# Frontloaders MANIP' MPower



#### The MPower range

The new range of **MPower** loaders is the summary of the Manip' know-how.

Using the experience acquired with the **MP'** and **MP'A** ranges, the new **Manip' MPower** loaders use a new design inspired by public works equipment and the high-powered MP'175A loader.

**Manip'** thus proposes a complete range of 7 loaders for tractors of 50 and over 150 HP designed for intensive use and meeting with the new requirements of farmers in terms of robustness, reliability and comfort.

#### Manip', a company in full development

During the last 15 years, **Manip'** has advanced and invested so as to follow market progression.

At the same time as the development of their products, arms, subframes and implements, **Manip'** has equipped the company with modern manufacturing machines enabling them to attain one of their main aims : a quality product !

A numerically controlled plasma cutting machine, welding robots, machining centre, powder paint line with shot blasting are just some of the examples of investments made by **Manip'** to ensure consistent quality of their products.

#### Close to the users

With the farmers requirements at heart, **Manip'** innovates taking into account the daily use of the loaders. Because each innovation must be practical and useful before all, **Manip'** has designed :

- The Manip'Pic with integrated storage for handling round or square bales without specific implements,
- The Manip'Activ suspension, the suspension that works when under load and unloaded,
- Mega-Matic 2 which turns the hitching operation of the loader into a child's game.

If you have the choice, look into the details... Compare, and it is without hesitation that you will choose a MPower loader for its design, robustness and comfort.

## Frontloaders



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24 The Manip' know how



#### A new arm design

The **Manip' MPower** loaders are based on a new arm design launched in 2007 on the MP'175A. The hydraulic hoses are rigid and integrated under the arm. Access, if necessary, is easier. Protected by the arm and the stands, these hoses cannot be seen.

#### An exceptional visibility

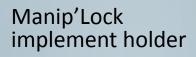
By integrating the hydraulic hoses under the arm, **Manip'** offers the users an exceptional visibility of the implements.

#### Mega-Matic 2

Simple, practical and reliable, the loader hitching in 3 stages is child's play !

## The strong points

3



The new Euro toolbar on the **MPower** loader is equipped in the standard version with the **Manip'Lock**, the hydraulic locking-unlocking of the implements.

With this system, the implement locks and unlocks directly using the monolever in the tractor cab. This ensures the user a maximum of comfort and safety when changing the implements.

#### Manip'Pic

The **Manip' MPower** loaders are equipped with **Manip'Pic**. The toolbar is designed to lodge two tines for the handling of round or square bales without an extra implement. Positioned at the same height as the articulation point of the implements, the **Manip'Pic** tines take advantage of the maximum height of the loader.

Practical, a space for lodging the tines is also designed inside the arm, enabling a safe transport on the road.



#### Manip'Activ :

# a real suspension just as efficient when loaded as unloaded !

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The **Manip'Activ** is equipped with two nitrogen tanks tared with different pressures. The suspension is always effective and comfort exceptional whether loaded or unloaded.



Loaded



### A new arm

#### An exceptional visibility

The Manip' MPower arm with its monobar construction and the new design integrating the hydraulic hoses, offer an exceptional visibility of the implements.



#### Paintwork: a top quality finish

All the Manip' loaders and implements are shot blasted resulting in a first-class finish.

Shot blasting, cleaning, phosphate treatment, drying, powder painting and polymerization are the 6 stages that ensure a perfect, high quality finish to the Manip' products. The powder paint which is recycled and uses no solvents, no diluents is environment-friendly.





#### High-yield point steel

The Manip' arms are made of high-yield point steel. High-yield point steels, because of the composition, have particular physical properties that enable them to support very important loads.

These steels are commonly used for the frames of transport and material handling equipment.

#### Rods

The rods are the parts of the loader which are in the most demand. This is why, for the design of the loader, we have chosen moulded rods with machined and ringed shafts.

This assembly guarantees reliability high and an assembly without play.



#### Parking stands

The new parking stands integrated into the loader unfold and fold in a few seconds and no tools are required. Robust with lateral reinforcement, they ensure a perfect \*\*•• stability. Folded up, they integrate perfectly into the arm for maximum clearance and protect the rigid hydraulic ••••• .... hoses.



#### Parallelogram

The **Manip' MPower** loaders are equipped with a mechanical parallelogram. Its simple design guarantees high reliability in time.

