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MANITOU

## Handing your world vide. A world-lead manufactures distributes

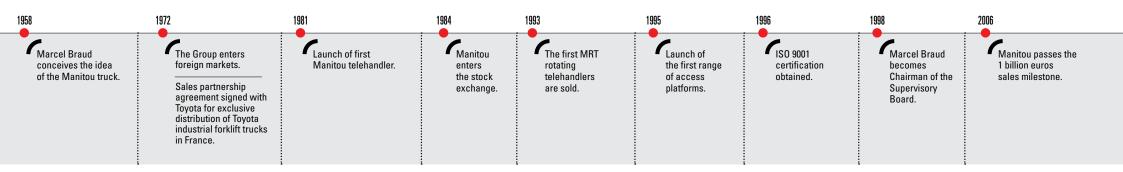
Founded over 60 years ago by the Braud family, the Manitou Group now operates worldwide. A world-leader in all-terrain material handling, the Group designs, manufactures, distributes and services equipment for construction, agriculture and industries.

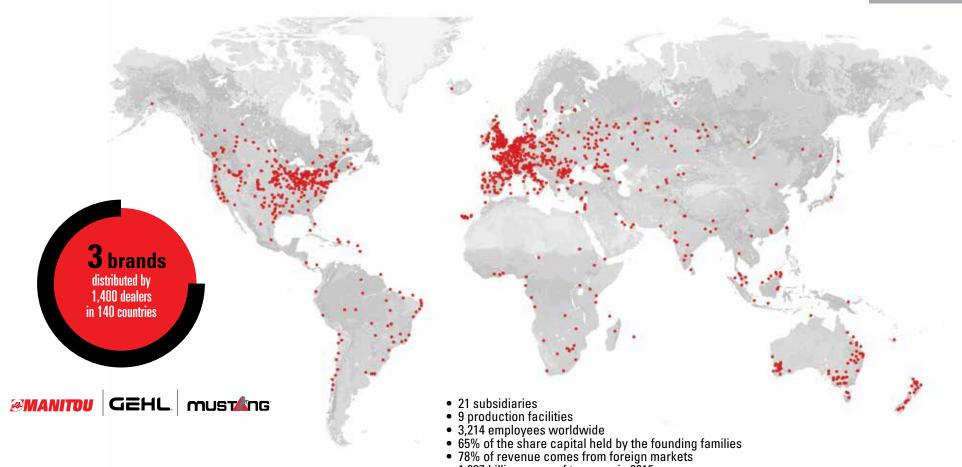
The Group's product ranges include: all-terrain fixed, rotating and heavy-load telehandlers; all-terrain, semi-industrial and industrial masted forklift trucks; wheel or track skid-steer loaders; access platforms; truck-mounted forklifts; warehousing equipment; and attachments.

Through its iconic brands – Manitou, Gehl and Mustang – and its worldwide network of 1,400 dealers, the Group offers the best solutions to create optimum value for its customers.

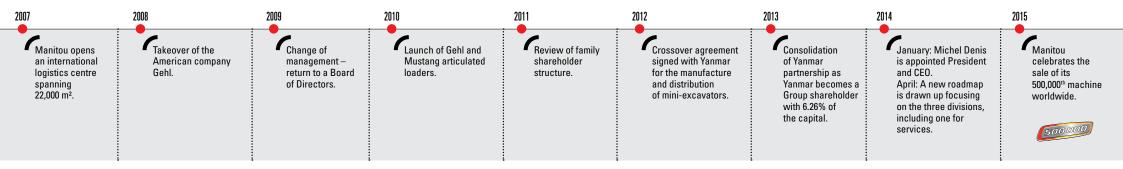
Based in France, the Group registered a 2015 turnover of 1,287 billion euros in 140 countries, and it employs 3,214 people who are resolutely focused on customer satisfaction.

