



Optima Visiobra M57T

- 51
- M51
- M56
- 60T
- Visiobra M57T

Optima



With lateral reach from 5.10 to 6 m, the Optima range adopts the principle of fully heavy-duty steel structure.

Robust and reliable, it is ready for the most intensive work while including everything that facilitates operation and extends equipment lifetime.



CARRIER
REACH
KINEMATICS

85 hp
540-1000 rpm
5.14 m
forward offset



85 hp
540-1000 rpm
5.61 m
forward offset



90 hp
540-1000 rpm
5.70 m
variable forward telescopic



90 hp
540-1000 rpm
6.05 m
straight arm telescopic

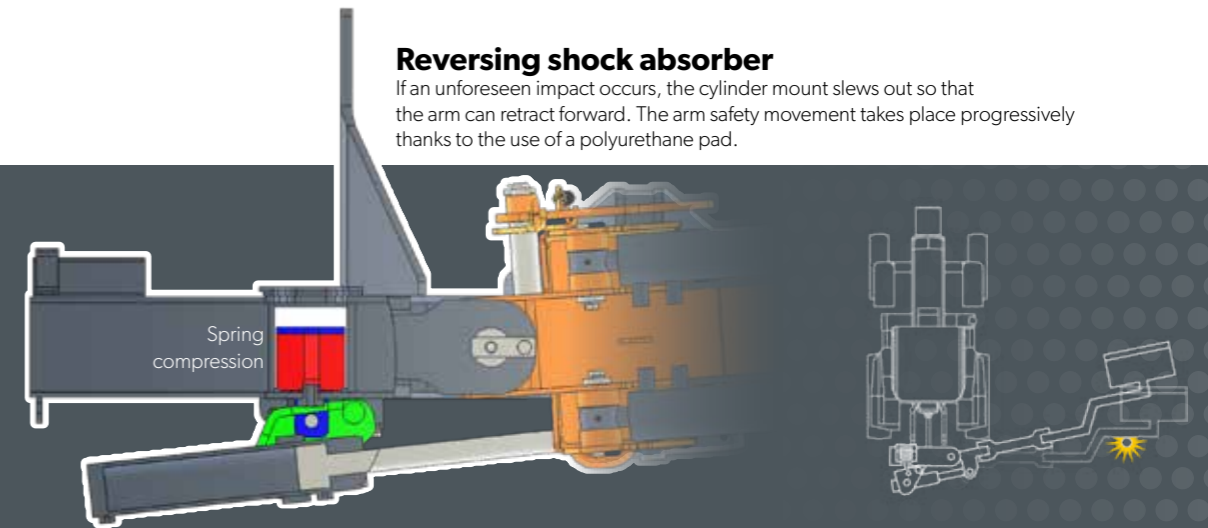


LEFT PIVOT AND FORWARD OFFSET: EXCELLENT STABILITY, EXCELLENT VISIBILITY!

Optima



SAFETY AND COMFORT



Stability

The left pivot and forward offset design (Noremat concepts) offer natural stability avoiding the need for counterweights.

This concept ensures good safety and preserves tractor tyres.

Working comfortably along narrow lanes

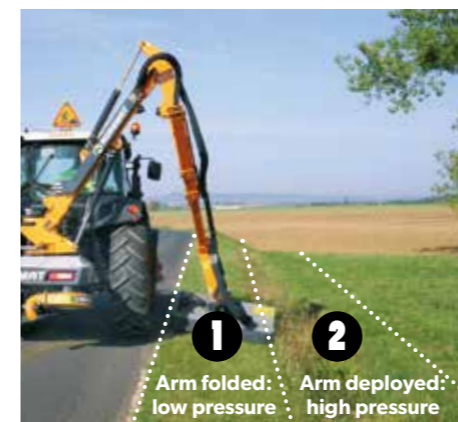
With the left pivot design the cutting tool is mounted as close as possible to the carrier.

An ideal position for working on narrow lanes without moving the tractor left and without the need for additional arm articulations.



Visibility

Reach-mowers with fixed and variable forward offset enable the mowing-head to be moved significantly forward, to cut next to the tractor cabin. This way the operator can see the road, the verge and the cutting tool in the same field of vision.



Dual pressure arm retraction and horizontal safety slew

"Incomparable driving feeling"

The arm is held in its working position with the same resistance to retraction whether it is folded along the carrier (1) or fully deployed (2). The system works automatically thanks to different pressure levels in the cylinder slew. Thanks to horizontal slew, the rotor never comes into contact with the ground, even when folded, avoiding both wear to the mowing tool and debris.