The new geometry of the parallelogram ensures a parallel lift of the implement from the ground to maximum height. Working with the pallet-stacker is thus done in entire safety.

## Ringed articulations, mounted on Silent block type washers

All the shafts on the **Manip'** loaders are in ARCOR treated steel. They are equipped with protected greasers directly accessible. These shafts are also equipped with a new system of blocking in rotation.

The shafts are equipped with Silent block washers which ensure an assembly without play and an optimum greasing of the shafts and bushings.

All the articulations are also equipped with bushings with a greasing system. This guarantees a longer loader life.

#### A new arm design

The **Manip' MPower** loaders are based on a new arm design launched in 2007 on the MP'175A. They leave space for the passage under the arm of the hydraulic hoses.

For its design, **Manip'** has used the most recent technology and in particular public works technology (shape and position of the reinforcing gussets, large diameter crossbar, etc.).



#### Position indicator

The adjustable position indicator enables you to rapidly find the correct position of the implement. The extremity of the rod is sliced to permit a rapid visualisation of the implement position. The adjustment of the level indicator with regards to the implement is rapidly and easily done without a tool.



#### Rigid hydraulic hoses

Public works machines inspired **Manip'** who developped the hydraulic circuit on the **MPower** loaders. Priority has thus been given to rigid, large diameter hoses. They limit the problems of oil heating up when intensively used with important hydraulic flows and make maintenance easier.



#### Concerned with details

The lateral assembly of the hoses between the loader and the tractor is neat, simple and logical.

It offers an excellent visibility and an optimal positioning not matter the position of the loader.

When the loader is unhitched, a bracket enables the tidy stocking away of the hoses.



#### Cylinders with double rods

The loaders with parallel linkage are equipped with cylinders with double rods which ensure a tipping speed of the implement equal to the digging speed for quicker handling.



#### Hydraulic couplings

The hydraulic fittings between the tractor and the loader in the standard version are made by Push Pull with coloured indicators.

For even more comfort and time saving, the rapid **Manip'Fast** is also available. The flat seals avoid leakages. The ergonomic handle ensures an easy installing and its form avoids interference with the front mud guards on the tractors.





Manip'Fast

Push Pull

In the standard version, the 3rd and 4th functions are equipped with push-pull couplers marked with different colours. Each function is equipped with a male coupler and a female coupler in order to avoid inversing the connections. On option the **Manip'Fast Tools** enables a rapid hydraulic connection of 2 or 4 hydraulic hoses. It is fitted with anti-pollution couplers as standard equipment.



## aulic circuit

## MANIP' MPower

#### Limit of travel moderator

The lift cylinders are equipped with an integrated limit of travel moderator. This system slows down the speed of the cylinder on the last centimetres which avoids bumping problems when the loader arrives at maximum height with tractors that have an important hydraulic outflow.

#### SA/DA Converter

The **Manip'** loaders delivered with a distributor have as standard equipment 2 DA distributor and a SA/DA converter for the lift cylinders. By turning the tap, you pass from single to double acting and inversely.

- For everyday tasks, you use the single acting :
- Smoother operating,
- Less wear on the implements.

When necessary, you change into double acting.



#### Preset for safety valve

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The lift and tip cylinders on the **Manip' MPower** loaders are preset to receive safety valves.

It is thus easy to re-equip later a loader with safety valves if necessary.



#### The compact hydraulic unit

The **Manip' MPower** loaders are equipped with a new compact hydraulic unit which regroups the main hydraulic functions of the loader (safety valves, third and fourth functions). This compact hydraulic unit is entirely protected by a metal housing which is easily removed.

The safety valves which are standard equipment, protect the Tractor-Loader from eventual shocks when advancing or reversing.

This system is variable and can easily have an extra function added.



#### Mechanical stop parts

All the **Manip'** loaders are equipped with tipping and digging stop parts. The cylinders are never used as stop parts. The digging stop parts relieve the stress on hydraulics and the cylinders. The tipping stop parts allow for a shaking of the implement when handling sticky materials.



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## Hitching / Unhitching of the loader

With the Mega-Matic 2 hitching and unhitching your loader is child's play. To hitch up, nothing easier.

#### Hitching

#### 1 - Advance

To advance, the loader is vertically and laterally guided by the subframe guiding parts.

