

RAPTOR

MOUNTED PLOUGH FOR ON LAND & FURROW OPERATIONS
WITH HYDRAULIC OR MECHANICAL FURROW
WIDTH ADJUSTMENT

EN

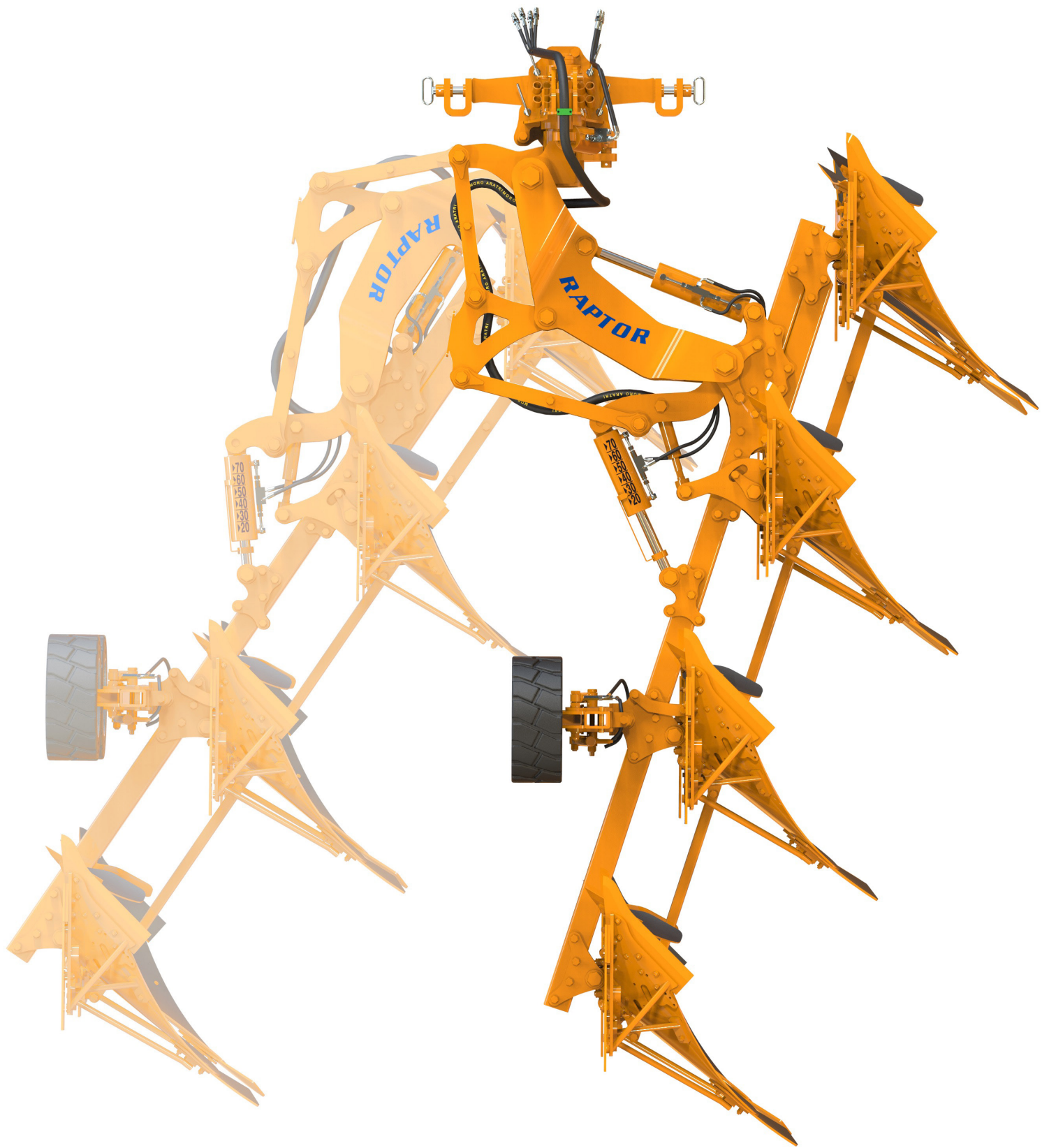


MORO
YOUR OWN FURROW



RAPTOR

It is the new generation of mounted plough for on land and in furrow operations, available in versions with 2 to 7 bodies. Characterized by an innovative and lightweight structure, but reliable at the same time, the Raptor allows both on land and in furrow ploughing, keeping a short distance from the tractor. All of this is possible due to an extraordinary geometry and the use of top raw materials.



