

# MANISCOPIC

**MRT**  
**M Series**



**MANITOU**

# MRT

M Series

A  
WIDE  
RANGE!



MRT 1432

MRT 1542

MRT 1635

MRT 1742



*Ever since its first appearance on the market in 1993, the MRT range has confirmed that the world market leader in rough terrain materials handling has complete mastery over state-of-the-art technology.*

**The "Manitou Rotary Telescopic Millennium series"** is a 3-in-1 machine design combining 3 functions: materials handling, lifting and access platforms.

*Usable through 360°, effectiveness on site, comfortable working conditions and absolute safety – these are the major advantages of the new MRT M Series range.*

**The MRT M Series is the answer for all your materials handling needs.**

	MRT 1432 M Series	MRT 1542 M Series	MRT 1635 M Series	MRT 1742 M Series	MRT 1850 M Series	MRT 2150 M Series	MRT 2540 M Series	MRT 2440 EPS M Series
Lifting height (m)	13,82	14,78	15,82	17,30	17,90	20,60	24,60	23,80
Forward reach (m)	11,63	12,50	13,20	14,50	15,20	18,10	18,50	17
Nominal capacity (kg)	3200	4200	3500	4200	4999	4999	4000	4000



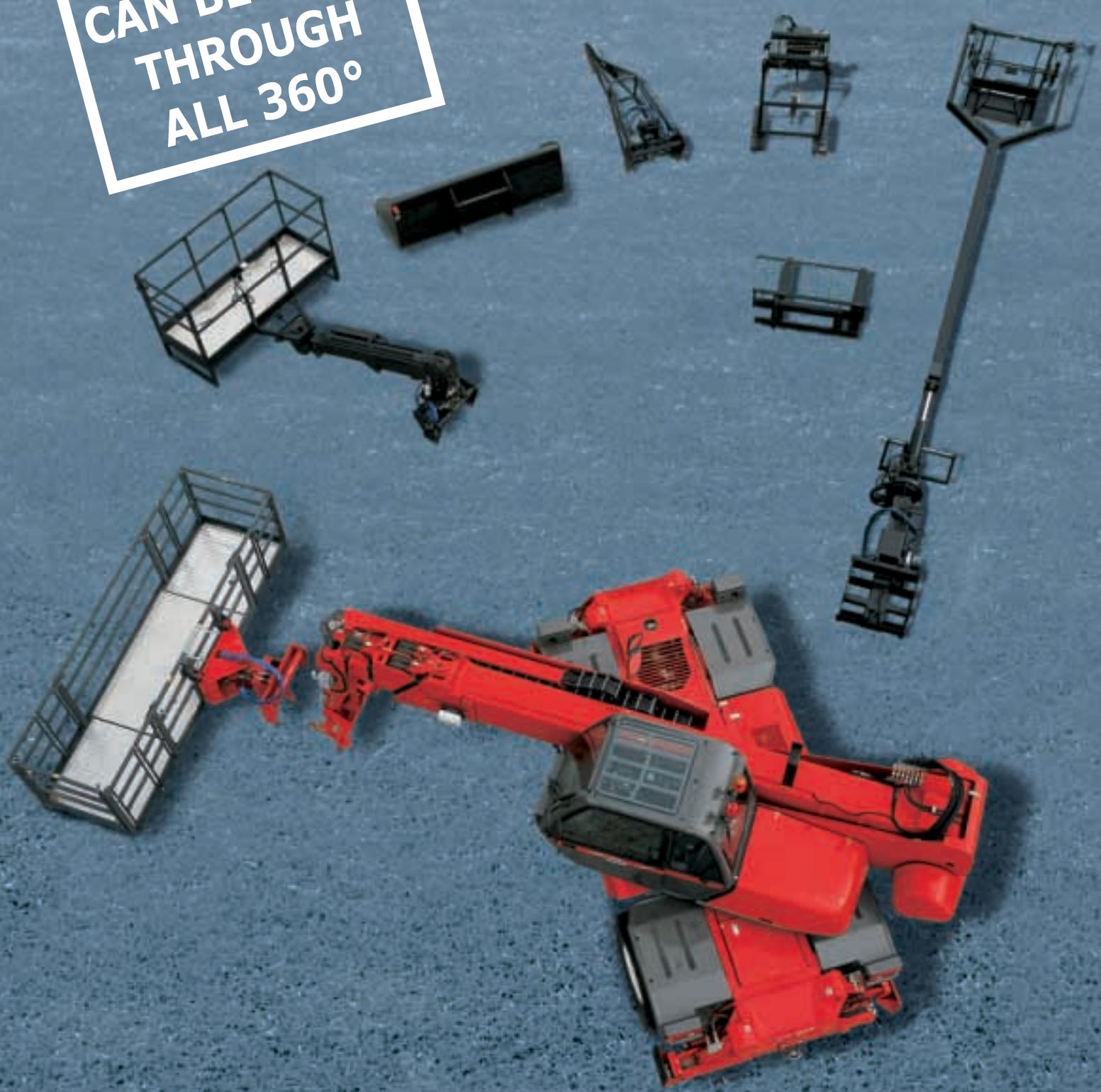
**MRT 1850**

**MRT 2150**

**MRT 2540**

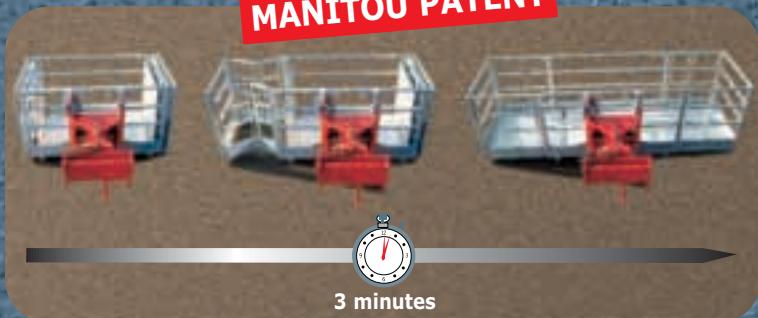
**MRT 2440**

CAN BE USED  