Reversing shock absorber

"A wrong move? No risk of breakage"

This mechanical safety feature protects the slew cylinder from any breakage hazard and limits the stress placed on the structure and the arm articulations during a reverse manoeuvre.



A compact set

"Transportation between worksites in complete safety"

Thanks to the left pivot, the equipment fits within the width of the tractor when in the transport position. Semi-automatic locking retains the arm mechanically.

DETAILS THAT MAKE A DIFFERENCE



Coupling the tool quickly and easily

Semi-automatic coupling is essential for being able to change tools on your own and vary the kind of work.



Storage

The machine is fitted with three stands that are height adjustable using handles. This offers an ideal setting for storing the mowing arm. This also allows easily mounting and downloading the machine by presenting it at precise carrier height.



Fully folded steel structure

Using the same frame as the top of the line, Optima is equipped with a large diameter pivot axis and greased wear rings fitted with flanges to ensure the pivot function. Forces are distributed over the entire axis for maximum robustness.



Hydraulics

Noremat equips their machines with quality hydraulic components from reputable brands (Sauer, Danfoss, Hydac...). The Optima range has a "closed" hydraulic circuit with a piston pump and piston motor.



High efficiency cooling

"For constant power"

Cooled by a very high power fan and supplied by large diameter flexible pipes, the radiator was designed to achieve maximum efficiency. Its inclined position stops dust from accumulating and reduces the effects of any clogging. The removable front grid and the upwards opening hood facilitate cleaning and maintenance.



Covers are strong and lightweight thanks to the use of HDPE*

"High resistance and acoustic comfort"

Recognised for its high resistance to impact damage, scratching, UV light and splashing, HDPE is also vibration absorbent and lowers acoustic emissions for remarkable driving comfort (not available in a left hand version).

Easy maintenance in complete safety

"25% reduction in weight"

HDPE's light weight makes it easier to handle the covers (not available in a left hand version).

Optima

*HDPE: High Density PolyEthylene



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Visiobra M57T

SEEING EVERYTHING, CONTROLLING EVERYTHING, MANOEUVRING BETTER



A Noremat unique feature

Optima Visiobra is the first heavy-duty category reach-mower to adopt a variable forward offset hydraulic section.

Seeing the head, the road and the verge

With the telescopic arm out, the unit is moved significantly further forward so that the operator can see the road, the verge and the cutting tool in the same field of vision.

Easy manoeuvring

Manoeuvres to avoid obstacles are performed without changing the trajectory and the mowing-head can be positioned within a centimetre.



01



02



03

01/ Panel support

A way to carry the required signs.

02/03/ Quick couplings and 1/4 turn isolation tap kit (optional)

To couple and uncouple cutting tools easily.

04/05/ Tool boxes

Handy and protected from the weather. Choose: Under cover or side opening.



04



05

06/ Built-in blower

It blows away any vegetation dispersed across the roadway.

07/ Light protection

As standard, the lights fit within the bumper. The optional grids protect them for demanding applications (tree cutting, etc.).



06



07

Technical features

ROTOR HYDRAULIC CIRCUIT*

PTO	540 rpm	1000 rpm
Gear ratio	1 : 4	1 : 2.5

Hydraulic pump		
Type and displacement	piston 46 cc	piston 46 cc
Flow rate	100 l/min	115 l/min
Max. pressure	300 bar	300 bar
Power	68 hp	78 hp
Starter	controls	controls
Complete rotor stop	within 5 seconds	within 5 seconds
Mounting	flanged pump mounted on the gearbox	

Hydraulic motor

Type and displacement	piston 35 cc	piston 35 cc
Built-in exchange valve	yes	yes

MOVEMENT HYDRAULIC CIRCUIT*

PTO	540 rpm	1000 rpm
Gear ratio	1 : 4	1 : 2.5

Hydraulic pump

Type and displacement	gear pump (cast iron body) - 17 cc	
Flow rate	36 l.	42 l.
Max. pressure	220 bar	220 bar
Mounting	flanged pump mounted on the rotor pump	

Hydraulic cylinders

Type	double acting	
Max. service pressure	250 bar	
Special equipment	anti-drop valves to stop 1 st / 2 nd arms falling	

Electrical and mixed controls

Main valve block	electric using proportional controls
Controls	electric with ergonomic joystick

Low pressure mechanical controls

Main valve block	proportional hydraulic controls
Controls	multilever

Oleopneumatic suspension

Accumulator	0.75 l - 250 bar max.
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Accumulator controls

Electrical and mixed controls machine	electrical
Electrical and low pressure controls machine	manual