IN FURROW AND ON LAND

Advanced CAD software is used for design and structural analysis of these machines, with simulated performance and fatigue testing. The chassis of the Raptor plough, like all the other structural parts, is made of special steel, with a very high yield load. Coupling of the elements are made by bolts, avoiding welded joints, and all the movements are made with pins and bushing with special anti-wear treatment.



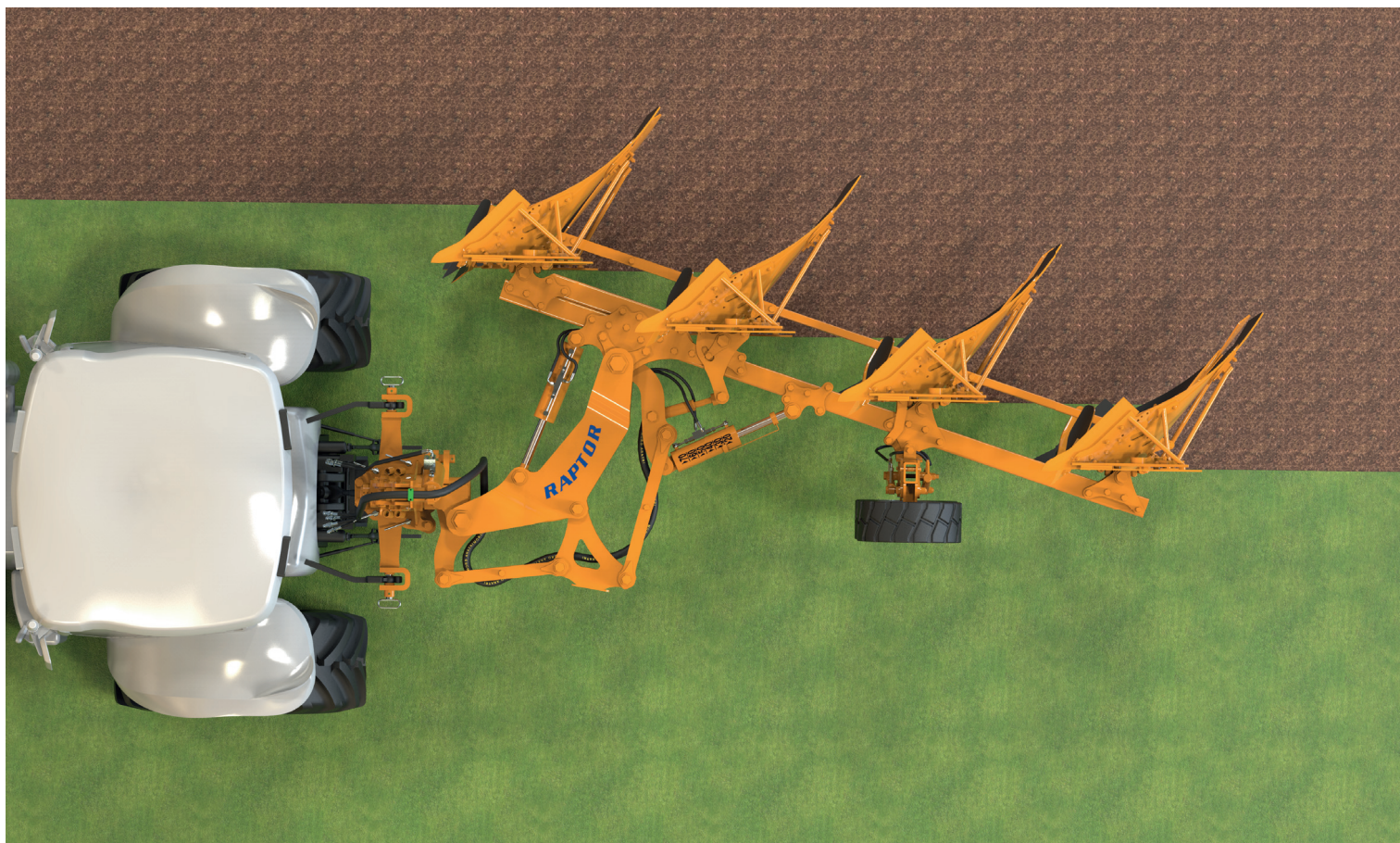
ON LAND

It limits soil compaction and allows you to work with wider tyres.



