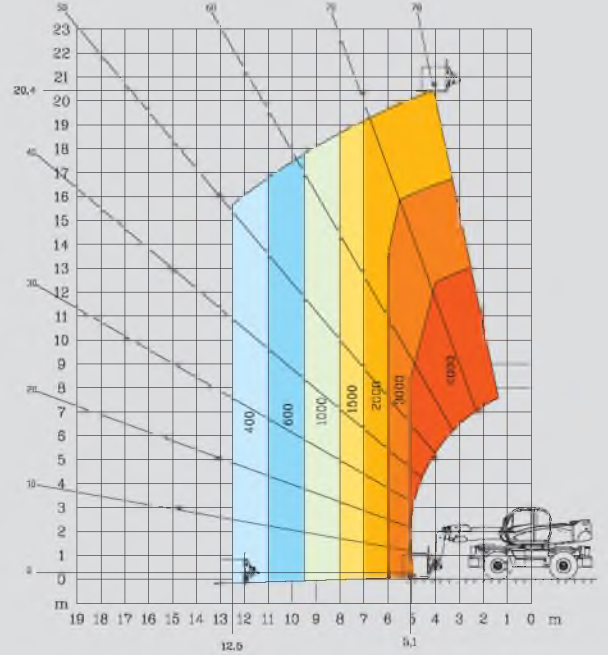


MANITOU

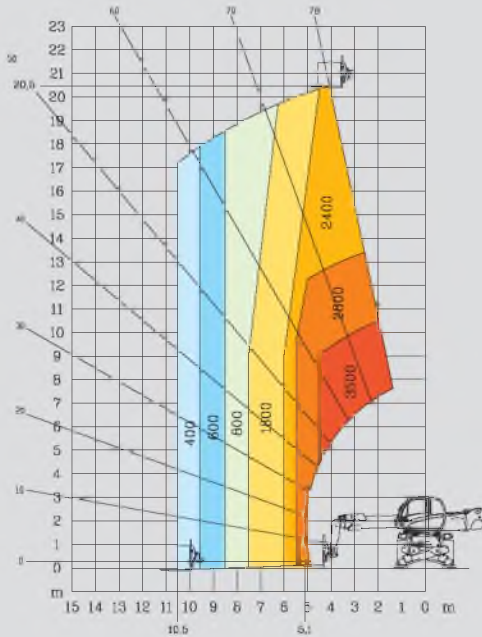
**ROTATION ON STABILISERS
FULLY EXTENDED WITH FORKS**



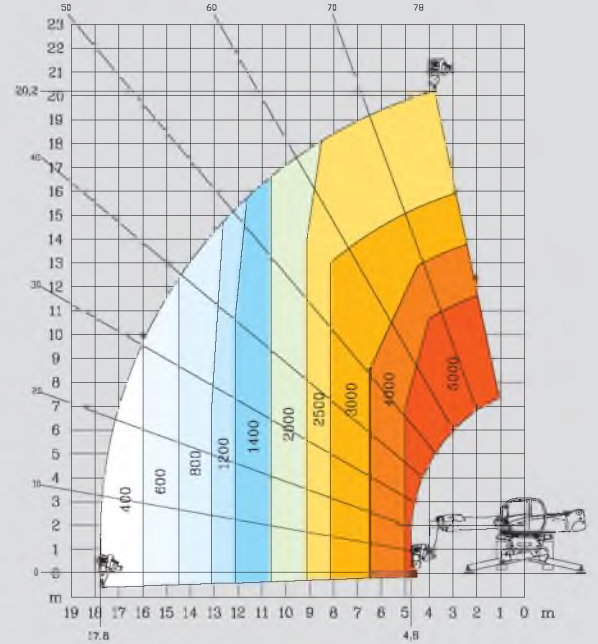
**FRONTAL POSITION ON WHEELS
WITH FORKS**