THROUGH  
ALL 360°



Rapid fixing  
of attachments

MANITOU PATENT



3 minutes

# A 3-in-1 machine



## The MRT is all these things:

- **a true Maniscopic**

Fitted with forks or a bucket, the MRT has all the advantages of a high level maniscopic, effective on rough terrain, manoeuvrable and flexible, whilst offering additional load capacity.

- **a rough terrain crane**

MRTs fitted with winches, jibs (with or without winches) or lifting hooks have great lifting power to handle heavy and/or bulky loads on stabilisers or free on wheels.

- **an access platform**

The MRTs can be fitted with work platforms, Pendular platform or the 3D system that enables working heights of up to 35 metres.



# A wide range of attachments for many applications



Steel framework



Renovation



Tunnels



Public works



Bridge maintenance



Building



Quarries



Materials handling in factories



Mines



Waste treatment



Tree pruning



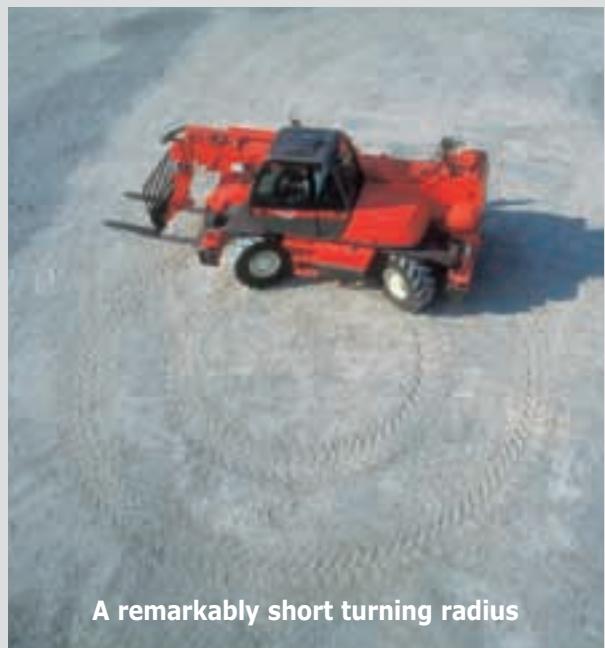
Roofing

**EFFECTIVE  
ON SITE**

- High lift height
- Accurate movements
- Work in confined spaces



## Manoeuvrability/Compactness



The choice of 3 steering options and a short turning radius make the MRT M Series extremely manoeuvrable.