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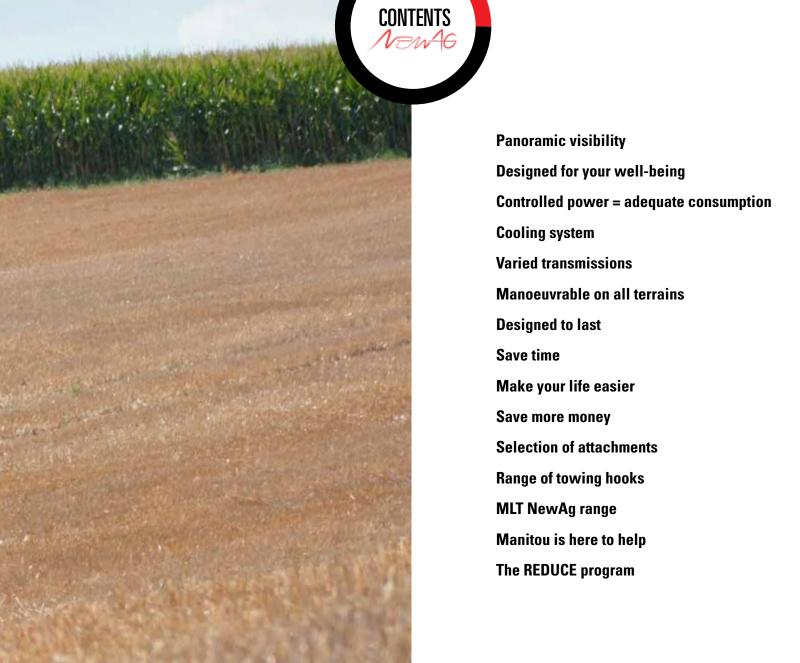




• 1,287 billion euros of turnover in 2015



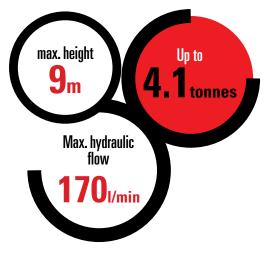






The new range of Manitou agricultural telehandlers, NewAg, was designed to assist in your everyday work and to meet with the needs that you have expressed to our network of dealers at trade shows, over the website and on the Manitou social networks.

Because your profession is demanding and essential, the NewAg range focuses on comfort, performance and efficiency. Discover all the developments and technological choices that help improve your performance every day.







- 1. Wide-view windscreen
- 2. Optimal lighting: standard working lights and LED + option
- 3. Mirror with adjustable support
- 4. Cab access via real steps
- 5. Full-comfort cab: Harmony or Vision\* screen, your choice of position for "DSB" buttons, soundproof cab, a number of storage compartments, and more
- 6. Joystick Switch and Move (JSM®) on suspended armrest
- 7. Engine power: 101, 129, 136 hp
- 8. Emission standards: Stage IV / Final Tier 4
- 9. Auto reversible fan\*
- 10. Several types of transmission\*: torque converter (with Powershuttle or Powershift Plus gearbox), M-Varioshift, M-Vario Plus
- 11. High-speed simultaneous movements thanks to distributor flow sharing\*
- 12. "Active CRC" boom suspension\*
- 13. A number of optional attachments
- 14. Easy Connect System (ECS)
- 15. Several towing hooks available
- 16. Selection of optional tyres
- 17. Central greasing points



## DESIGNED FOR COMFORT

Comfort and productivity are closely linked. That is why our telehandlers provide an optimal level of ergonomics and all the features that you need to fully concentrate on your activity.





## **Panoramic** visibility

The models of the NewAg series feature exceptional visibility. The angle of each blade of the roof structure has been meticulously adjusted in relation to the lifting height to offer you a clear view of the load, regardless of its position.

The relatively low position of the boom articulation point and the one-piece windscreen offer you 360° visibility, guaranteeing your safety and the safety of those around you.







## **Electric adjustable** mirror with de-icing\*

The exterior right rear view mirror may be easily adjusted from a control on the interior of the cab. The defrosting function makes it possible to work efficiently in all weather conditions.

## Extra wiper\*

An additional windscreen wiper offers a perfectly clear view of the front of the machine, even in the rain.





## LED⁺ option

The LED<sup>+</sup> option is a way of guaranteeing high standards by offering optimal lighting all around the machine:

- 1 behind the cab on the left side,
- 2 in front of the machine on the right side,
- 1 behind the machine over the towing hook.

## <mark>Optimal</mark> lighting

A cab fitted with four work headlights and equipped with a ceiling light for night work.



## Cab ventilation

Even in dusty conditions, you'll breathe easily thanks to:

adjustable air vents, and two cab filters.









