

DRAGON

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

EN



MORO
YOUR OWN FURROW



DRAGON

It is the new generation of semi mounted plough for on land and in furrow operations, available in versions with 5 to 9 bodies. Advanced software is used for design and structural analysis of these machines, with simulated performance and fatigue testing.

The chassis of the DRAGON 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.



SUPPORT WHEEL

The wheel is a fundamental element of the Dragon plough. Not only it serves as resting point for transport, but also it is the load bearing fulcrum during ploughing and turning of the plough.

The working depth is adjustable by a two functions hydraulic jack with memory, and it can be changed directly from the tractor. Hydraulic actuations of the wheel for manoeuvres in headland or road transport, do not change the pre selected working depth.



RELIABLE HEADSTOCK

The Dragon plough is provided with a robust 3 points linkage headstock of category 3 and 4N, which allows a wide turning angle.



SAFE TRANSPORT

While transporting, the plough is positioned centrally. The 2 cylinders are equipped not only with a blocking valve, but also with a manual valve for additional safety against any possible involuntary movements.

On request, it is possible to add the marker boards and lighting.



BEAM

The Dragon plough is equipped with a strong main beam which supports the working mouldboards.

A secondary support beam links the wheel to the towing tractor.

ON LAND / IN FURROW



ON LAND & IN FURROW

On request, the Dragon ploughs can be equipped with a new hydraulic system which allows ploughing both on land and in furrow.

ON LAND

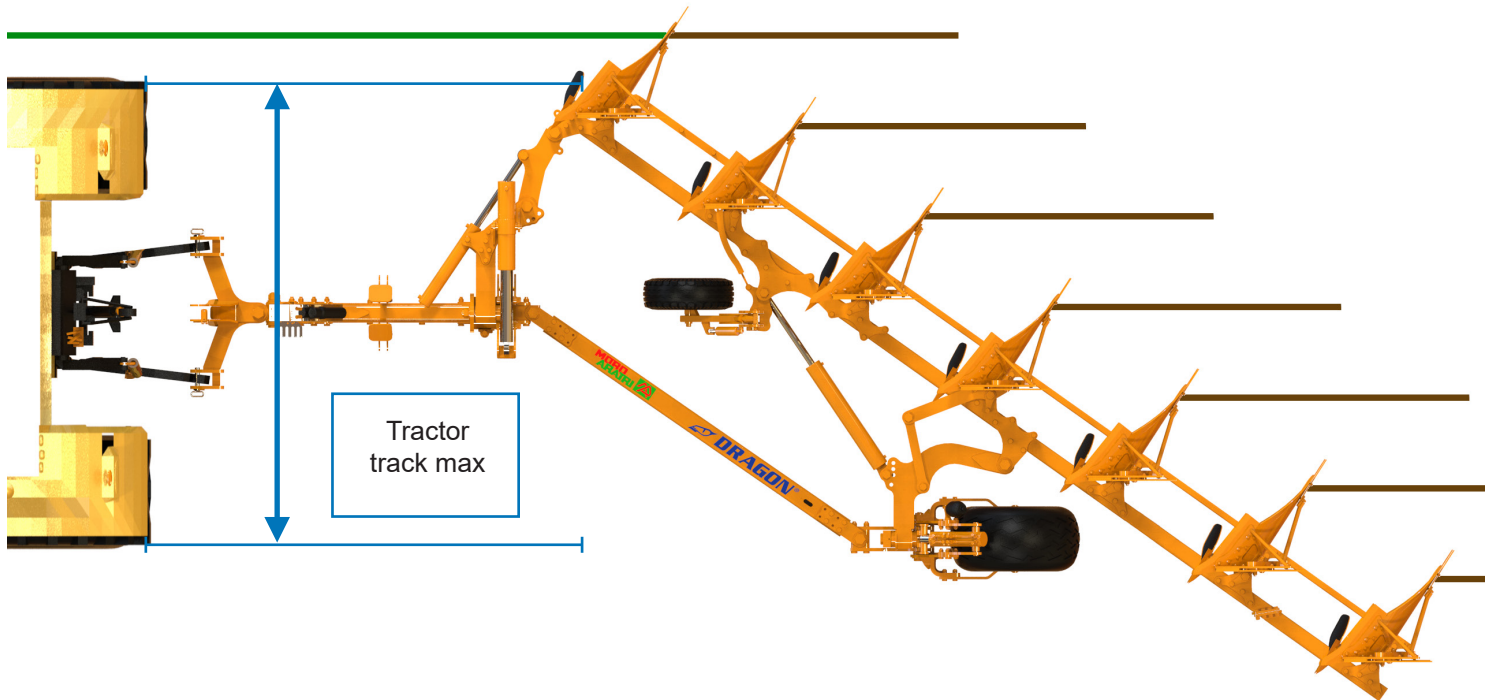
On land ploughing reduces compaction damages, with considerable benefits to the soil structure.