## Flexible transmission



### Hydrostatic transmission

The Rexroth hydrostatic transmission has automatic adjustment (variable flow hydrostatic pump and variable capacity hydrostatic motor) that combine fast reaction and high tractive effort: 8200 daN to 8600 daN.

### A powerful engine

The MRT range has Perkins Diesel Engines from 101 to 132 hp according to model.

## Excellent Tractive effort and stability



The MRT has 4 drive wheels, 2 forward and reverse working gears, an oscillating rear axle and **excellent ground clearance**.



The MRT 1850, 2150, 2440 and 2450 M Series are fitted with a frame levelling device.

WORKING  
COMFORT



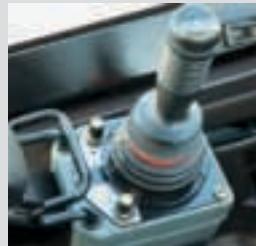
# Fast, simultaneous and flexible movements



The multipump hydraulic system combined with two Danfoss electro-proportional joysticks means that movements can be carried out simultaneously.

## An extremely comfortable seat

The seat with two arm-rests can be adjusted to suit the driver. An additional safety feature is that hydraulic movements can only be carried out when the sensor under the seat is activated by the presence of the driver.



To allow a more precise control of rotation performance for site operation, additional speed adjusters are fitted adjacent to the slew joystick.

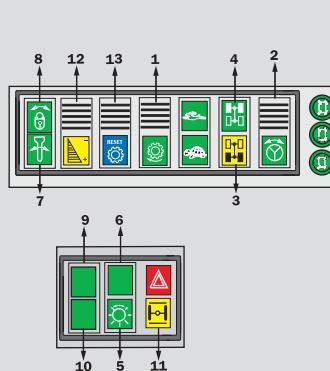
## Excellent vision



## Simple to use

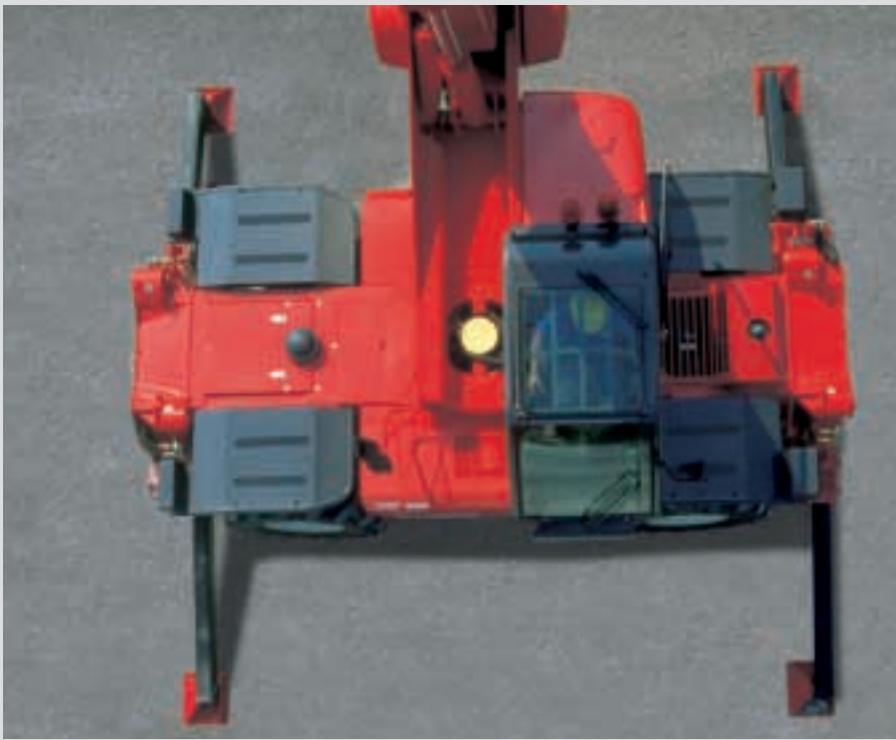
The dashboard on the M Series MRTs is ergonomically designed and fitted with switches labelled with universal symbols to make them even easier to use.