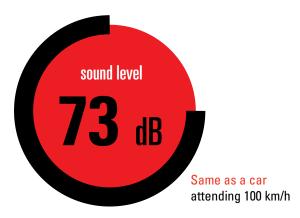


## You won't see the time go by in your machine!

Enjoy equipment perfectly suited to your needs: a cloth-covered seat, a steering column with adjustable height and depth, a sun visor, an electric window, a USB slot, a 12V plug, and more.

Because silence is a factor of well-being, we also consider cab soundproofing a major priority (73 dB). If you get fed up with silence occasionally, you can always turn on the radio!

For additional comfort, your personal belongings may easily be stowed away in any of the many spacious storage compartments.



) EL ITE



## Easy-access cab

The access to the driving station has been entirely redesigned. This model offers cab access via a proper set of steps. The non-skid step and large handles on the cab frame and door make it even easier to climb up and down.







## Clear, modular dashboard

Behind the wheel of the NewAg, all the controls are within reach and are clearly identified with symbols and colour codes. And because everyone has their own way of doing things, you can choose the position of your "DSB" buttons: an essential time-saver that enables you to concentrate on the work at hand!

## Two screens Two styles

Whatever level of finishing you choose, the cab screen indicates the maintenance frequency, moving speed, time of day, and other information useful in your daily work.











#### Manitou works hard to make your workday easier!

Exclusive to Manitou, the JSM<sup>®</sup> on the suspended armrest allows you to operate in complete safety and without getting tired by carrying out every movement with one hand: raise and lower the boom, extend and retract the boom, crowd and dump the bucket, hydraulically move the attachments, and also reverse the machine. One hand stays on the wheel so you keep total control over your machine.

FNR (Front Neutral Reverse) button
Hydraulic line attachments
Telescope: retraction and extension

Forward: boom lowering
Backward: boom lifting
Left: crowd
Right: dump

#### Air conditioning with automatic adjustment\*

Select your ideal temperature and enjoy your climate control system.



## DESIGNED FOR PERFORMANCE

Because performance is one of your priorities, our agricultural telehandlers offer you features and a choice of transmissions that are well-adapted to your work environment.



## SUITABLE POWER = Controlled Consumption

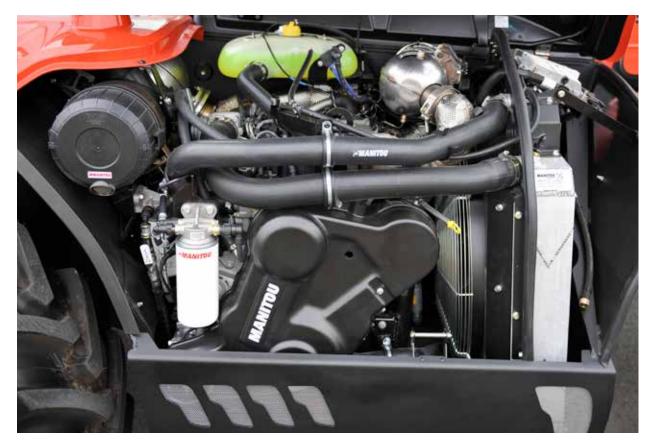
### **Engine suited** to your needs

Each telehandler is fitted with suitable engine, giving you the optimal machine/engine combination for maximum efficiency and minimal consumption.

The NewAg range is equipped with Deutz 4-cylinder engines with a cubic capacity of 3.6 l. With power ranging from 101 hp to 136 hp according to the model, these engines are perfectly suited to your activities.



\*vs our previous ST -- IIIB versions



## A cleaner engine

In compliance with the Stage IV (Final Tier 4) standard, all NewAg models feature a DOC (Diesel Oxidation Catalyst) and a SCR (Selective Catalytic Reduction) with diesel exhaust fluid (AdBlue® or similar).











## COOLING SYSTEM Adapted to your Work Environment

#### A cooling system engineered to your needs!

The NewAg cooling system was engineered to ensure you long, comfortable workdays. Its electronic adjustment\* system allows it to automatically set the speed and rotation of the fan according to the temperature of the engine. This enables you to significantly reduce your fuel consumption.

\*option available on the MLT 733 with the auto reversible fan







# Auto reversible fan\*

The auto reversible fan feature reverses the air flow every three minutes (for 10 seconds) regardless of the engine speed. Cooling is always optimal, especially in very dusty environments (notably in the presence of straw, manure, etc.).