#### 2 - Connect the hydraulics

With the multicoupler **Manip'Fast** the connection of the Tractor-Loader hydraulics is made rapidly.

#### 3 - Lift the loader

Lift the loader and it locks automatically without leaving the tractor seat or push the loader (*patented system*).

#### **Conically shaped lock**

During the hitching operation, when lifting the loader, the lock, pushed by the spring, automatically comes into place. The conically shaped lock (in blue) guarantees the **backlash elimination**. Thus, even after years of use, the hitch of your loader on the tractor will always be rigid and without play.

#### 4 - Fold the stands

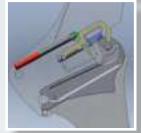
Fold the stands, the loader is hitched. This is simple, practical and reliable.

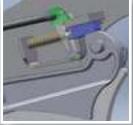
















### Guiding

The sloping shape of the upper subframe part guarantees a vertical guiding of the loader when hitching. The rounded forms of the hitching subframe part also ensure a sideways guiding of the loader for an easy hitching up in any situation.













### Unhitching

#### 1 - Place the loader on the ground

To unhitch the loader, you just place it flat on the ground and put the monolever into floating position.

#### 2 - Unfold the stands

Unfold the stands on to the ground.

#### 3 - Unlock the loader

To unlock the loader, you just lift the unlocking handles.

#### 4 - Disconnect the hydraulics

Disconnect the hydraulic hoses.

#### 5 - Reverse

Reverse the tractor, the loader is unhitched.

#### Unlocking

Due to the long lever (28 cm), the unlocking of the the Manip' loader is easy and without effort.

Furthermore, its design and position have been studied to enable a rapid and practical unlocking. On the right hand or left hand side of the tractor, with or without side exhaust, the lever is always easily accessible. Neither the exhaust, nor the hydraulic fittings get in the way for unlocking the loader.



### Manip' Monolever

The **Manip'** monolever is flexible, precise and reliable. Its especially studied ergonomic design ensures easy and fast handling. Buttons of the additional functions are ideally positioned.

The robust design of the handle and the casing ensure the reliability of the Manip' monolever.

Main functions				
Α	Lifting			
В	Lowering			
С	Digging			
D	Tipping			

#### Float position

The **Manip'** monolever and the distributor integrate as standard equipment, a floating position. By pushing the lever completely forward, the distributor is put into floating position and the tool follows the ground contours.

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The diagrams which are clear and precise on the handle are protected. Even after hours of work, they can still be read.

The safety locking system locks the loader when not used or when being transported on the road.





well

#### Working position

Ideally positioned in the cab, the **Manip'** monolever is easy to work with. The use of the buttons for the 3<sup>rd</sup> and 4<sup>th</sup> functions and the **Manip'Lock** is made almost intuitively.





on MPower)

#### Monolever bracket

The **Manip'** loaders are delivered with the **Manip'** monolever as standard equipment. Each monolever is delivered with a bracket to adapt to all models of tractors. If necessary, the monolever bracket is adjustable and can be retracted <sup>(1)</sup> to facilitate the use.



### Manip'Drive 2

## **MANIP' MPower**

The electronic control system Manip'Drive 2 offers a precision of operation unequalled and now integrates the Bus-CAN, used on all modern farm equipment.

The electronic control system adapts the speed of the loader and the tool to the use of the hand. The arms obey perfectly. Use a tractor with a high hydraulic output becomes easy, rapid and precise.

Main functions				
Α	Lifting			
В	Lowering			
С	Digging			
D	Tipping			

#### **Ergonomic monolever**

The Manip'Drive 2 monolever is very ergonomic and easy in hand. When your arm and your hand are relaxed after a long day's work with your loader, you will understand why we made this choice

#### the loader when it is not being used or during road transport. D Manip'Lock (locking / unlocking of implements. standard equipment on MPower) Tipper (on option for additional functions) 3<sup>e</sup> function 4<sup>e</sup> function

The safety locking enables the blocking of

HPS

Safety locking

No matter what the position of the loader or the implement, a simple press on the HPS button and the implement is immediately on level, independant of the loader movements.



#### Position

Positioned on the arm rest, the Manip'Drive 2 monolever has its own bracket : independent from the arm rest, its length can be adjusted as well as the position with regards to the arm rest to suit the morphology and working habits of the operator.