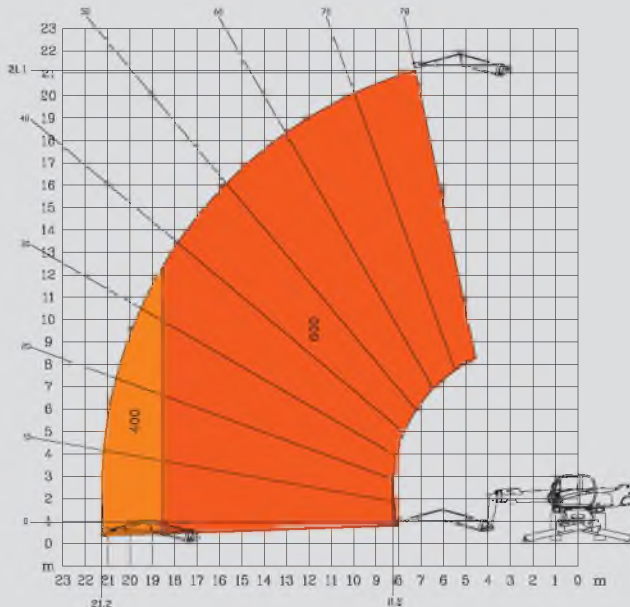
**ROTATION ON STABILISERS NOT FULLY EXTENDED
WITH FORKS**



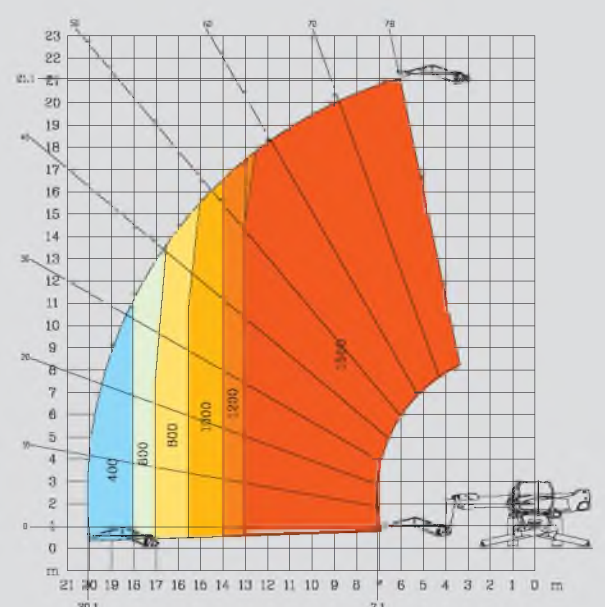
**ROTATION ON STABILISERS FULLY EXTENDED
WITH 5T WINCH**



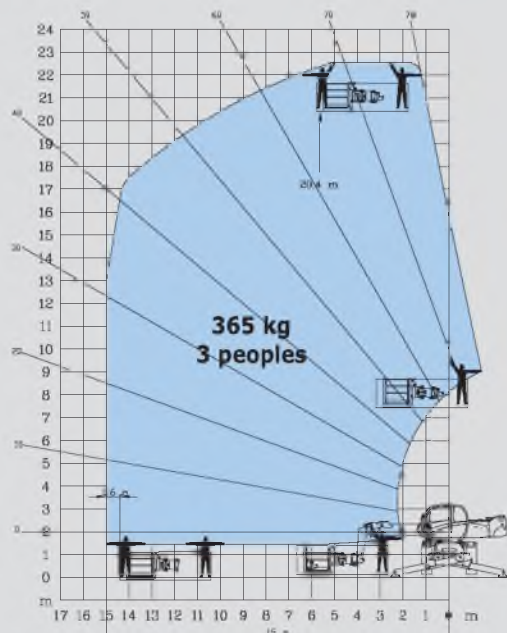
**ROTATION ON STABILISERS FULLY EXTENDED
WITH JIB P 600**



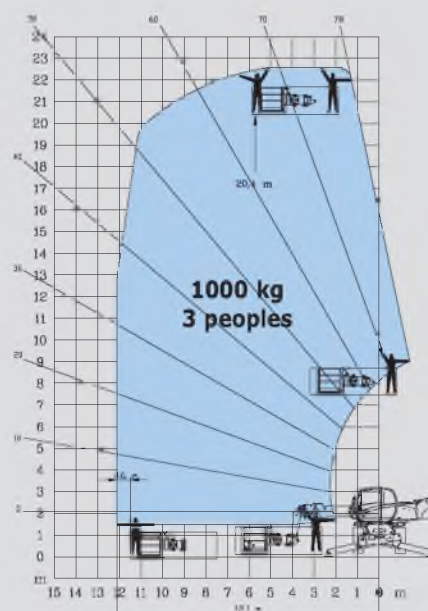
**ROTATION ON STABILISERS FULLY EXTENDED
WITH JIB P 1500**



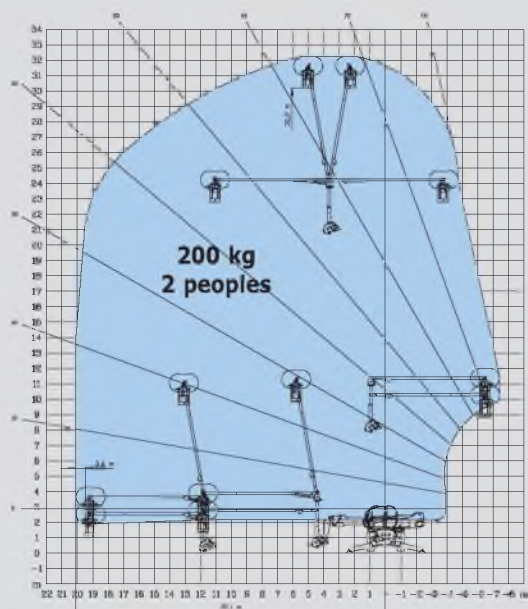
**ROTATION ON STABILISERS FULLY EXTENDED
WITH EXTENSIBLE PLATFORM 2,25/4 m**



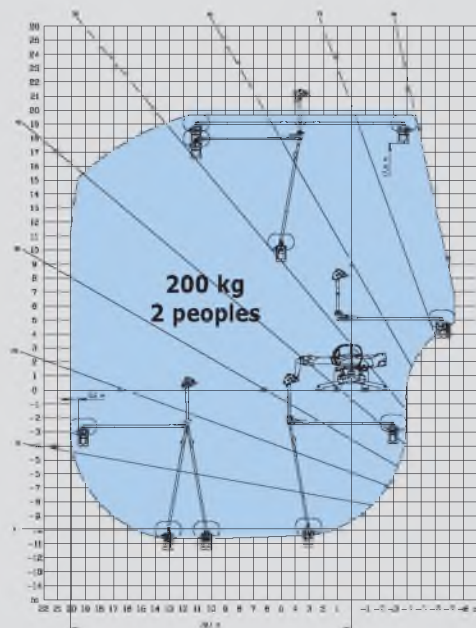
**ROTATION ON STABILISERS FULLY EXTENDED
WITH 1000 KG PLATFORM 2,25/4 m**



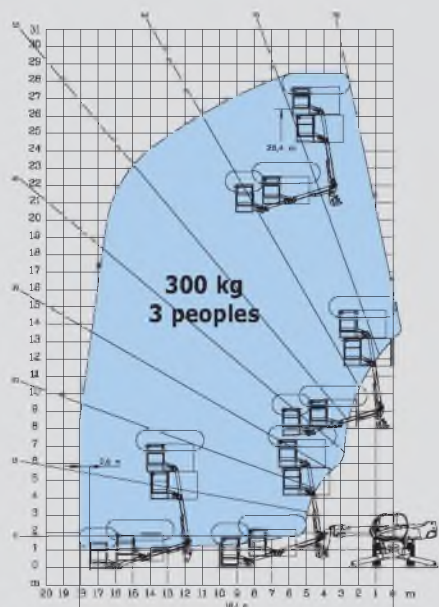
**ROTATION ON STABILISERS FULLY EXTENDED
WITH 3 D SYSTEM IN POSITIVE POSITION**



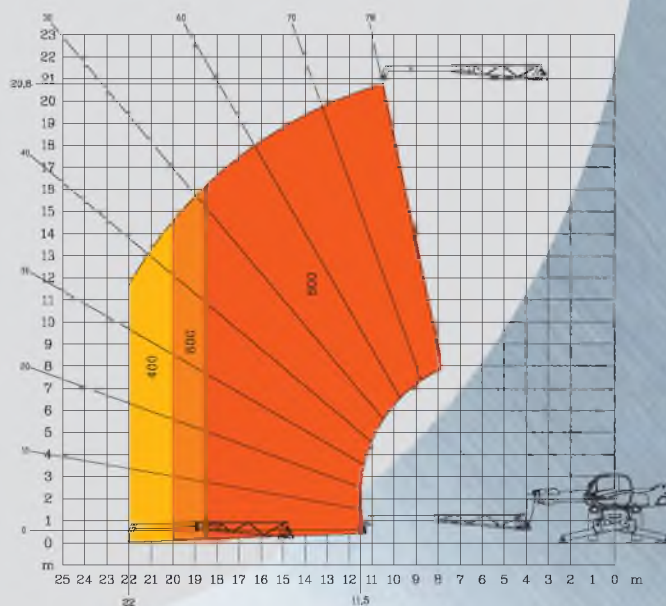
**ROTATION ON STABILISERS FULLY EXTENDED
WITH 3 D SYSTEM IN NEGATIVE POSITION**



**ROTATION ON STABILISERS FULLY EXTENDED
WITH AERIAL JIB PLATFORM**



**ROTATION ON STABILISERS FULLY EXTENDED
WITH CRANE JIB**



MRT 2150 **PRIVILEGE**



Lift capacity (on stabilisers)4999 kg
at 500 mm from forks heels



Lift height :20.60 m



Tyres
18 - 22,5



Forks (mm)
Length1200
Width x thickness150 X 50



Multidisc brakes : hydraulically assisted on both axles
Negative parking brake



Engine Mercedes-Benz
TypeOM 904 LA (EURO 3
Capacity4 cyl. 4250 cm³
Power (ISO/TR 14396)150 HP/110 kw
580 Nm of 1200 at 1600 rpm
Water cooling
Direct injection