\*option available on the MLT 733



## A VARIETY OF Transmissions for A variety of tasks

#### Torque converter with Powershuttle gearbox

Reliable, economic and effective, this transmission is particularly well-suited if you use the machine for tasks such as agricultural loading and off-road or on-road transport. Combined with a four-speed manual gearbox, it allows you to easily adapt your speed to the work at hand.

#### Torque converter with Powershift Plus gearbox

This transmission is very easy to use. You may change speeds using the clutch, manually (+/- buttons on the JSM make it possible to change among the six speeds) or automatically. This makes it possible to concentrate on the work at hand.



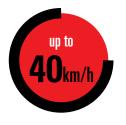


## **M-Varioshift**

The M-Varioshift enables you to adapt the moving speed up to 40 km/h and to adapt the tractive effort according to the task. Choose your speed with a simple movement directly from the JSM® (+/- buttons). Precision and tractive power: the M-Varioshift guarantees smooth handling.

## **M-Vario Plus**

Reaching 40 km/h smoothly is now possible with the M-Vario Plus transmission! The engine power is continually adjusted to provide the best torque-speed ratio for the task at hand. This means great comfort in use and fuel efficiency. This new-generation technology (Continuous Variable Transmission) is user-friendly.



## **Inching system**

Standard equipment on the M-Varioshift and M-Vario Plus transmissions, this feature makes it possible to accelerate the boom movements as you progressively reduce the moving speed of the telehandler.



## MANOEUVRABLE ON ALL TERRAINS

# 

## All-terrain handling

- Agricultural profile tyres
- High ground clearance making it possible to easily clear obstacles
- Oscillating rear axle to maintain maximum grip and stability
- Four wheel drive
- Optimal turning radius
- Dimensions suitable for agricultural use with a varied range of heights and widths available

#### Limited slip differential

To help you get out of tricky situations, the standard equipment of the MLT 635/733/737/741/940 models include a limited slip differential (45%) on the front axle.



## A choice of four steering modes

An ultra-manageable machine with four steering modes:



**Two steering wheels** for road use,



 Four steering wheels
to manoeuvre through narrow spaces,

Crab mode



for sideways approaches and tricky unloading manoeuvres,



**Mani-crab mode** for tasks such as silage.



## "Active CRC"\* boom suspension

This system absorbs the stock movements of the boom when you drive with or without a load. The components are put under less strain, your load is protected and driver comfort is ensured.

Our new "Active CRC" system operates regardless of the angle of the boom and is automatically activated when driving over 4 km/h. At lower speeds, the feature is deactivated to focus on movement precision for easier, better-suited load handling.

<sup>\*</sup>standard or optional, according to the level of finishing.



- 1. A "double U" boom, welded at the point under the least amount of strain to resist intensive use
- 2. Hoses and distributor are protected under the boom
- 3. Tilting ram protected behind the boom head
- 4. Dana Spicer axle with epicyclic reduction gear
- 5. Steering cylinder in a high position, protected from gravel splatter
- 6. Hydraulic oil immersed multi-disc braking within axle
- 7. Possibility of changing the position of the mirror at the back of the machine to avoid breakage risks
- 8. One-piece chassis
- 9. Cab compliant with ROPS / FOPS level 2 standard
- 10. Easy Manager: online tracking for better maintenance support and maintenance planning. Easier maintenance diagnostic (machine and service alerts) and decreased downtime.



## DESIGNED FOR EFFICIENCY

We take every possible measure to save you time: quick hydraulic movements; a wide range of attachments, tyres and hooks; and easier maintenance.

## YOU'RE GOING TO HAVE TIME ON YOUR HANDS

### Starts in seconds

Cab access via real steps
Intuitive handling with the JSM<sup>®</sup>
Ideally located controls











#### Simultaneous movements

The flow sharing distributor, standard equipment on the MLT 635/737/741/940 models, guarantees simultaneous movements for more efficient work.

## 100, 150, or 170 l/min

Combined with the JSM, the hydraulic pump of your MLT delivers a maximum flow of 100, 150 or 170 l/min for quick, precise movements.





# Attachments may be changed in seconds

With the Manitou carriage system, which has equipped our telehandler models for 35 years, you may change attachments within just a few seconds.

The ECS® (Easy Connect System) decompresses the hydraulic attachment line without turning off the engine, making it quick and easy to change your hydraulic attachments.





# Attachment hydraulic locking option

The attachment hydraulic locking allows you to change and lock the attachment without leaving the machine.