#### HPS

В

3<sup>e</sup> function

4<sup>e</sup> function

С

HPS

Safety locking

The HPS system of automatic repositioning of the tool is entirely integrated into the Manip'Drive 2. By simply pressing the button, the implement is levelled no motion position of the loader or the implement.

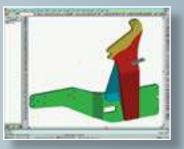
Levelling is made without the necessity of simultaneously lowering the loader. As soon as you press the HPS button, the two sensors positioned on the level indicator activate the hydraulic distributor until the implement is levelled.

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### Monobloc subframe

#### Rigorous design and manufacture

The **Manip'** subframes are the fruit of a rigorous design. Easily assembled, optimum visibility, easy access for motor maintenance, loader hitched up, turning



angles, ground clearance, front axle clearance are always taken into account when a new **Manip'** subframe is being designed. For this the CAD used by our engineers and technicians is a precious help.

Well designed, our subframes are manufactured with rigour. To guarantee an excellent assembling quality, all our subframes are manufactured on welding jigs and drilled with numerically controlled machines. The care taken around manufacture is the guarantee of a subframe that will perfectly fit on to your tractor.



A well-designed subframe, discreet and perfectly suited to your tractor : short, long with extensions, or with ventral boom according to the tractor models.

## Compatible with front linkages



The **Manip'** loaders and subframes are designed so as to be compatible with the front linkages on tractors.

The cross boom at the front of the loader and the width of the arms of 1020

and 1120 mm bring a wide clearance to the front of the tractor.

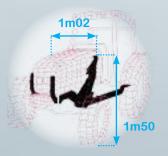
Folded, the arms of the front linkage pass between the assemutracto tracto wide e

#### Easy access to the tractor engine

You use your tractor every day and servicing and maintenance is important to you. **Manip'** has thought of you. All our subframes are designed to make servicing easy when the loader is hitched. During the design of every new subframe, we always take into account the following points :

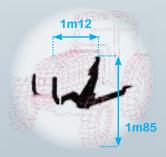
- Opening of the bonnet,
- Checking of oil levels,
- Cleaning of air filter,
- Cleaning of radiators,
- Access to the battery.





#### Mega-Matic

The **Mega-Matic** subframe is used for all the loaders and standard tractors from the MPower 60 to MPower 140 (50 to 160 HP). The arm width is 1m02.



#### Mega-Matic HD

The Mega-Matic HD subframe is specially designed for **MPower** 160 and MPower 180 loaders assembled on high-powered tractors of over 150 HP. The width of the arm is 1m12 for the assembly of loaders on tractors equipped with wide engine bonnets.

## Implement holder MANIP' MPower

#### Euro Manip'Lock implement holder

The Manip' loaders are equipped with an Euro implement holder enabling the use of a multitude of implements available. This implement holder is equipped with an extremely robust cross boom. This boom also integrates the Manip'Pic brackets. The new locking-unlocking system of implements Manip'Lock enables the hitching and unhitching of the implements directly from the tractor cab. It thus ensures the user more comfort and safety when changing the implements.



#### **Optimized** angles

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The loader has been designed to have large implement angles when digging or tipping. Filling and emptying are made easier.







Hitching - unhitching

locking-unlocking enables a rapid and safe changing of the implements.

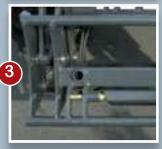
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Hitching or unhitching a tool is rapid and easy :



With the monolever, place the implement holder locks in hitch position (unlocked) by using together the two monolever buttons.

Position the hitch frame in the hooks of the implement and crowd.



Always lock the 3 implement by using together the two monolever buttons. The hydraulic cylinder then ensures the locking of the implement.

To unhitch the implement, just reverse the above operation.

#### **Implement Couplers**

In the standard version, the  $3^{rd}$  and  $4^{th}$  functions are equipped with push-pull couplers marked with different colours. Each function is equipped with a male coupler and a female coupler in order to avoid inversing the connections. ....

On option, the Manip'Fast Tools enables a rapid hydraulic connection between the loader and the implements. It is compatible with 2 or 4 hydraulic hoses. It is fitted with anti-pollution couplers as standard equipment.

### **MANIP'Activ**

#### A real suspension just as efficient when loaded as unloaded !

The **Manip'Activ** is equipped with two nitrogen tanks tared with different pressures. The suspension is always effective and comfort exceptional whether loaded or unloaded.