Transmissionhydrostatic
With automatic power regulation (hydraulic variable
displacement pump and motor)
Reversing shiftelectromagnetic
2 speed forward and reverse
Travel speed36 km/h*
*This speed may be limited by local regulations



Rear axle
Frame levelling on front axle +/- 8° (15%)
Automatic rear axle locking system
over 15° rotation



4 stabilizers
simultaneous or individually controlled



Total and continuous rotation
Turret mounted on a double slew ring
Hydraulic and electric rotation



Hydraulics
3 pumps gear type270 bars/160 l/mn



Control : 2 electro proportional control joysticks for all
hydraulic movements



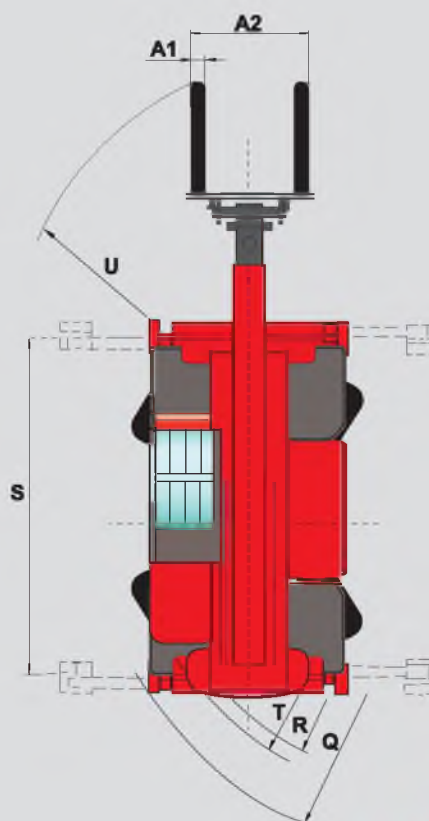
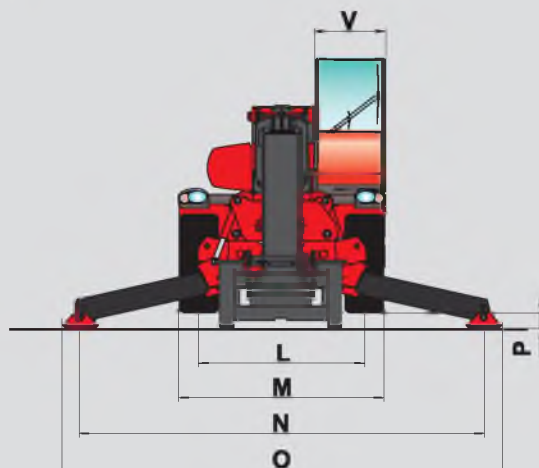
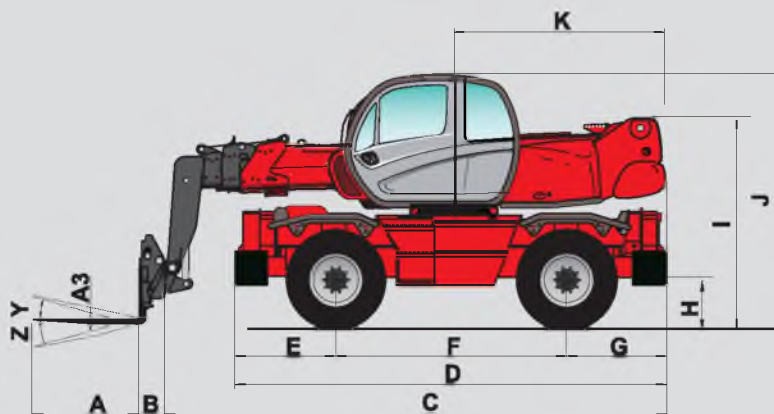
Capacities
Cooling system18 l.
Engine oil15 l.
Hydraulic oil200 l.
Fuel tank230 l.



Weight unladen (with forks)16095 kg
Overall width2.43 m
Overall height3.05 m
Overall length6.78 m
Ground clearance0.37 m
Drawbar pull8200 daN



Standard load moment indicator
(mobile crane standards)



A	1200
A1	150
A2	1320
A3	50
B	290
C	6490
D	5050
E	1155
F	2750
G	1155
H	380
I	2485
J	3050
K	2485
L	1930
M	2425
N	4700
O	5100
P	150
Q	4500
R	3800
S	4550
T	4040
U	6230
V	950
Y	12°
Z	105°

mm

This publication in no way constitutes an offer and the company reserves the right to alter specification without prior notice.
The MANITOU models presented in this brochure can be supplied complete with optional equipment attachments.