## **Easy access** to the main engine parts

Because you have no time to lose, we have engineered the engine compartment to make maintenance easy:

- Wide engine hood opening
- Possibility to clean the radiator on each side
- Hatch (beneath the radiator)
- Easy access to the various filters, engine oil gauge, and more.







# **Easy, safe access** to the principal tanks

The fuel, urea (AdBlue<sup>®</sup> and similar) and hydraulic oil tanks are easily accessible, in distinct locations, to prevent errors.

The brake fluid and windscreen washing liquid tanks are accessible within a closed compartment outside the cab to keep the interior clean.

### Intelligent maintenance

The dashboard screen displays the maintenance and engine diagnostic intervals.

### **Longer** maintenance intervals

Hydraulic oil change every 2000h (vs 1000h on previous models).







## A complete range of tools adapted to the agricultural world

To meet your needs and suit your tasks, we offer a range of attachments approved by Manitou and specially adapted to agricultural applications.





# Do you have specific needs?

Thanks to the experience and skills of its special business department, Manitou is able to offer customised attachments and machines that meet with the most detailed specifications. Do you have such needs? Feel free to contact us!





CRS - Silage Facer Bucket

Unloads silage onto the pile and ventilates it, making it directly consumable by animals. Leaves a clean pit face and reduces fermentation.



**BSB - Sugar Beet Bucket** 

Designed for handling sugar beets and other roots or tubers, filtering out soil and other impurities.



HBB - Big Bag Handler

Handles up to four big bags safely for increased efficiency in loading and unloading operations.



### SHG - Shear Grab

Attachment enabling the perfect cutting of all types of silages, thus limiting the fermentation of feed. The quality of the feed, and its nutritional value, are preserved.



### SHB - Shear Grab Bucket

Attachment enabling the perfect cutting of maize or grass silage, thus limiting the fermentation of feed. The quality of the feed, and its nutritional value, are preserved. The bucket component makes it possible to handle cereals, mineral supplements, and so on, without changing attachments.



### **CBA - Agricultural Bucket**

The ideal bucket for handling agricultural bulk such as cereals and beetroot pulp. Guaranteed lightweight, sturdy and high-performance. Optionally available with a reversible bolted wear blade (LDR).



### **CBR - Rehandling Bucket**

Bucket suitable for the handling of heavy materials (max. 2100 kg/m<sup>3</sup>). Reinforced structure for better durability.



### CBG MS - Machine-Welded Grab Bucket

A multi-purpose tool enabling the handling of feed, manure and agricultural bulk.



CGD – Shear Bucket Distributor

The CGD quickly distributes silage (or a ready-made mix) for animals, offering optimal efficiency.



**SCC - Sweeper Cleaner** 

Sweep, collect or make swathes: you no longer need to choose! The SCC Sweeper Cleaner offers you a competitive solution and optimal results. Attachments designed for tasks of light to medium intensity.



FMG - Large-Capacity Manure Fork

Large-capacity attachment for handling strawy manure. Higher performance and flow, with guaranteed visibility.



### CBG FO - Forged Grab Bucket

A bucket enabling the precise cutting of the silage pile and the handling of manure.







### Bale Clamp

Cubed, cylindrical or baled? Manitou offers you a wide range of solutions for stable, effective work that ensures the quality of your bales.

Discover all our attachments on manitou.com



# Towing Hooks

All NewAg\* machines are tractor homologated. This means that you are authorised to use them on the road to tow trailers.

### Standard towing hook

Rotating system\*\* for additional safety in case the trailer tips over.

### Automatic towing hook

An effective, easy-to-use solution: you no longer need to get down from the cab to hitch a trailer. Simply reverse the machine until the trailer ring enters the hook: the system locks automatically!

# Ladder hitch with wide choice of hooks with or without fixed piton

(simple or automatic hook). The sliding and locking system of the lever modules makes it extremely simple to use.

### Hydraulic hook

The best solution for supports with rings that are close to the ground when unhitched: the hook itself seeks out the ring! Hitch up from inside the cab, without moving or making an effort.

\* Option to choose the MLT 733 without tractor homologation. \*\* The MLT 733 features a fixed hook (version without tractor homologation).





# TO EACH HIS OWN... STYLE

Choose from a wide range of telehandlers with lifting capacities ranging from 3 to 4.1 tonnes and lifting heights ranging from 6 to 9 metres. You also have the choice among various options and finishing levels to best suit your needs.