Without Manip'Activ Important stress on the front axle. The tractor rocks when on the road. Heavy loads are not absorbed.

#### Unloaded :

The pressure in the hydraulic circuit is low, only the tank N°1 ensures the suspension. Even when unloaded during road transport, the suspension operates and prevents the tractor from rocking.

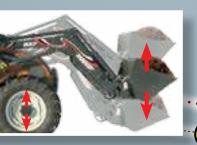


With Manip'Activ unloaded Stress reduction on the front axle. The tractor no longer rocks when on the road.



#### Loaded :

The pressure in the hydraulic circuit is higher, the tanks N°1 and N°2 ensure the suspension. Digging, picking up, bale handling, etc., the suspension operates permanently for more comfort and safety.



With Manip'Activ loaded Stress reduction on the front axle. Even when heavily loaded, the suspension is always efficient.



The two nitrogen tanks of the **Manip'Activ** suspension tarred at different pressures.

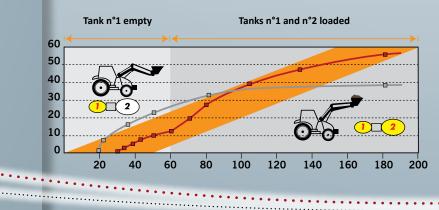
#### Shut-off valve

The **Manip'Activ** suspension can also be equipped on option with a shut-off valve. This cuts off the suspension during certain tasks.



#### **Re-equipping**

All the **Manip'** loaders are pre-equipped to receive the suspension. It can thus easily be added.



## MPower 60 & MPower 80



#### Tractors from 50 to 80 HP\*

With mechanical self-levelling	
Arm width	1m02
Mega-Matic subframe	
Lifting height at pivot point*	3m55
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	1540 kg
■ At 2m00	1320 kg
■ At maxi. height	1200 kg
Angles*	
Digging on the ground	44°
■ Tipping at maxi. height	58°

#### Tractors from 60 to 95 HP\*

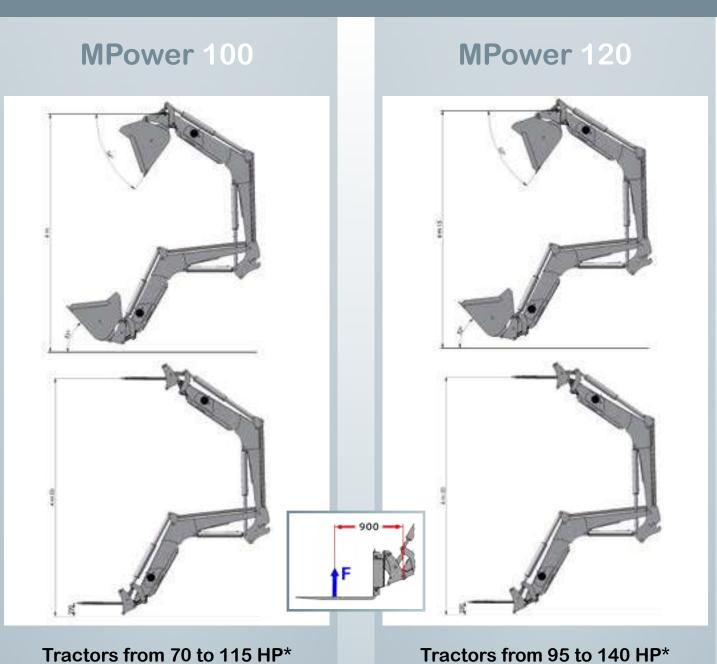
1m02
3m80
2100 kg
1810 kg
1420 kg
49°
56°

\* Data may vary according to the type of tractor equipped.

\* Data may vary according to the type of tractor equipped.