IN FURROW

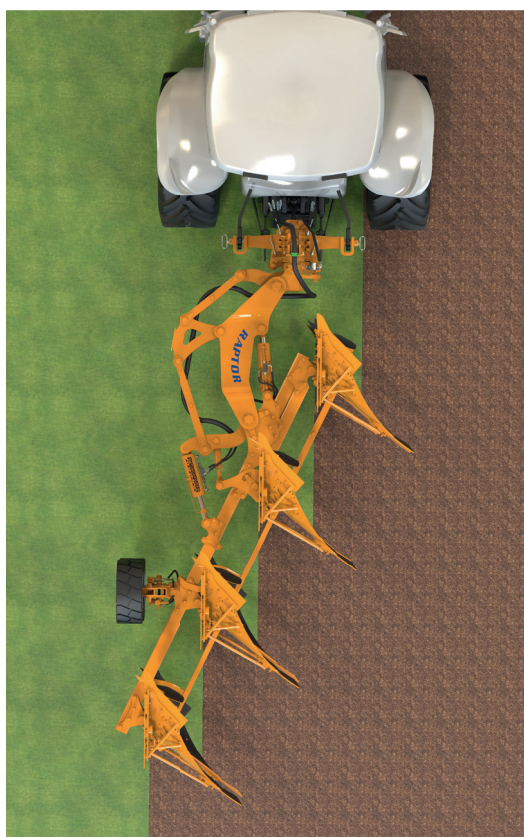
In case of conditions affecting the tractor's optimal traction, it is possible to operate in-furrow.



ON LAND

The conversion from “in furrow” to “on land”, is fast and without frictions; the working width is adjustable via hydraulic actuator, and the first body re-alignment is automatic. The parallelogram geometry allows an effective lateral movement, optimizing the distribution of the forces and reducing the problems of wear of the mechanical parts.

The wide excursion permits a considerable distance from the furrow and so, it is possible to work with large tractors.



← IN FURROW

FINISHING →

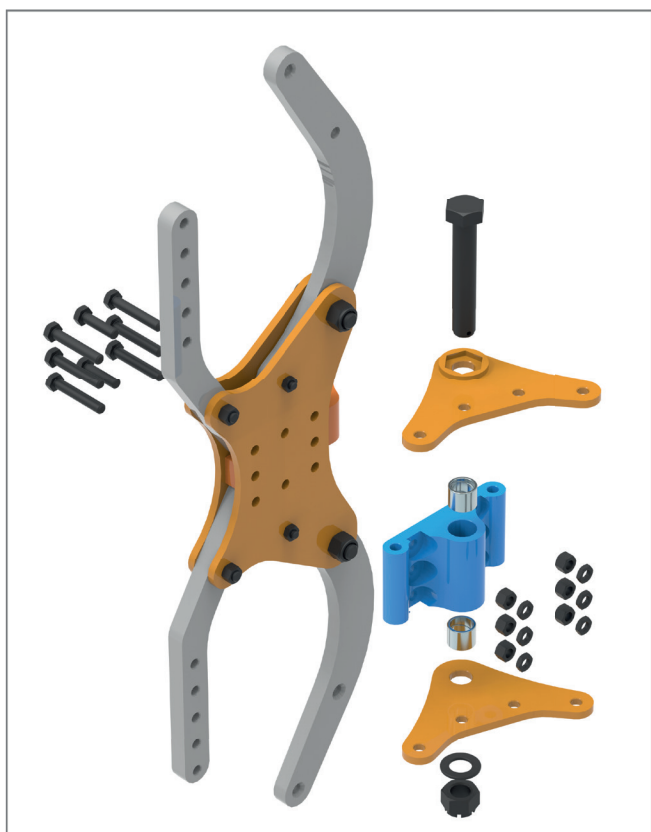




SMOOTH WIDTH ADJUSTMENT:

By means of a double acting hydraulic cylinder, it is possible to adjust the working width continuously while working, remaining comfortably seated in the driver's seat.

On request, it is available the system with two memory functions: automatic alignment of the frame during the turn over and adjustment of the working width. The frame is pivoted and rotated, then re-adjusted to the pre-selected furrow width.



THE CORE OF THE ADJUSTMENT:

The rotating movement of the system is entrusted to special mono-blocks in steel, without joints or welds, which hold special anti-wear bushings, ensuring high durability.