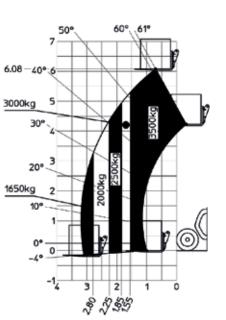


MLT New 46

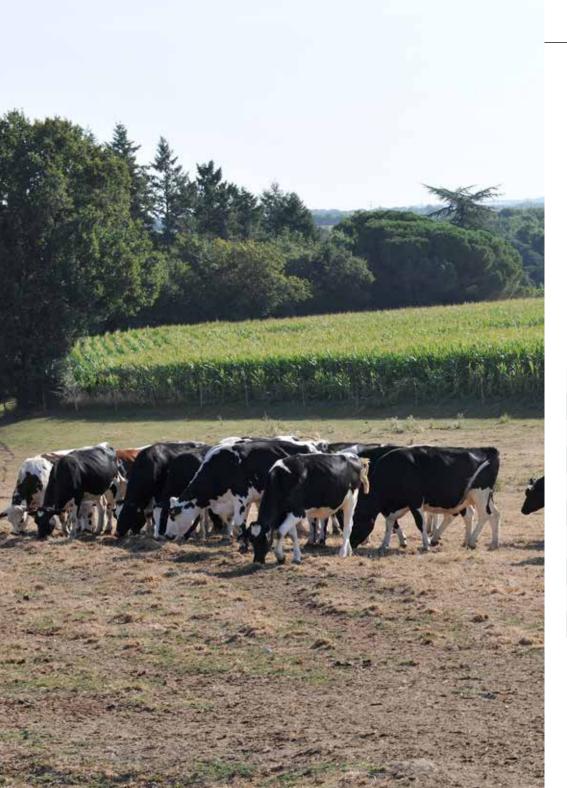




Transmission*	H/C/CVT	C
Engine power	hp (kW)	129 (95)
Engine brand	-	Deutz
Max. capacity	kg	3 500
Max. lifting height	m	6.08
Max. forward reach	m	3.20
Dimensions without attachments (LxWxH)	m	4.66x2.39x2.3
Hydraulic flow	l/min	150
Unladen weight with forks	kg	7,405
Speed	km/h	40

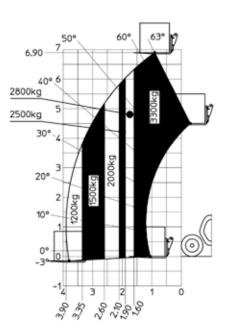


\* H: Hydrostatic C: Torque converter CVT: Continuous Variable Transmission



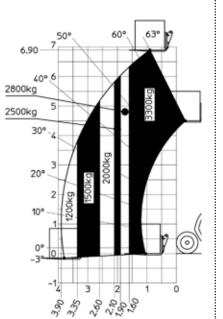


Transmission*	H/C/CVT	C		
Engine power	hp (kW)	101 (74.5)		
Engine brand	-	Deutz		
Max. capacity	kg	3,300		
Max. lifting height	m	6.9		
Max. forward reach	m	3.9		
Dimensions without attachments (LxWxH)	m	4.78x2.39x2.38		
Hydraulic flow	l/min	104		
Unladen weight with forks	kg	7,015		
Speed	km/h	32		



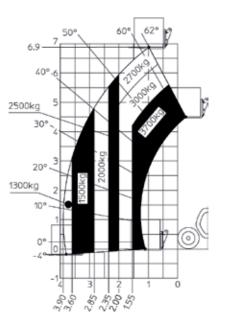


Transmission*	H/C/CVT	C		
Engine power	hp (kW)	101 (74.5)		
Engine brand	-	Deutz		
Max. capacity	kg	3,300		
Max. lifting height	m	6.9		
Max. forward reach	m	3.9		
Dimensions without attachments (LxWxH)	m	4.85x2.39x2.38		
Hydraulic flow	l/min	104		
Unladen weight with forks	kg	7,015		
Speed	km/h	32		





Transmission*	H/C/CVT	C		
Engine power	hp (kW)	129 (95)		
Engine brand	-	Deutz		
Max. capacity	kg	3,700		
Max. lifting height	m	6.9		
Max. forward reach	m	3.9		
Dimensions without attachments (LxWxH)	m	4.97x2.39x2.38		
Hydraulic flow	l/min	150		
Unladen weight with forks	kg	7,700		
Speed	km/h	40		