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## MPower 100 & MPower 120



#### Tractors from 70 to 115 HP\*

With mechanical self-levelling	
Arm width	1m02
Mega-Matic subframe	
Lifting height at pivot point*	4m00
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	2240 kg
■ At 2m00	2160 kg
■ At maxi. height	1880 kg
Angles*	
Digging on the ground	51°
■ Tipping at maxi. height	54°

Arm width

With mechanical self-levelling

Mega-Matic subframe	
Lifting height at pivot point*	4m15
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	2510 kg
■ At 2m00	2400 kg
■ At maxi. height	2160 kg
Angles*	
Digging on the ground	52°
Tipping at maxi. height	55°

1m02

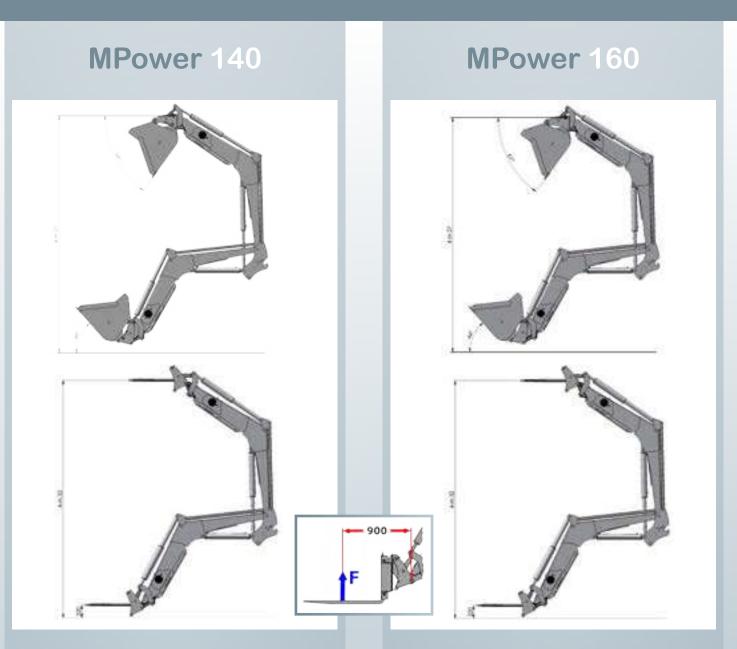
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\* Data may vary according to the type of tractor equipped.

\* Data may vary according to the type of tractor equipped.

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## MPower 140 & MPower 160



#### Tractors from 100 to 160 HP\*

With mechanical self-levelling	
Arm width	1m02
Mega-Matic subframe	
Lifting height at pivot point*	4m27
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	2910 kg
■ At 2m00	2545 kg
■ At maxi. height	2125 kg
Angles*	
Digging on the ground	49°
■ Tipping at maxi. height	54°

#### Tractors from 100 to 160 HP\*

With mechanical self-levelling	
Arm width	1m12
Mega-Matic HD subframe	
Lifting height at pivot point*	4m27
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	2910 kg
■ At 2m00	2545 kg
■ At maxi. height	2125 kg
Angles*	
Digging on the ground	44°
Tipping at maxi. height	•61°

\* Data may vary according to the type of tractor equipped.

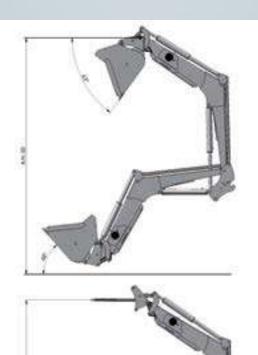
\* Data may vary according to the type of tractor equipped.

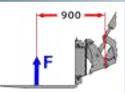
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<sup>.....</sup> 

### MPower 180

### MPower 180





#### Tractors of +150 HP\*

With mechanical self-levelling	
Arm width	1m12
Mega-Matic HD subframe	
Lifting height at pivot point*	4m50
Lifting power at 180 bars on pallet folks (900 mm in front of the pivot point F) :	
■ On the ground	2900 kg
■ At 2m00	2560 kg
■ At maxi. height	2300 kg
Angles*	
■ Digging on the ground	48°
Tipping at maxi. height	63°

Data may vary according to the type of tractor equipped



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### **Equipment and characteristics**