When the machine is started, all the warning lights and an audible signal show that the machine is working properly.



- 1 Gear-box button (slow - fast)
- 2 Steering-type selector
- 3 Yellow warning light - alignment of rear wheels
- 4 Green warning light - alignment of front wheels
- 5 Green warning light - road lights
- 6 Uncoloured warning light (for supplementary equipment)
- 7 Green warning light - turret alignment
- 8 Green warning light - rotation lock
- 9 Uncoloured warning light (for supplementary equipment)
- 10 Uncoloured warning light (for supplementary equipment)
- 11 Yellow warning light - rear axle locked
- 12 Optional button for electric accelerator
- 13 Luminous button - "RESET TRANSMISSION"

# Working platform



The design of the engine bonnet and the steel mudguards helps to create a platform that can be walked on to access turret items.

A wide step gives easy, quick access to the cab, and a removable ladder (standard) allows easy access to the platform in any situation.

## Tool box

The M Series MRTs are fitted with a tool box for storing all the small items you need when handling materials (e.g.: slings, chocks, etc.).



## Radio control (optional)

The M Series MRTs may be fitted (as an option) with radio control so that the hydraulic operations of the machine can be controlled at a distance.



With its two 2-in-1 proportional control Joysticks, the (optional) radio control allows simultaneous movements.



## Booms

in High Yield Strength steel that is both light and highly resistant to damages:

- M Series MRT 1432      Three-stage boom with simultaneous in-and-out action of the telescopes  
M Series MRT 1542  
M Series MRT 1635  
"hydraulic boom"
- M Series MRT 1742      Four-stage pentagonal booms with simultaneous in-and-out action  
M Series MRT 1850  
M Series MRT 2150  
M Series MRT 2540  
of the "chain booms" (\*)



(\*) The chain booms on the MRT 1742, 1850, 2150, 2540 M Series are fitted with a mechanical stop which allows bucket work with the boom retracted.



## Ease of Maintenance

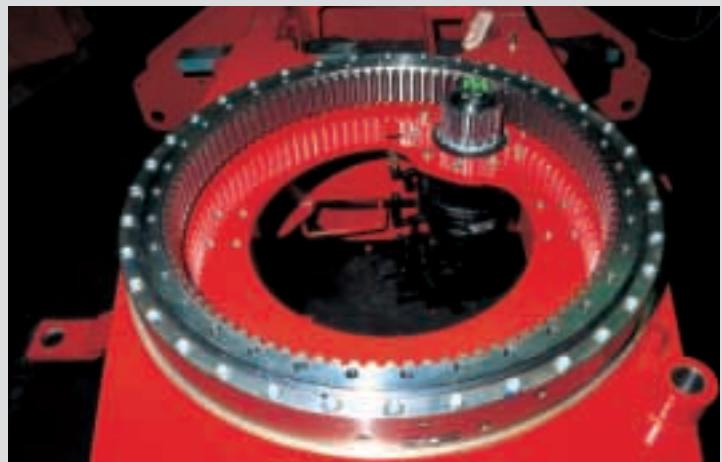


- The transverse position of the engine allows access from all sides.
- A hinged cover situated at the rear of the chassis gives easy access to the air filter and the battery.
- A gauge placed under the step allows the hydraulic oil level to be checked visually.
- Hoses positioned externally on the boom make them easier to work on.

## High quality components

- ➔ Rexroth Hydromatic transmission
- ➔ Danfoss distributor
- ➔ Rotherd ring gear
- ➔ Trasmital reducer
- ➔ DANA-SPICER axles

The sealed axles, fitted with multidisk oil-bath brakes, help to keep down the frequency and cost of maintenance.