\* H: Hydrostatic C: Torque converter

CVT: Continuous Variable Transmission





### Three finishing levels available

CLASSIC 🕘 PREMIUM

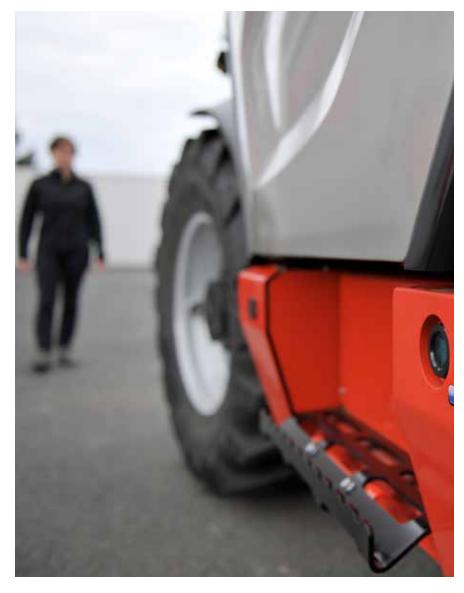
🖲 ELITE

s: series / o: option / -: not available	MLT 635-130 PS+		MLT 733-105		MLT 737-130 PS+			
	WILI 035-130 PS+		WILT 753-105					
General		_					_	
"Active CRC" boom suspension	•	•	-	•	•	0	0	•
Manual accelerator with engine speed memorisation	0	0	S	0	0	0	0	S
Automatic wheel alignment	0	0	S	-	-			S
5	0	0	S			0	0	S
Manual towing hook	S	S	S	S	S	S	S	S
Automatic towing hook	0	0	0	0	0	0	0	0
Adjustable towing hook	0	0	0	0	0	0	0	0
Hydraulic towing hook	0	0	0	0	0	0	0	0
Comfort								
Grammer mechanical cloth-covered seat	S	-	-	S	-	S	-	-
Grammer pneumatic cloth-covered seat	0	S	-	0	S	0	S	-
Grammer low-frequency pneumatic cloth-covered seat	0	0	S	0	0	0	0	S
Grammer heated, low-frequency pneumatic cloth-covered seat	0	0	0	0	0	0	0	0
Tuner car radio (50 w)	S	-	-	S	-	S	-	-
Bluetooth car radio with integrated microphone (100 w)	0	S	-	0	S	0	S	-
Bluetooth car radio with external microphone (100 w)	0	0	S	0	0	0	0	S
Manual air conditioning	0	S	-	0	S	0	S	-
Air conditioning with automatic adjustment	0	0	S	0	0	0	0	S
"Harmony" screen	s	s	-	S	S	S	s	-
"Vision" screen (7'')	0	0	s	-	-	0	0	S
Electricity / Security								
Front and rear work lighting (4 fixtures: 2 in front + 2 in back)	s	-	-	s	-	s	-	-
Front and rear work LED lighting (4 fixtures: 2 in front + 2 in back)	0	s	s	0	S	0	s	s
Premium front windscreen wiper	0	s	s	0	s	0	s	s
Electric defrosting rearview mirror	0	0	s	-	-	0	0	s
LED +	0	0	0	-	-	0	0	0
Hydraulics								
Easy Connect System (ECS)	s	s	s	s	s	s	s	s
Continuous flow hydraulics	0	0	s	0	0	0	0	s
Attachment hydraulic locking	0	0	0	0	0	0	0	0
Return pipe to hydraulic oil tank	0	0	0	0	0	0	0	0
Double effect rear hydraulic predisposition	0	0	0	0	0	0	0	0
Electrovalve for 2 hydraulic functions on boom head	0	0	0	0	0	0	0	0
Hydraulic trailer braking	s	s	s	o/s	o/s	s	s	s



# MANITOU IS HERE TO HELP!

To provide you with an operational machine year-round, Manitou offers a wide range of products and services that are suited to all your needs.







# 1,400 dealers at your service

The Manitou network operates in more than 120 countries. In total, we employ more than 2,000 expert technicians, specially trained in Manitou technology, who are at your service to assist with everything from purchasing to after-sales.

### Expertise and service on a daily basis

**on a daily basis** Your Manitou dealer guarantees a complete range of services at all stages of your machine's life and is there to provide support and meet your needs, always looking to provide you with the best solution.