#### **Equipment of the various versions**

Version	Base	Comfort	Luxe
Monoblock Subframe	•	•	•
Manip' monolever with 2 DA hydraulic distributor, floating position and SA/DA converter <sup>(1)</sup>	•	•	-
Manip'Drive 2 with 2 DA hydraulic distributor, floating position and SA/DA converter <sup>(1)</sup>	0	0	•
HPS automatic tool repositioning <sup>(2)</sup>	o <sup>(2)</sup>	o <sup>(2)</sup>	•
3 <sup>rd</sup> function	0	•	٠
4 <sup>th</sup> function	0	0	0
Manip'Fast loader multicouplers	0	•	٠
Manip'Fast Tool 2 implement multicoupler for 3 <sup>rd</sup> function	0	0	0
Manip'Fast Tool 4 implement multicoupler for 3 <sup>rd</sup> and 4 <sup>th</sup> functions	0	0	0
Manip'Activ suspension (Shut-off valve on option)		•	٠
Manip'Lock Euro implement holder with hydraulic locking-unlocking of implements <sup>(3)</sup>		•	•
Support Manip'Pic on Euro holder		•	٠
Manip'Pic bracket Two tines with integrated box (4)		•	٠
Community kit Safety valves on lifting and tipping cylinders (5)	0	0	0

<sup>(1)</sup> Only with Manip' monolever or Manip'Drive 2

(2) Only with Manip'Drive 2

<sup>(3)</sup> Standard on **MPower** 

(4) Except MPower 140, 160 and 180

<sup>(5)</sup> Not compatible with **Manip'Activ** suspension and floating position

#### **Technical characteristics**

MPower		60	80	100	120	140	160	180
Tractor power*		50 - 80 HP	60 - 95 HP	70 - 115 HP	95 - 140 HP	100 - 160 HP	100 - 160 HP	+ 150 HP
Lifting height at t	Lifting height at tool axis*		3,80 m	4,00 m	4,15 m	4,27 m	4,27 m	4,50 m
	on the ground (1)	1560 kg	2100 kg	2440 kg	2510 kg	2910 kg	2910 kg	2900 kg
Lifting capacity pallet stacker	at 2m00 (1)	1320 kg	1810 kg	2160 kg	2400 kg	2545 kg	2545 kg	2560 kg
puncestation	at maxi. height (1)	1200 kg	1420 kg	1880 kg	2160 kg	2125 kg	2125 kg	2300 kg
Excavation angle	(on the ground)*	44°	49°	51°	52°	49°	44°	48°
Discharge angle (	at maxi. height)*	58°	56°	54°	55°	54°	61°	63°
DA lift cylinders		Ø 65 x 40 mm	Ø 75 x 40 mm	Ø 80 x 50 mm	Ø 90 x 50 mm			
Mechanical self-le	Mechanical self-levelling		Yes	Yes	Yes	Yes	Yes	Yes
Implement holder		Euro	Euro	Euro	Euro	Euro	Euro	Euro
Arm width		1020 mm	1120 mm	1120 mm				
Subframe		Mega-Matic	Mega-Matic	Mega-Matic	Mega-Matic	Mega-Matic	Mega-Matic HD	Mega-Matic HD
Implement holder preset for Manip'Pic		2 tines	3 tines	3 tines				
Weight of arm without option		540 kg	640 kg	670 kg	700 kg	820 kg	900 kg	1000 kg

\* Data may vary according to the type of tractor equipped.

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<sup>(1)</sup> Control pressure at 180 bars at 60l/mn at 900 mm in front of the pivot point.

Note : These features may vary depending on the type of tractor equipped. . . . .

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• Standard / o On option / - Not possible

### The tools

#### **Multi-purpose buckets**



Type (1)	MB130	MB150	MB170	MB200	MB220		
Width, cm	130	150	170	200	220		
Depth, cm	72	72	72	72	72		
Weight, kg	280	300	325	360	400		
Side cheeks on option							

#### V-shaped multi-purpose buckets

MBV150

150

72

285

V-shaped for wider work width with manure

MBV170

170

72

305

**Multi-material bucket** 

Type (1)

Width, cm

Depth, cm

Weight, kg

MBV190

190

72

330

MBV220

220

72

365

MBV240

240

72

405

#### Manure forks



Туре	FF130	FF150	FF170	FF200	FF220	
Width, cm	130	150	170	200	220	
Depth, cm	82	82	82	82	82	
Tines, Number	7	8	9	10	11	
Weight, kg	110	120	135	150	158	
Bolted or removable tines						

Earth bucket

#### Hydro-claws



Type (1)	HG130	HG150	HG170	HG200	HG220
Width, cm	130	150	170	200	220
Depth, cm	72	72	72	72	72
Tines, Number	7	8	9	10	11
Weight, kg	240	260	295	310	345