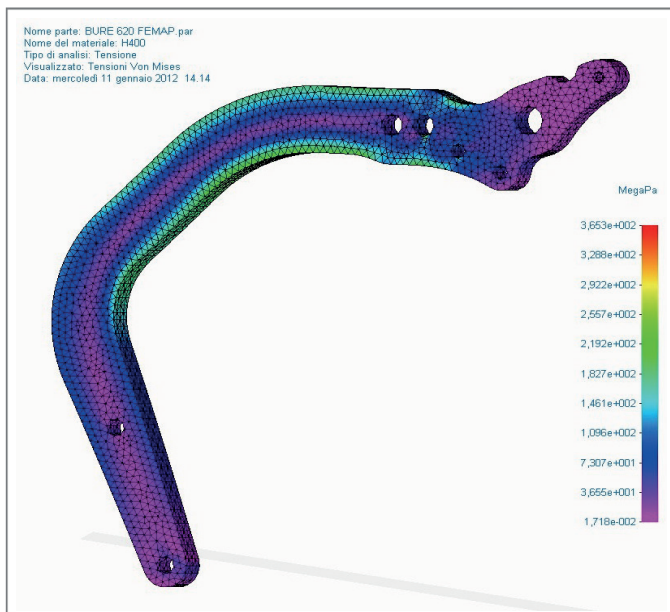
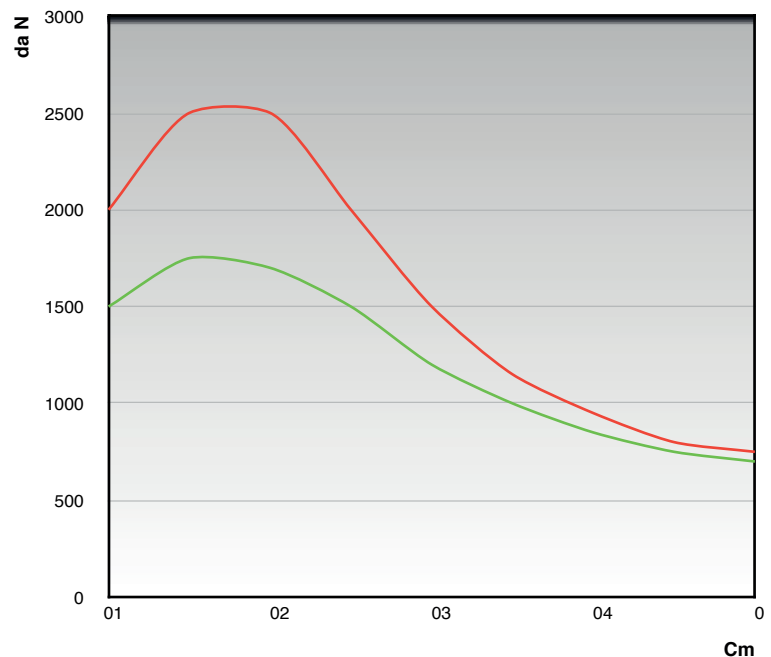


STONE SYSTEM

The MORO Aratri non-stop security system, protects the plough from damages when a body encounters an obstacle. This ensures a safe ploughing in stony soils.

The release is soft and without shocks, with a reduction of force as the leg rises.

The triggering pressure is adjustable, thus allowing the ploughing both in tenacious and light soils, avoiding the extraction of stones.



UNIQUE

The special shape of the leg guarantees the optimal kinematic: in case of impact, the body is quickly guided outside of the soil, overcoming the obstacle.

Special elastic steels enables also lateral movement: the STONE SYSTEM is able to absorb all the stresses and to ensure reliability and durability.