COMPLETE  
SAFETY



# Rapidly extending stabilisers

The M Series MRTs (MRT 1542/1742/1850/2150/2540 and 2440) have Manitou-designed telescopic scissor-action stabilisers.

**MANITOU PATENT**

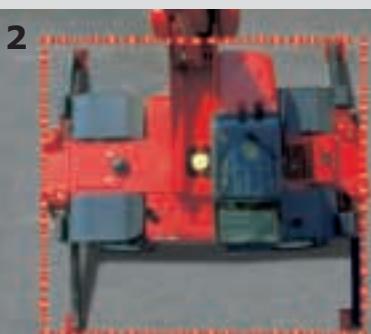


When raised, the Manitou stabilisers remain within the profile of the machine, ground clearance is not reduced and the cylinders are perfectly protected. A switch allows the stabilisers to be used simultaneously or individually. The large pad width mean that, on most ground, chocks do not have to be used.

## Complete stability



1  
Intermediate settings for the stabilisers



2  
Square base



3

The telescopic scissor-action stabilisers form a square base that guarantees uniform stability during rotation. Intermediate settings (as shown as photo 1) allow working in any configuration, even on the most restricted site.

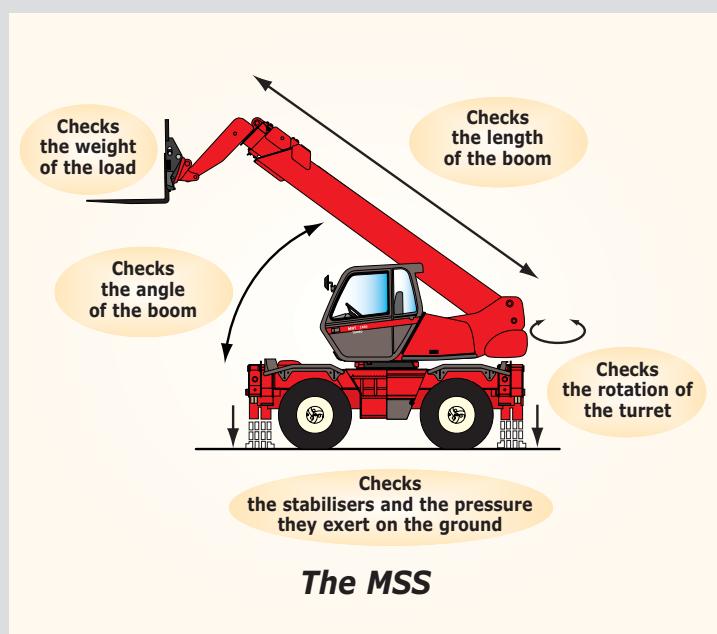
## Load moment indicator

### MANITOU SAFETY SYSTEM



The M Series range meets all the European standards for mobile cranes, telescopic trucks and access platforms.

The M Series MRTs are fitted with the Manitou Safety System (MSS) - a load moment indicator (mobile crane type) that is able to memorise a very large number of load charts. It analyses the position of the load in three dimension and the work configuration of the machine. The MSS continually analyses the memorised load charts against information sent by the sensors depending on the configuration of the machine and the load moment. When the system is overloaded any offending movements are automatically prevented.



# 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 :



Telescopic  
trucks

**MANISCOPIC**

Rough terrain  
and semi industrial  
masted trucks

**MANITOU**

Access  
equipment

**MANIACCESS**

Compact  
telescopic  
handler

**Twisco**

Truck mounted  
forklifts

**MANITRANSIT**

Backhoe/Loader  
with telescopic boom

**MANIHOE**

Swinging arm  
and articulated  
wheeled loaders

**MANILOADER**

Electric pallet trucks  
and electric stackers

**MANILEC**



## A network of skilled professionals at your service

With a network of 500 service and parts centres in more than 100 countries, Manitou provides an efficient after-sales support based on the expertise of 2000 factory trained technicians.

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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