#### Earth buckets Bolted tines

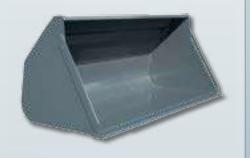


Туре	BTB135	BTB150	BTB170	BTB200
Width, cm	135	150	170	200
Capacity, L.	340	380	430	505
Tines, Number	5	6	6	7
Weight, kg	200	225	245	275



Туре	BP150	BP170	BP200	BP220	BP240
Width, cm	150	170	200	220	240
Capacity, L.	545	620	730	800	875
Weight, kg	255	285	325	355	385

#### Light material buckets



Туре	BL170	BL200	BL220	BL240
Width, cm	170	200	220	240
Capacity, L.	1035	1200	1340	1460
Weight, kg	380	410	440	470

# Welded tines



Туре	BTS135	BTS150	BTS170	BTS200
Width, cm	135	150	170	200
Capacity, L.	340	380	430	505
Tines, Number	5	6	6	7
Weight, kg	200	225	245	275

#### Jaw Buckets



Туре (1)	BM150	BM170	BM210
Width, cm	150	170	210
Capacity, L.	480	505	600
Weight, kg	310	350	400

#### Manip'Bal BRC 4 (4 bales)



Round Ø 0m90 to 1m80 or square bales (800 kg). 4 fingers clamp to take round or square bale. Clamp with 2 vertical positions adjustable from the cab.

Synchronized opening clamp.

3rd function required.

Options : 2 lower fingers kit (Ø 40 mm, L 0m95) with adjustable spacing, wrapped bale clamp kit ((Ø 1m10 to 1m60, 800kg).

#### Manip'Bal BRC 5 (5 bales)

#### Manip'Bal BRE 4 (4 bales)



Wrapped round bales Ø 0m90 to 1m80 (1200kg). Synchronisation spring for both arms to facilitate self-centering. Integrated check valve to keep the ball tight. 3rd function required.

Option: pressure limiter kit for BRE 4.

#### Manip'Bal BRC 5D (5 bales)



Round Ø 0m90 to 1m80 or square bales (800 kg). Big 8 fingers clamp height 1m50. Synchronized opening clamp. Taking 2 round bales or 3 square bales. 3rd function required. Options : 2 lower fingers kit (Ø 40 mm, L 0m95) with adjustable

spacing, Lower finger additional kit (Ø 40 mm, L 0m95) with adjustable

#### Manip'Bal BRC 5DD (5 bales)

Round Ø 0m90 to 1m80 or square bales (800 kg).

Clamp with 2 vertical positions adjustable from the cab.

Options : 2 lower fingers kit (Ø 40 mm, L 0m95) with adjustable

spacing, wrapped bale clamp kit ((Ø 1m10 to 1m60, 800kg).

4 fingers clamp to take round or square bale.

Synchronized opening clamp.

3rd function required.



Round  $\emptyset$  0m90 to 1m80 or square bales (800 kg). Double clamps operating alternately one after another, Synchronized opening clamp, Probe detection of the second ball, One function to operate the two clamps. 3rd function required.

Options : 2 lower fingers kit (Ø 40 mm, L 0m95) with adjustable spacing, Wrapped bale clamp kit (Ø 1m10 to 1m60, 800 kg).

#### Manip'Bal BRC 6 (6 bales)



Round Ø 0m90 to 1m80 or square bales (800 kg). Elevation, tilt and integrated turning by double-acting cylinder, 6 fingers clamp to take round or square bale. Integrated parking position. 3rd and 4th functions required.

Only for loaders with parallelogram

## Palet forks (Parallelogram loader recommended)



Certified paddles

Туре	LP1200	LP1800	LP2300
Capacity, kg	1200	1800	2300
Paddles, cm	95	100	100
Weight, kg	130	165	170

## Rear 3 points hitch weight





MF900			MF600 + MF300 (Ad)			
Туре	MA400	MF600	MF900	MF1700	MF300 (Ad)	MF500 (Ad)
Weight, kg	400	600	900	1700	300	500



Machine tooling with numerical control

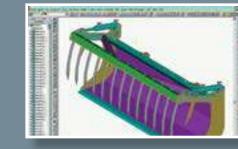


Oxycutting with numerical control



Powder painting





Arm welding robot

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Computer-assisted design and drawing CAD

## The MANIP' know-how

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For Manip', your satisfaction is our priority. This is why from the design to the forwarding of the product, we do all that is possible to deliver you a high quality product.





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