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MANITOU

MANISCOPIC

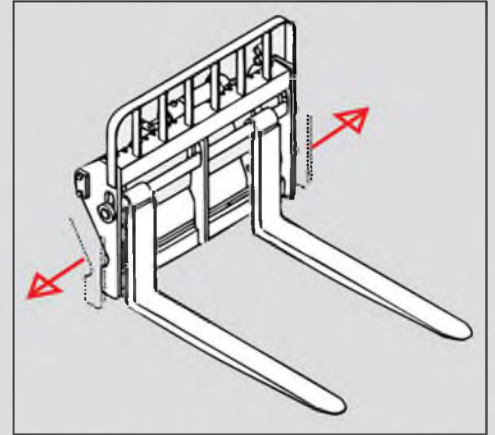
MRT



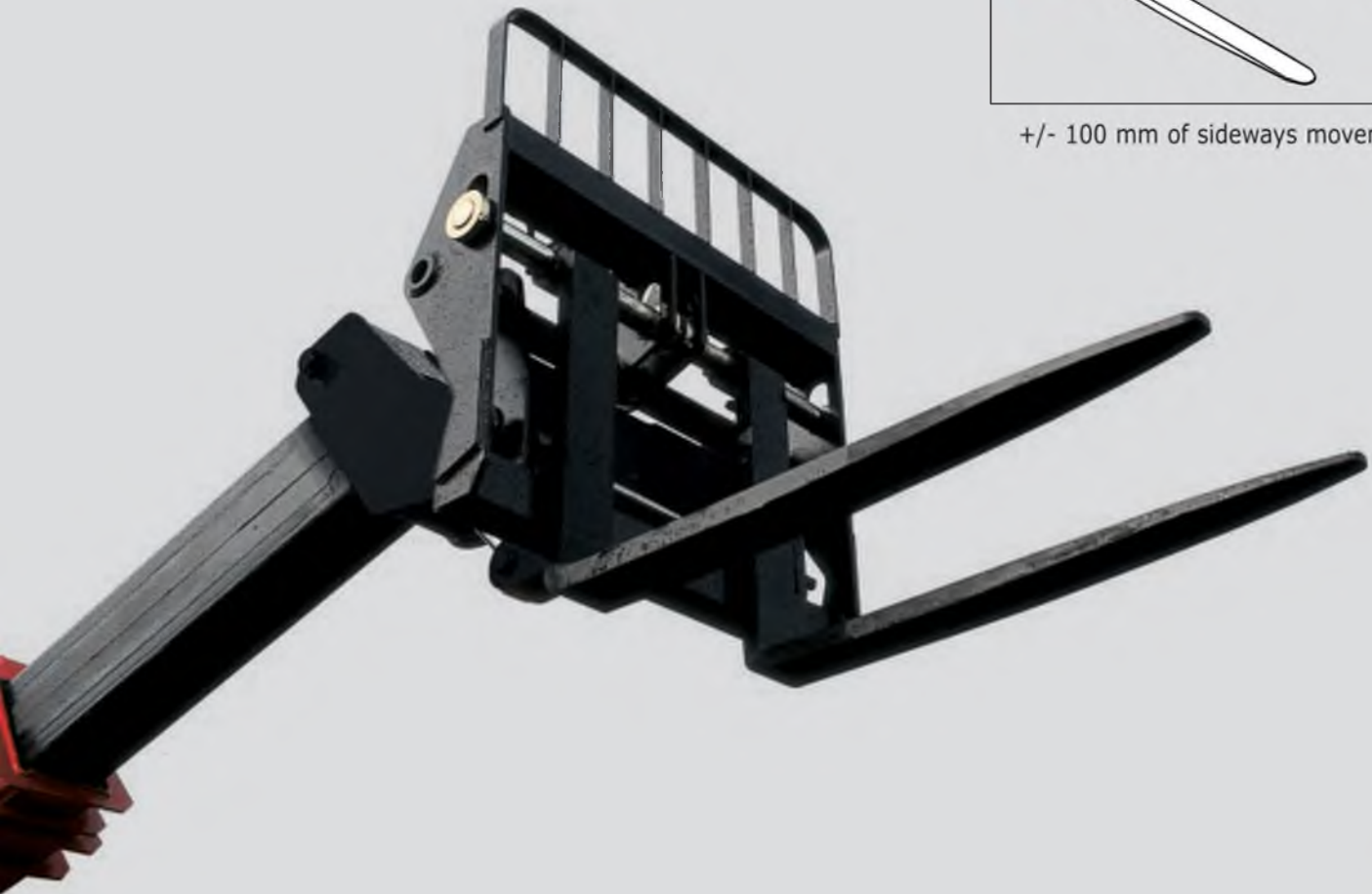
MANITOU

- Height 945 mm
- Widths 1040 and 1300 mm
- 2 forks with eyes, 1200 mm long
- Distance between forks can be adjusted with high precision
- Used for picking up pallets from uneven ground

OPTION: Floating forks with integrated side shift (TFF)

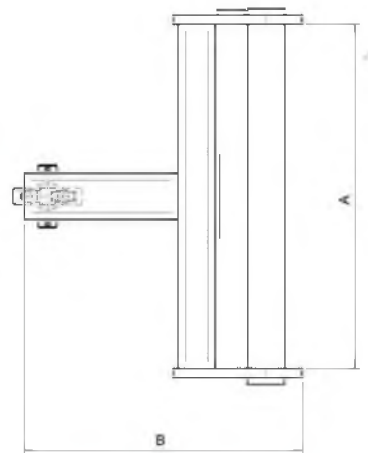
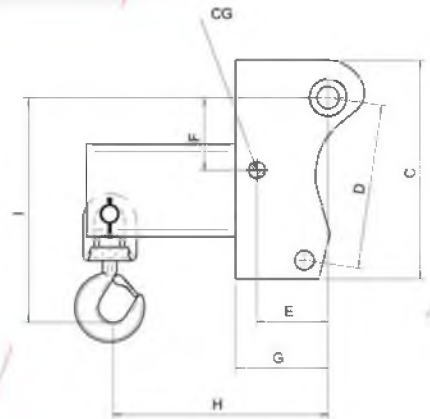