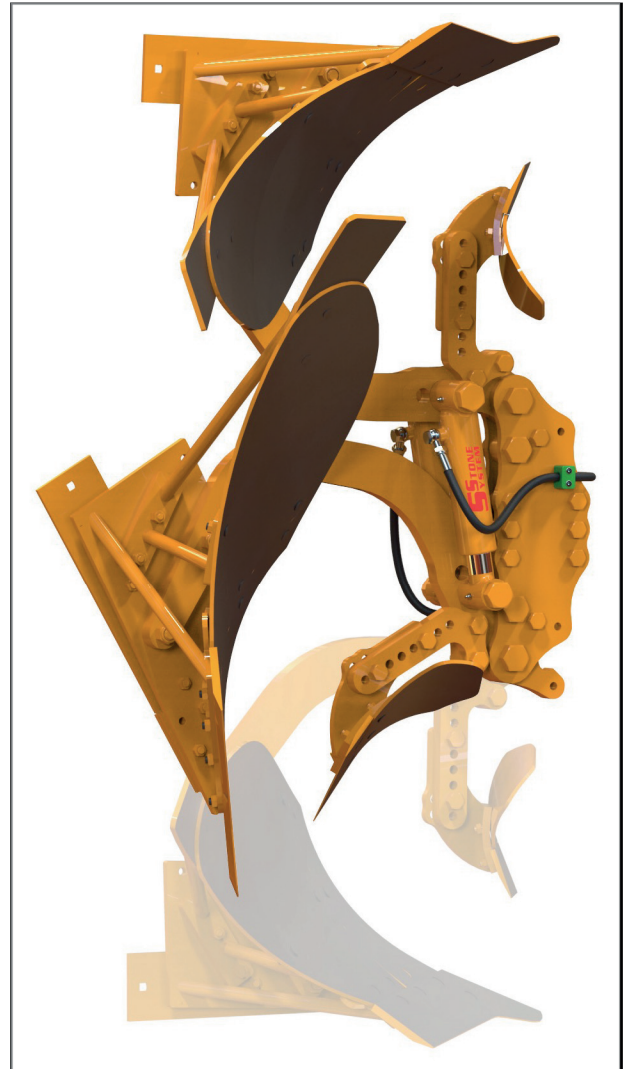


PATENTED

Each STONE SYSTEM body is provided with a couple of hydraulic jacks which allow the system to work.

Bodies are fixed with bolts to the chassis, avoiding joints and connecting rods that could affect the reliability of the plough.

STONE SYSTEM element
in working position and in
simulation of obstacle →



The constructive solution to entrust the delicate task of safeguarding the structure to a battery of accumulators, in comparison to a single accumulator, represents an important advantage in terms of reliability.

The RAPTOR STONE SYSTEM is able to continue ploughing even in case of failure of one or more accumulators. Moreover, it is possible to exclude the hydraulic device and add a couple of shear bolt.

TECHNOLOGY

TRANSPORT SYSTEM



TRANSPORT SYSTEM

The patented plow work and transport system that completely resolves the issue of road safety.



Movements from working to transport position and vice versa, are hydraulically actuated. Due to the unique steering head, during transport the plow acts like a tractor-trailer.



The TRANSPORT SYSTEM is available both hydraulic and mechanical versions



TRANSPORT SYSTEM

Designed, built and patented by MORO Aratri, TRANSPORT SYSTEM is highly regarded for its exceptional functionality.

Easy road transport, safety and quick conversion from working to transport position, are the characteristics that make this system unique.

Tested by many farmers, TRANSPORT SYSTEM is not just a trailing system, but a real working tool that allows to carry and use the plough at its best.

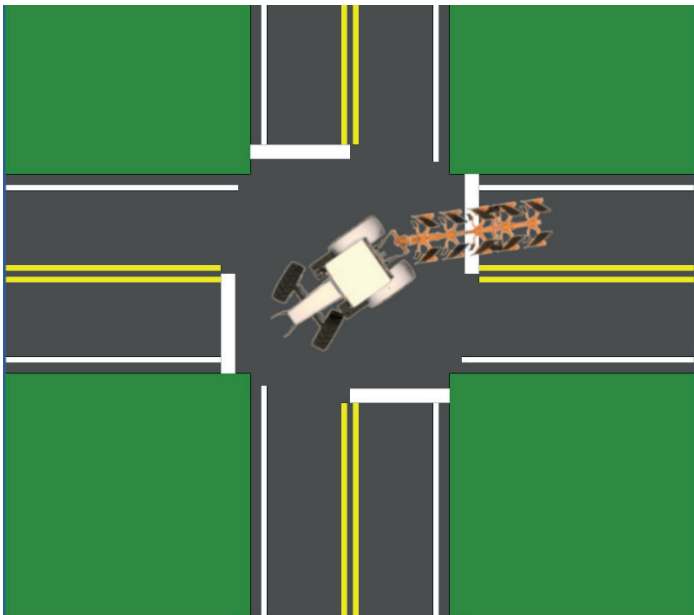
It is provided with the MORO Aratri special and patented steering head.





TRANSPORT SYSTEM 2.0

The evolution of the patented plow work and transport system that definitively solves the road safety issue.



All movements are carried out hydraulically

1. From the working position to the transport configuration and back
2. Working depth adjustment

Thanks to the special steering head, the plow behaves like a trailer during transport.