#### Dealership network

A network of experts at your service, whatever your field (agriculture, construction, industry).

### Maintenance contracts

We offer three levels of contract to meet with your needs: Initial, Advanced and Excellence. Rest easy and leave the maintenance to your official Manitou dealer.

#### Financing

To hire or to purchase? Whatever your business, simplify your investment with Manitou Finance financing or leasing solutions.

### Warranty extension

With Maniplus, you can extend the cover of your Manitou warranty for up to 5 years. Use your equipment with peace of mind.

### The connected solution

Easy Manager is a simple and flexible tool for managing, optimising and securing the operational monitoring of your machines.

#### Second-hand equipment

In the market for second-hand equipment? The Manitou network is here to help. Just visit your dealer or used.manitou.com, our reference site for second-hand Manitou machines.

### Original spare parts

With more than 70,000 products available, your Manitou dealer provides expertise and service on a daily basis!

# **REDUCE** The Manitou Group's vision

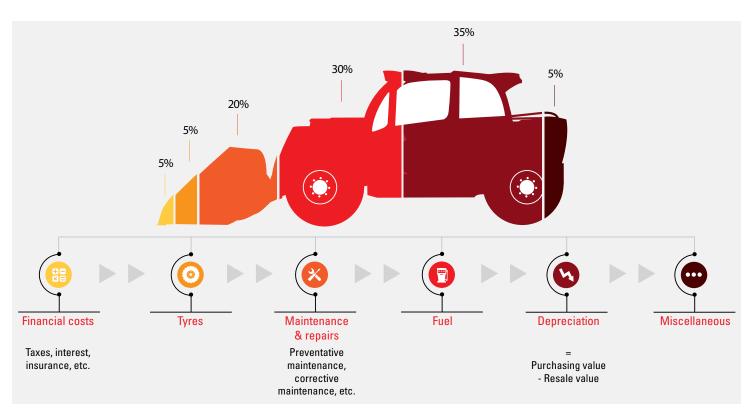
The REDUCE approach aims to improve the work conditions for machine operators in keeping with better productivity and environmental protection. This means transparency regarding fuel consumption data, reducing emissions, raising awareness of total cost of ownership (TCO), and putting a greater emphasis on the health and safety of operators.

### Do you know the real cost of ownership of your equipment?

REDUCE TCO (Total Cost of Ownership) gives you a detailed breakdown of costs for your machine and helps you to optimise the profitability of your production tool.



Calculate your TCO on tco.manitou.com



### What does TCO stand for?

The TCO is the total cost of ownership of an asset, more commonly known as the user cost. This indicator takes into consideration fixed costs (such as acquisition, interest, rent and residual value) and also variable costs linked to the use of your machine (such as maintenance and operator training).

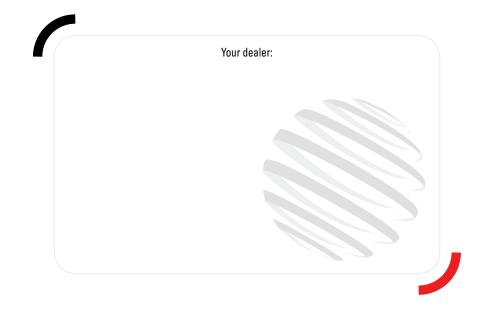




### Do you know how much your machine consumes?

Unlike the automobile sector, the handling machine sector does not yet have a standard rating system. We have therefore created a clear internal protocol enabling us to compare our machines' fuel consumption measurements. In order to provide you with clear, reliable and transparent information, this data has been verified by a recognised organisation.







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This publication provides the description of the versions and configuration possibilities of Manitou products, which may differ in terms of equipment. The equipment the specifications and on option, or not available, depending on the versions. Manitou reserves the right, at any time and without notice, to amend the specifications provided do not bind the manufacturer. For more details, please contact your Manitou and contractually binding on the version. Manitou reserves the right, at any time and without notice, to amend the specifications in origination of the products is not contractually binding. The last of specifications is non-exclusative. The logos and visual identity of the company are the property of Manitou and cannot be used without authorisation. All rights are reserved. The photos and diagrams in this brochure are only provided for consultation and information purposes. Manitou PSA – Limited company with board of directors – Share capital 39,547,824 euros - 857 802 508 RCS Nantes