+/- 100 mm of sideways movement



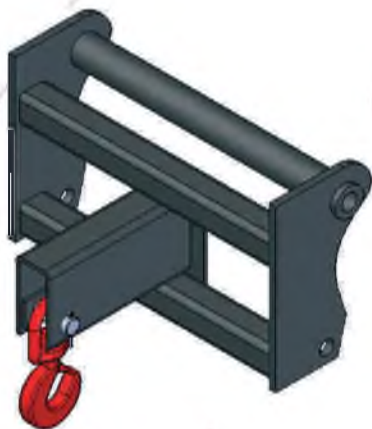
Equipment designed to European standards and to the specifications of your Maniscopic

PC 40



CHARACTERISTICS

DESCRIPTION	LOAD LIMIT	OVERALL LENGTH									WEIGHT
		A	B	C	D	E	F	G	H	I	
PC 40	4000 Kg	740	598	470	354	153	156	200	462	484	120 KG

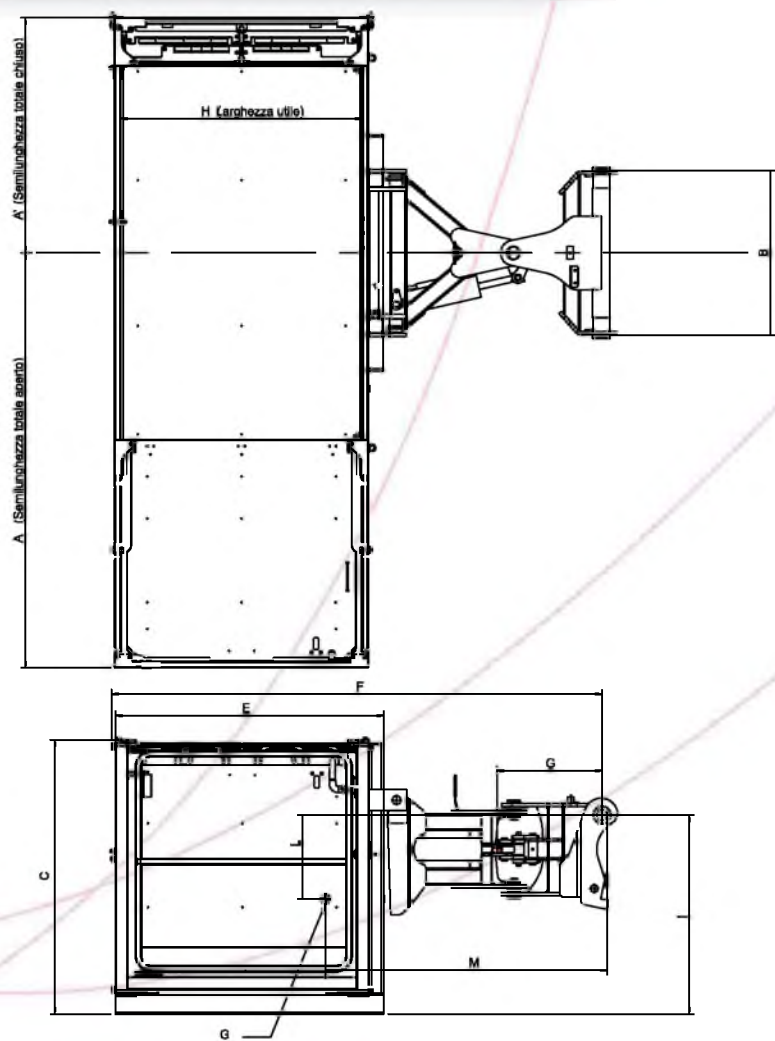


Description:
0.50 m long jib with carrying capacity of 4000 kg



MANITOU
ATTACHMENTS

GALVANISED PLATFORM WITH DOOR



Description:
Galvanised extendable and rotating personnel platform

- Specifications:*
- Maximum load: **365 Kg**
 - Maximum number of people: 3.
 - The platform can be extended from **2,25 m** (closed) to **4,00 m** (open)
 - 90°+90° hydraulic rotation.
 - Door can be opened on one side of platform.
 - The platform is accessible from three sides.
 - The platform can be accessed even if it is not extended.
 - Presence of two guides for easy handling by means of forklift equipment

- Safety features:*
- Overload sensor.
 - Shear pin presence sensor.
 - Door closed sensor

CHARACTERISTICS

DESCRIPTION	LOAD LIMIT	OVERALL LENGTH												WEIGHT
		A	A'	B	C	D	E	F	G	H	I	L	M	
GALVANISED PLATFORM WITH DOOR	365 KG	1976	1060	785	1037	640	1280	2339	500	1150	949	400	1344	500 KG



This is universally appropriate equipment; its dimensions, meeting European standards, make it indispensable for moving pallets of bricks, cement or cladding. Its use is totally unlimited.

Its system of forks is certified according to FEM classifications.

Just like other equipment in the **MANITOU** range, durability and safety are its major features.

Its floating forks and their system of movement make it extremely manageable. It is possible to adjust the forks very precisely, and pick up a pallet from uneven ground. The backboard gives the load great stability and prevents it from slipping backwards.



This carriage also enables you to use other equipment in the **MANITOU** range, such as the concrete skip with spout, and the fork extensions (1.70 m to 2.50 m).



To find out which equipment suits your MANISCOPIC, get in contact with your dealer.
The specifications shown here are not binding on the manufacturer and may be altered without notice.



MRT

A COMPLETE
RANGE



MRT 1432
M Series

MRT 1542
M Series

MRT 1635
M Series



MRT 1742
M Series



MRT 1850
PRIVILEGE



MRT 2150
PRIVILEGE

Since 1993 and its first appearance on the market, the MRT range has been confirming its expertise in leading edge technology as the world leader in all-terrain handling equipment.

The «Manitou Rotary Telescope» is a 3-in-1 machine concept, combining 3 main functions: handling, lifting and elevating personnel.

Versatile throughout 360°, Site efficiency, working comfort and absolute Safety... are the main advantages of the MRT M and Privilege Series.

The MRT is the answer to all your needs in all-terrain application.