TRANSPORT SYSTEM 2.0



TRANSPORT SYSTEM 2.0

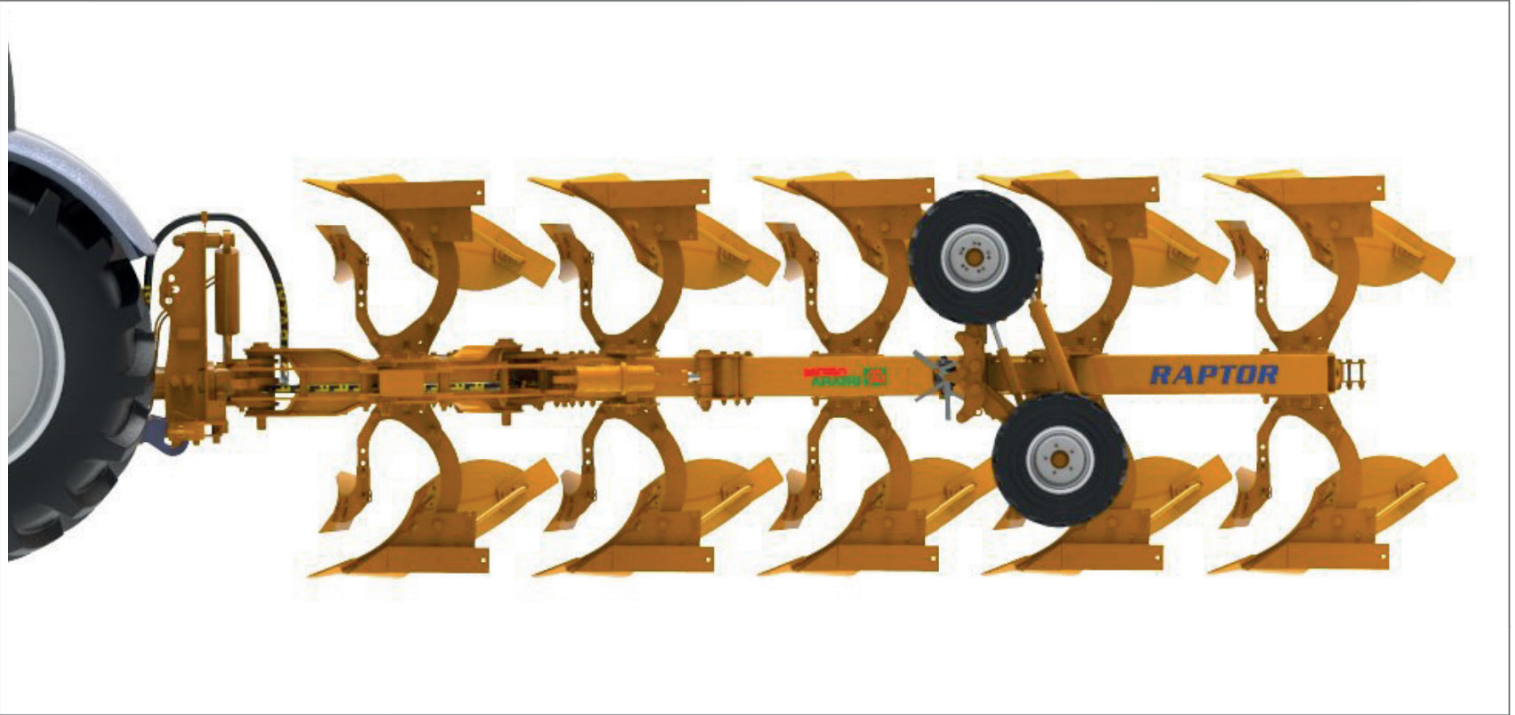
The working depth adjustment is quick and precise.

It is possible to equip the Transport System 2.0 with large-diameter wheels.





TRANSPORT SYSTEM 2.0



ROAD APPROVAL

The plow equipped with the Transport System can be approved for road use.

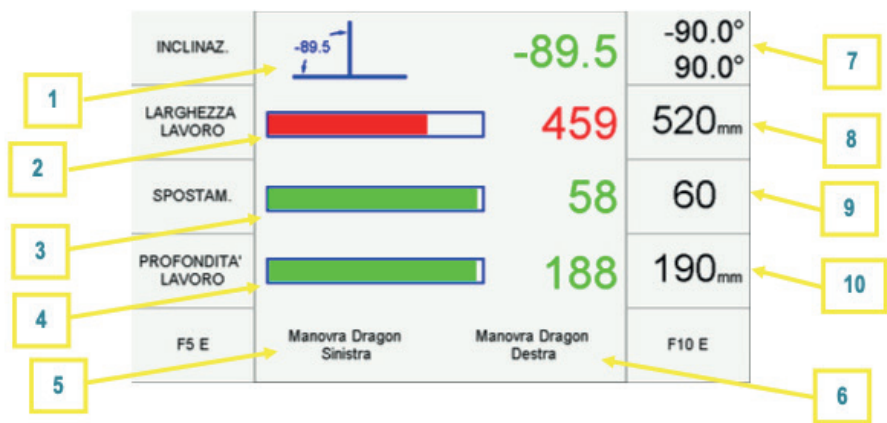
This classifies the plow as a towed implement, as required by the "Mother Regulation," making it compliant with individual national regulations throughout the European Union

SYSTEM FEATURES

Moro Next is an integrated system that allows you to visualize data from the movements of the Moro plow range and interface with a web environment, enabling remote access and data modification.