FILTRATION AND COOLING

Tank	
Capacity	70 litres

Oil	
Type	80 W 90 - HV 46

Suction / return filter	
Filter and filtration	immersed filter - 10 micron rated

Cooling	
Cooler	aluminium
Fan	electric - ø 385 mm
Exchange capacity	14.5 kW

STRUCTURE**

Frame	
Material	HLE steel***
Structure & materials	tube 160 x 60 mm - thick. 8 mm tube 180 x 80 mm - thick. 6 mm steel thick. 10 / 12 / 15 / 20 mm

Machine pivot	
Material	HLE steel***
Structure & materials	steel thick. 10 & 12 mm
Hitching element	special steel rod ø 70 mm

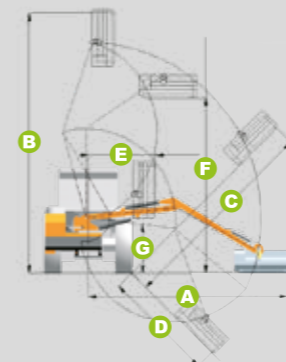
1 st arm	
Material	HLE steel***
Structure & materials	tube 160x160 mm - thick. 8 mm

straight and type M 2 nd arms	
Material	HLE steel***
Structure & materials	reconstituted tube - thick. 6 to 10 mm
Evolving 2 nd arm section	110x110 mm to 160x165 mm
Forward offset	650 mm

Visiobra type 2 nd arm	
Material	HLE steel***
Structure & materials	reconstituted tube - thick. 6 to 10 mm
Evolving 2 nd arm section	140x140 mm to 150x170 mm
Telescopic section	tube 110x110 mm - thick. 6.3 mm
Forward offset	650 mm to 1350 mm

Cutting tool pivot	
Material	cast steel
Hitching element	special steel rod ø 50 mm

**All of the structures are validated by tests on a test bed that simulates three years in operation at maximum pressure
***HLE: High Elastic Limit



KINEMATICS

Optima

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					Telescopic retracted	Telescopic extended
A Maximum horizontal reach (1)	5.14 m	5.14 m	5.61 m	6.05 m	5.15 m	5.70 m
B Maximum vertical reach (2)	6.57 m	6.57 m	7.03 m	7.36 m	6.57 m	7.11 m
C Reach on a 45° upper embankment	5.23 m	5.23 m	5.71 m	6.09 m	5.23 m	5.80 m
D Reach on a 45° lower embankment	3 m	3 m	3.52 m	4 m	3 m	3.63 m
E Min. lateral reach (1)	1.75 m	1.75 m	1.85 m	1.75 m	1.75 m	1.75 m
F Maximum hedge height	4.42 m	4.42 m	4.65 m	4.86 m	4.42 m	4.71 m
G Headroom under 1st arm	1.01 m	1.01 m	1.01 m	1.01 m	1.01 m	1.01 m
Sweep angle	100°	100°	100°	100°	100°	100°
Telescopic value	-	-	-	0.91 m	-	0.92 m
Tool orientation angle	230°	230°	230°	230°	230°	230°
Transportation height (3)	3.86 m	3.86 m	3.85 m	3.80 m	3.86 m	3.86 m
Operational weight (4)	1545 kg	1595 kg	1645 kg	1600 kg	1745 kg	1745 kg

(1) measured from the tractor axis to the tip of the outer flail
(2) 50 cm ground clearance at the centre of the machine
(3) variable depending on the tractor and the tyres used
(4) with Unibroyeur 2 unit



ADAPTABLE TOOLS

- 01/ Unibroyeur 2 width 125 cm
- 02/ Unibroyeur 1000 width 100 cm
- 03/ Tactil' width 125 or 150 cm
- 04/ 16 Max width 160 cm
- 05/ Unibroyeur 1200 width 120 cm
- 06/ Forest-Broyeur width 125 cm
- 07/ Branch cutter
- 08/ Sawblade unit Lineo
- 09/ Sawblade unit Eliss'
- 10/ Brush Klario



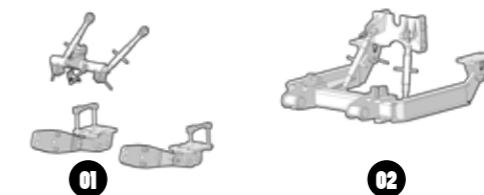
CONTROLS



- 01/ Hydraulic
Hydraulically assisted controls
Low pressure multilever
- 02/ Electrical/Hydraulic
Mixed electrical/hydraulic controls
Low pressure with joystick
- 03/ Electrical
Electrical digital controls



MOUNTING FRAMES



- 01/ Quick-mounting frame
- 02/ Versatile frame