	MRT 1432 <i>M Series</i>	MRT 1542 <i>M Series</i>	MRT 1635 <i>M Series</i>	MRT 1742 <i>M Series</i>	MRT 1850 <i>Privilege</i>	MRT 2150 <i>Privilege</i>	MRT 2540 <i>Privilege</i>	MRT 3050 <i>Privilege</i>
Lifting height (m)	13.82	14.78	15.82	17.30	17.90	20.60	24.60	29.70
Maximum range (m)	11.63	12.50	13.20	14.50	15.20	18.10	18.50	25.50
Nominal capacity on stabilizers (t)	3.2	4.2	3.5	4.2	5.0	5.0	4.0	5.0



VERSATILE
THROUGHOUT
360°



A 3-in-1 machine

The MRT is defined as :



- **a Maniscopic**

Equipped with forks or a bucket, the MRT has all the advantages of a high lift Maniscopic (all-terrain capability, lift capacity and versatility).



- **an all-terrain crane**

Equipped with a winch, a jib (with or without a winch) or lifting hooks, the MRT has significant lift capacity to manipulate heavy or bulky loads, on wheels or stabilizers.



- **a mobile elevated work platform (MEWP)**

MRTs can be pre-equipped for working with access platforms, pendulum or 3D arms, for working at heights in excess of 41 metres.

A wide range



Material distribution



Bridge maintenance



Restoration work

of accessories for many applications



Construction work



Infrastructures



Site supplies



Lifting



Handling Tunnel Sections



Steel erection

Most advanced ergonomics

PRIVILEGE



Safe driver's cab

The ROPS / FOPS approved cab in the PRIVILEGE series has a new design with unrivalled comfort.



Spacious cab

A wide door guarantees easy access. Large cab interior for greater comfort.



Attachment visibility at height

The lack of a front bar and the rounded shape of the windscreen guarantees excellent visibility when working at height. Standard Front/Rear and roof windscreen wipers ensure perfect visibility even when it's raining.



The driver's cab is designed with unrivalled ergonomics. The instrument



Electric windows

Easy to open and close with the press of a button.



Driver's cab safety

The shape of the joysticks fits perfectly into the hand. For improved safety, they are equipped with a deadmans switch to prevent any risk of uncontrolled movement.



Large storage space

Space for operators manuals and P.P.E. (Personal Protective Equipment).

All under control

Control and alarm
visual indicators

Multifunctional
digital display



Load Status Controller.



- | | |
|--|---------------------------------------|
| 1 Hour meter | 5 Speed display (km/h) |
| 2 Kilometer counter (only on starting the machine) | 6 Rev counter (rpm x 10) |
| 3 Water temperature indicator | 7 Engine warning indicator |
| 4 Fuel gauge | 8 Speedometer or rev counter selector |

panel is offset to the right for excellent frontal visibility.

Main control panel



- | | |
|--|---|
| A Backup pump switch (only if platform pre-equipped) | P1 Front left stabilizer selector |
| B Remote control switch (optional) | P2 Front right stabilizer selector |
| C Electric accelerator switch | P3 Rear left stabilizer selector |
| D Parking brake switch | P4 Rear right stabilizer selector |
| E Transmission reset button | Q Stabilizer movement selector |
| F Range change switch | Q1 Stabilizer movement indicators |
| G Rotating light switch | S Stabilizer movement control |
| H Steering mode selector | S1 Stabilizer movement control indicators |
| J Slope corrector joystick | |