The main features of the system are:

- TERA7 Control: System management, data entry, and display of plow parameters (Inclination, Depth, Working Width, and Out-of-Furrow Adjustment).
- CAN Live System: Data collection and transmission to the IT InTouch system for visualization.
- InTouch Service: Cloud database, system management, planning, and remote programming.



1. Inclination measurement	6. Description sequence set F10
2. Working width measurement	7. Desired inclination value (right & left)
3. On land shifting measurement	8. Desired workinh width value
4. Working depth measurement	9. Desired on land shifting value
5. Description sequence set F5	10. Desired working depth value

THE SENSORY PLOUGH

Equipped with special sensors and interconnected, the plow becomes SMART.



GPS



CLOUD



**USER
REGISTRATION**



**WORLDWIDE
CONNECTIVITY**



**WORKING
DEPTH**



**WORKING
WIDTH**



**ON LAND
OFFSET**



TILT

MOULDBOARDS



STEEL

Boron steel mouldboard extremely wear resistant, for a precise and low power absorption ploughing.

Various models for a working depth ranging from 16 cm to 100 cm. Also available in multi layer steel plate.

(for further information please contact the sales network)



SLATTED

Boron steel slatted mouldboard for sticky soils. Excellent crumbling.

Various models for a working depth ranging from 26 cm to 50 cm. Synthetic version available.

(for further information please contact the sales network)



SYNTHETIC

Plastic mouldboard for wet and sticky soils without stones. It allows the soils to flow with less effort.

Various models for a working depth ranging from 16 cm to 100 cm.

(for further information please contact the sales network)



SCANDIC

Helicoidal mouldboard for a low power absorption ploughing. Specifically designed for the north european markets and for rice fields. Various models for a working depth ranging from 16 cm to 30 cm.

Synthetic version available.

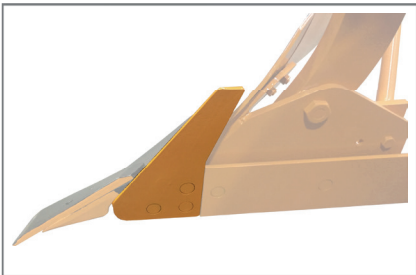
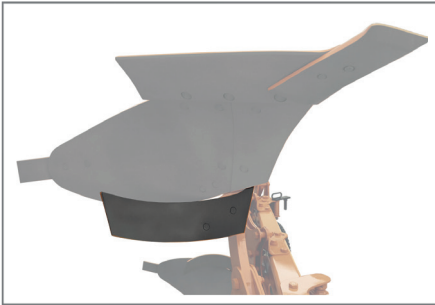
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ACCESSORIES



SKIMMERS

Rice field / Maize - Synthetic - Steel



TRASHBOARDS

Available on all the plough bodies, for ploughing without skimmers.

DISC COULTER

Smooth or scalloped coultter disc, with 500 mm diameter

Easy to set in every soil condition.

Non-stop version available.

KNIFE COULTER

Available on all the plough bodies

EXTRA LARGE LANDSIDE

For a better stability of the plough. Available on all the plough bodies, it can be turned for an efficient use of the material.

ACCESSORIES



SINGLE DEPTH WHEEL

Depth wheel with hydraulic shock absorber, adjustable via turnbuckle. Positioned on the last body and mountable on every plough model.

DUAL DEPTH WHEEL

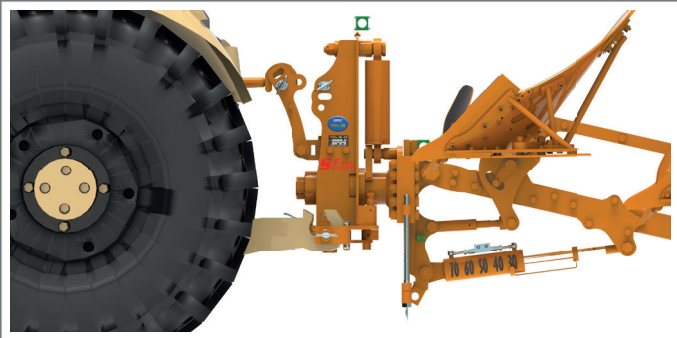
Adjustable dual depth wheel. Positioned on the penultimate or last body and mountable on every plough model.