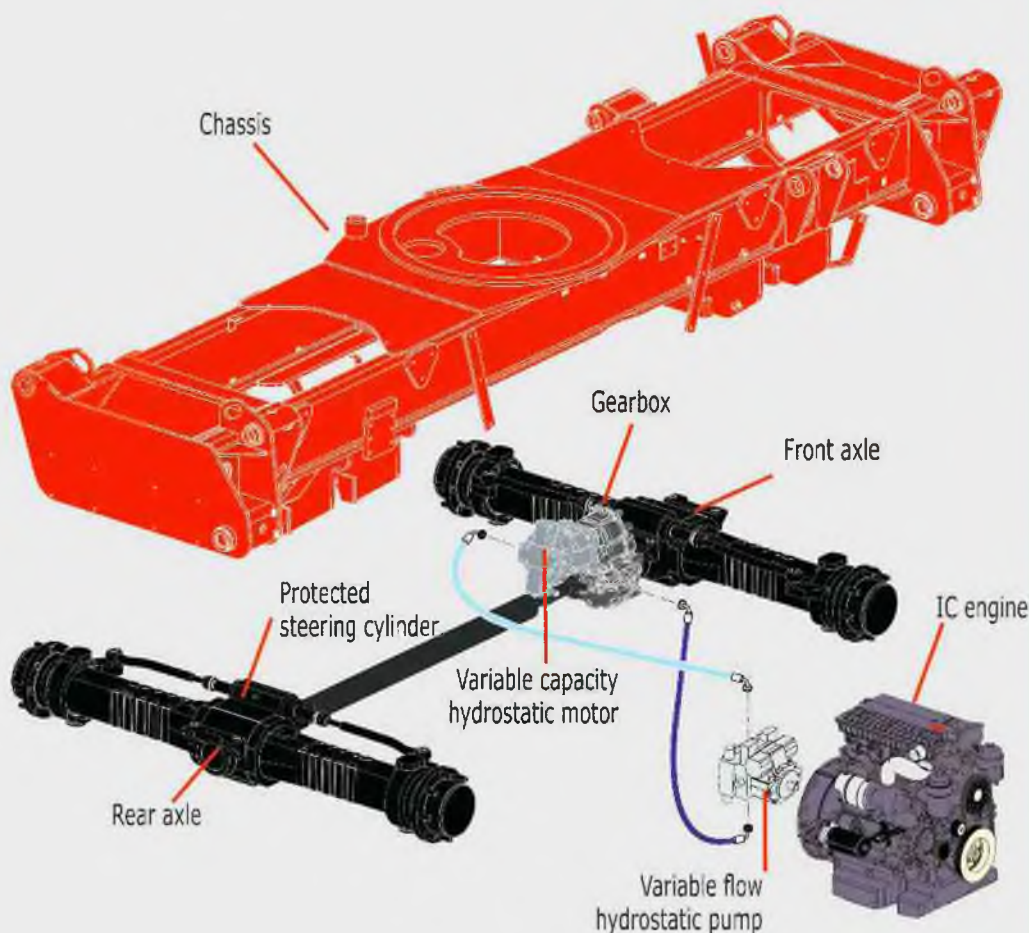


(Personal Protec-

PRIVILEGE

Power and Strength





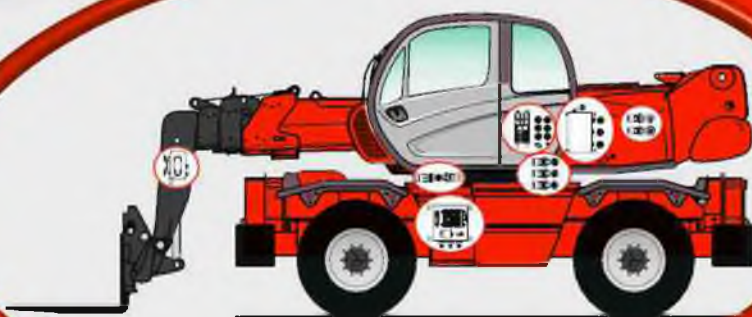
Epicyclic reduction gears



Multidisc oil-bath brakes

Electrical circuit protection

IP 67



Hydrostatic transmission

It provides accurate and gradual movement to position in total safety. Automatic adjustment of the variable flow hydrostatic pump and variable capacity hydrostatic motor provides optimal balance between speed and tractive effort.

A two-ratio gearbox means that the operator can choose to work in «site» or «road» modes depending on the terrain.

Heavy duty steering axles

Designed specifically for all-terrain applications, they provide excellent power transfer to the wheels.

The steering cylinders on the upper part are situated above the axle to prevent accidental damage.

Epicyclic reduction gears

Steering axles are equipped with epicyclic reduction gears which multiply wheel torque while reducing internal wear.

Oil-bath disc brakes

The automatically adjusting multidisc service brakes are inside the axle assembly.

A hydraulic negative action parking brake built into this system ensures that the machine will stop under all circumstances.

- Maximum braking capacity always distributed over all 4 wheels.
- Minimum maintenance.

Sealed electrical installation

The MRT series are IP67 protected to guarantee protection against water and dust penetration.

All the electrical components (electronic cards, fuse and relay boxes, connections...) are thereby protected to ensure perfect reliability and longer life.

Safe and fast stabilization



Fast stabilizer deployment

The MRT series (1542/1742/1850/2150/2540/3050) have telescopic scissor stabilizer jacks designed by Manitou.



Stabilizers within the limits

In the raised position, Manitou stabilizers remain within the machine's limits and do not reduce its ground clearance.

The cylinders are perfectly protected.

A switch in the cab deploys the stabilizers simultaneously or individually.

The design of scissor stabilizers ensures that excellent ground clearance is maintained at the feet, even when they are fully deployed.

Accurate machine placement is therefore easy and fast.



Optimal ground support

The stabilizer mechanism guarantees permanent contact with the ground in deployed position. With their wide contact area, they adapt to all surfaces, providing maximum stability.



Perfect stability on the stabilizers



Stabilizers fully deployed



Square stabilizer base



Stabilizers in intermediate position

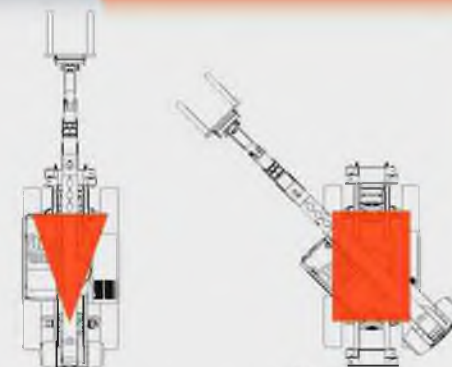
The telescopic scissor stabilizers form a lifting square which guarantees uniform stability during rotation.

Intermediate locking - if there is an obstacle on the site or the machine is in a narrow street, stabilizers in the intermediate position allows you to work in total safety whilst maintaining impressive capacity.

Perfect stability even on tyres



To ensure perfect stability and guarantee maximum capacity during rotation on tyres, the MRT is equipped with an automatic rear axle oscillation locking device.



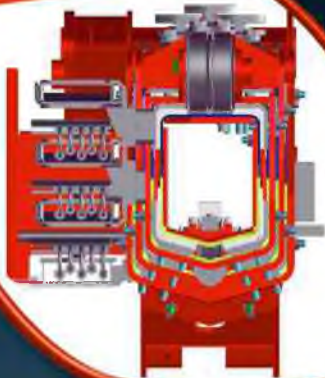
**Frontal work :
Rear axle assembly
oscillating.**

**360° work :
Rear axle
assembly locked.**

Flexibility and Precision



MANITOU PATENT



Precise movement

On quadriplex and quintuplex booms, the pentagonal cross-section makes the telescopic boom more rigid and provides perfect guidance between boom sections which considerably reduces lateral oscillation.

There are many advantages:

- extremely precise movement,
- perfect control of the handling operation,
- easy access to chain tensioners,
- easy wear pad adjustment.



Driver's cab comfort.

Adjustments to suit every operator:

- Seat depth adjustment.
- Height adjustment.
- Seat back rest adjustment.
- Suspension adjustment according to the operator's weight.



Intuitive manipulation

MRTs are equipped as standard with two electrohydraulic levers mounted on the seat arm-rests to give better control and greater comfort.

The right-hand lever can simultaneously control two movements: lifting and tilting.

The left-hand lever can simultaneously control three movements: telescope extension, turret rotation and attachment control.

Turret rotation speed limiter

To guarantee total safety on site, MRTs are also equipped with two potentiometers on the left arm-rest, which control the turret left/right rotation speed independently.

Perfect control of rotation at maximum height means accurate load placement and success with even the most difficult manoeuvres.



Radio-control (optional)

All MRTs can be equipped with radio-control. This means that all the boom hydraulic functions can be performed at a distance. For maximum ergonomics, the two proportional radio-control joysticks perform the same functions as the driver's cab joysticks and allow simultaneous movement to optimise efficiency.



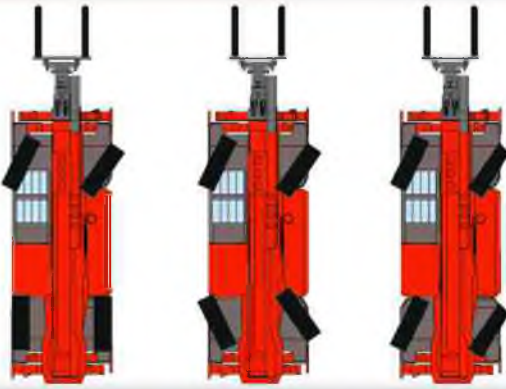
All-terrain efficiency



Manoeuvrability

The MRT has three steering modes:

- All wheel steering for maximum manoeuvrability.
- Two wheel steering for road travel.
- Crab steering for a lateral approach.



two wheel
steering

all wheel
steering

crab
steering

Compactness

With 4 wheel drive and steering, the turning circle is very small. Its exclusive design (laterally-mounted engine), makes the MRT extremely manoeuvrable.

All-terrain performance

The 4 wheel drive and the oscillating rear axle provide excellent adhesion on all four wheels even on rough terrain ground.

The hydrostatic transmission coupled to a two-ratio gearbox gives the ability to travel on the most difficult ground conditions including steep slopes.

Frame levelling

MRT 1850, 2150, 2540 and 3050 are fitted with frame levelling on the front axle ($\pm 8^\circ$) to ensure loads can be easily handled on uneven ground.



Absolute safety



The MRT range meets European norms governing mobile cranes, telescopic trucks and personnel elevation.

MRTs are equipped with a load status controller (Manitou Safety System) capable of memorising a large number of settings.

It constantly analyses the load's position and the machine's working configuration.

It compares all the data with the memorised load diagrams. In the event of an overload, it automatically cuts aggravating movement.

This system eliminates any risk of overloading the machine or its accessory.

AN ADVANCED SAFETY SYSTEM !

Sensors are installed on the machine to detect working conditions and configurations.

- A. Detection of boom angle and extension.
- B. Detection of load weight.
- C. Detection of turret position.
- D. Automatic detection of working configuration.

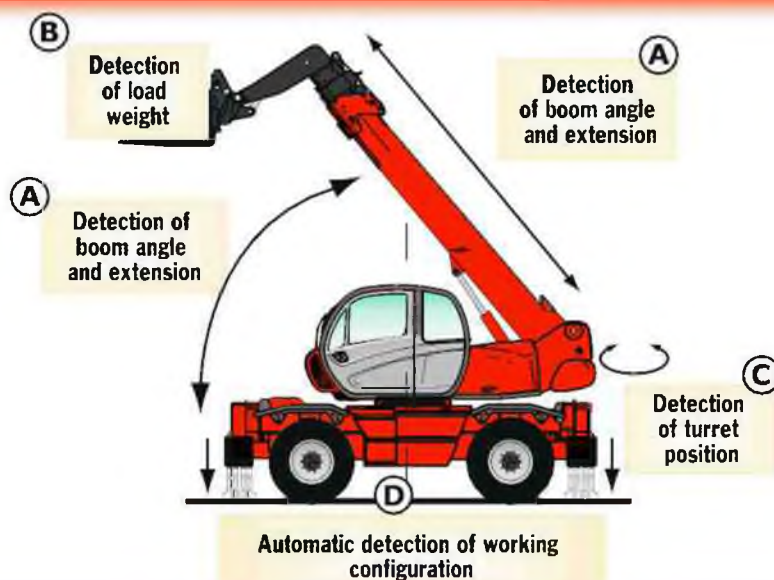
SELF-DIAGNOSIS

This Load Status Controller has a specific self-diagnosis programme. It is used to verify on screen the status of all the components connected to the load control system. If there is an incorrect reading, this device goes into safety mode and locks movement.

To facilitate diagnosis, the sensor concerned is displayed on the screen to minimise machine down time.

The digital display in the cab informs the operator of machine load status continuously. It also includes:

1. Symbols identifying the machine's operating modes (stabilized, frontal on tyres, rotation on tyres, intermediate position).
2. Symbols identifying the equipment (selection from a drop-down menu accessible via key A).
3. Green/Yellow/Red light indicators showing working condition (safety/alarm/locked).
4. Alphanumeric LCD display of working data.
5. Symbols for the information displayed.
6. Icon representing the machine.
7. Image contrast adjustment.
8. Hydraulic movement speed selector.
9. Accessory selection (from those available).
10. Confirmation of the accessory and image contrast value.



Easy maintenance

External hydraulic hoses

The hydraulic hoses are outside the boom. For maintenance on this unit, access is fast, which reduces operating time and support costs.



Tension distributor

All MRT chain booms have a distribution system which ensures even distribution of tension on all the chains, to extend reliability and life span. A mechanical stop device is used for pick-up work with a bucket while keeping the boom retracted.



Storage space

MRTs are equipped with a useful storage compartment for storing of the platform control box, remote control and small ladder plus P.P.E. (Personal protection Equipment) and any additional service items (grease guns, etc). The compartment is fitted with an anti-theft device.



Visual indicator

An indicator on the cab access side is used to check the hydraulic oil level easily.

Easy access to the main components

- The engine is installed laterally for access on 3 sides.
- A cover behind the chassis allows access to the air filter and battery.

Optimized boom design

The use of high-tensile steel means that the boom is light and strong. Whether hydraulic or chain driven, MRT telescopic booms are designed to facilitate and minimise servicing.



The Manitou network

In your profession and ours, reactivity and professionalism are our strengths. To ensure the best service, we provide you with the most comprehensive global network and most efficient logistics on the market.

Our network works hand in hand with the manufacturing plants to provide a complete after sales service, covering all your needs in terms of spare parts and technical services.



Training

At the 600 Manitou service points throughout the world, nearly 1 000 technicians are trained every year to be real professionals at your service.



Spare part availability

95% of Manitou spare parts are shipped throughout the world within 24 hours: A level of response you need.

Manitou, material handling world leader

Inventor of the rough terrain forklift truck, Manitou offers today the most comprehensive range to meet all specific handling and personal lifting requirements :



MANISCOPIC
Telescopic trucks



MANITOU
Rough terrain
and semi industrial
mast trucks



MANIACCESS
Access
equipment



Twisco
Compact
telescopic
handler



MANIHOE
Backhoe/Loader
with telescopic
boom



MANITRANSIT
Truck mounted
forklifts



MANILOADER
Articulated
wheeled loaders



MANILEC
Electric pallet trucks
and electric stackers

A network of skilled professionals at your service !

With a network of 600 service and parts centres in more than 120 countries, Manitou provides an efficient after-sales support based on the expertise of thousands of factory trained technicians.



The equipment supplied with each model may differ from that described in this leaflet.
For more details, contact your MANITOU dealer.