WORKING AND TRANSPORT WHEEL (SINGLE/DOUBLE FORK)

A hydraulically cushioned working wheel with depth adjustment via a regulator.

Positioned on the last body and can also be used as a transport wheel on the road. Starting from the four-furrow model, it can be mounted on the second-to-last body.



ARTICULATED TOP LINK

Patented and designed by MORO Aratri, the special FAST SYSTEM accessory is available on the TRANSPORT SYSTEM headstock. During the conversion from working to transport position, the top link is freed without detaching it from the plough.

**FAST
SYSTEM**



HYDRAULIC INCLINATION ADJUSTMENT

The plough can be equipped with a turnover cylinder that enables adjustment of its inclination

This cylinder also stores the set position, eliminating the need for readjustment after each turnover.

MOTHER REGULATION



KIT MOTHER REGULATION ROAD APPROVAL

For plows equipped with the Transport System, the kit includes:

- Fast System
- Lighting system with signal panels
- Side reflectors
- Safety locks
- Share protections
- Chocks



TECHNICAL DATA

7 FURROW

R7

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
EPT 18A Raptor	100-105	25-65	84	200x120	4100	400-600	650
EPT 16A Raptor	90-100	25-65	84	150x120	3800	300-400	450
EPT 14A Raptor	90-95	25-65	78	150x120	3600	200-300	320

6 FURROW

R6

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
EXA 20A Raptor	110	25-70	87	200x120	3900	420-600	650
EXA 18A Raptor	100-110	25-70	83	200x120	3500	380-420	450
EXA 16A Raptor	100	25-65	78	150x120	3100	300-350	370
EXA 14A Raptor	90-95	25-65	78	150x120	2900	270-300	320

5 FURROW

R5

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
PNT 22A Raptor	110-120	25-70	94	200X120	3900	450-600	650
PNT 20A Raptor	100-110	25-70	89	200X120	3400	400-500	550
PNT 18A Raptor	100-110	25-70	89	200X120	3100	300-390	410
PNT 16A Raptor	100-105	25-65	89	150X120	2800	250-300	320
PNT 14A Raptor	95-100	25-65	84	150X120	2600	220-250	260

4 FURROW

R4

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
QRV 22A Raptor	110-130	25-70	94	200x200	3500	400-600	650
QRV 20A Raptor	100-120	25-70	94	200x120	3000	360-420	450
QRV 18A Raptor	100-120	25-70	89	200x120	2700	280-360	380
QRV 16A Raptor	100-110	25-70	89	150x120	2450	220-280	300
QRV 14A Raptor	100-105	25-65	84	150x120	2250	180-220	230

3 FURROW

R3

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
TRV 24A Raptor	120-130	25-70	100	200X200	3200	360-450	470
TRV 22A Raptor	120-130	25-70	94	200X200	2950	300-400	420
TRV 20AP Raptor	110-130	25-70	94	200X120	2700	260-31	330
TRV 20A Raptor	110-120	25-70	89	200X120	2450	220-260	280
TRV 18A Raptor	110-115	25-70	89	200X120	2200	190-230	240
TRV 16A Raptor	100-115	25-70	89	150X120	1950	170-200	210
TRV 16A Raptor	100-110	25-65	84	150X120	1750	140-170	180

2 FURROW

R2

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT Kg	POWER	
						HP	MAX*
BVM 26A Raptor	180	30-90	125	200X200	3390	350-400	500
BVM 24A Raptor	120-140	25-70	103	200X200	2550	280-360	400
BVM 22A Raptor	120-140	25-70	94	200X200	2300	240-300	320
BVM 20AP Raptor	110-130	25-70	94	200X120	2100	180-240	250
BVM 18AP Raptor	110-130	25-70	94	150X120	1800	140-180	190
BVM 16AP Raptor	100-120	25-70	89	150X120	1600	130-150	160
BVM 14A Raptor	100-120	25-65	84	150X120	1400	120-140	150

Disclaimer:

The data provided in this brochure is for guidance only; the manufacturer reserves the right to make changes to the models described without prior notice. Drawings and photographs may show optional equipment or setups intended for other countries.

For any further information, please contact our sales network.

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