IN FURROW

In case of wet soil or traction problems, the plough can be easily converted to the in furrow ploughing.



ON LAND / IN FURROW



ON LAND PLUS

In order to match very wide tractors, it is available the ON LAND PLUS solution.

Due to the geometry and the wide in furrow/ on land excursion, the plough can be matched both with twin-wheel and track-type tractors up to 4 meters track, always keeping the correct furrow wall distance.



NEW DESIGN



REVERSING UNIT

A second beam is the rotation fulcrum and guide for the tractor.

The reversing process is carried out by 2 well sized hydraulic cylinders, which ensures a safe and smooth 180° movement in safe conditions.

TILT ADJUSTMENT

Vertical tilt adjustment can be easily made by 2 adjusters placed on the sides of the secondary beam.

Adjustment is performed separately on 2 sides.



NEW DESIGN



TURNING

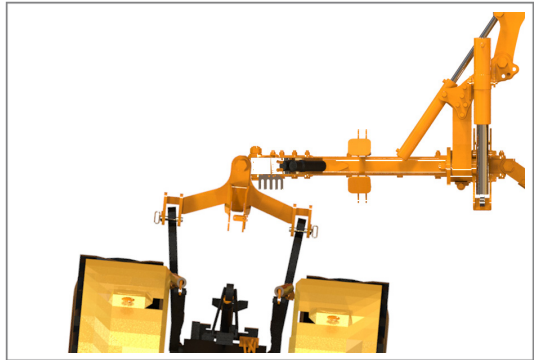
Due to the wide steering range, headland turn operations are rapid and easy, even in narrow headlands or on hills.

Wheel direction, guided by the secondary beam, is correlated with the turning.



OPTIMISED DESIGN

Headstock new design ensures an optimal match with the tractor.



FIRST BODY ADJUSTMENT

While working in furrow, adjustment of the first body is made by the following:

- In furrow & on land version: by acting the hydraulic jack.
- In-Furrow version: adjusted via a specific regulator located on the second frame



WORKING WIDTH

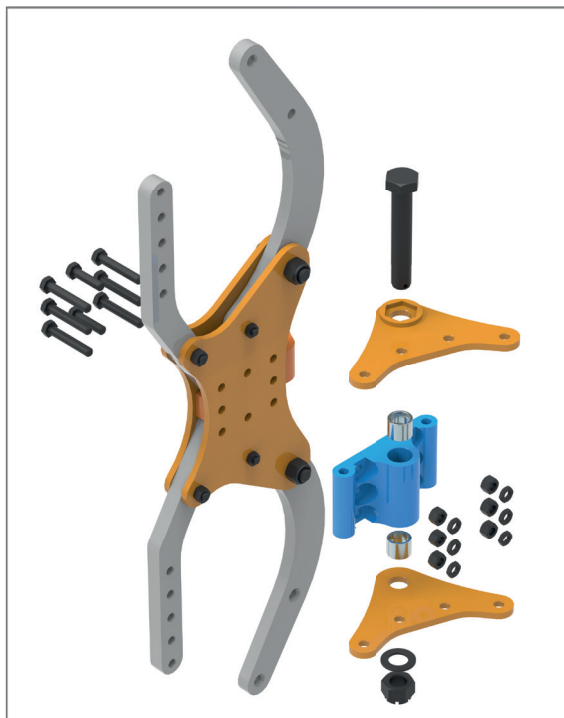
DRAGON W



SMOOTH WIDTH ADJUSTMENT:

The Dragon W. is available in version from 5 to 9 bodies. 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. Further adjustments available:

- First body adjustment through tractor-track mechanical adjustment (in furrow version)
- First body hydraulic adjustment (on land version)
- Tilt adjustment
- Working depth adjustment with memory, placed on the wheel



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.



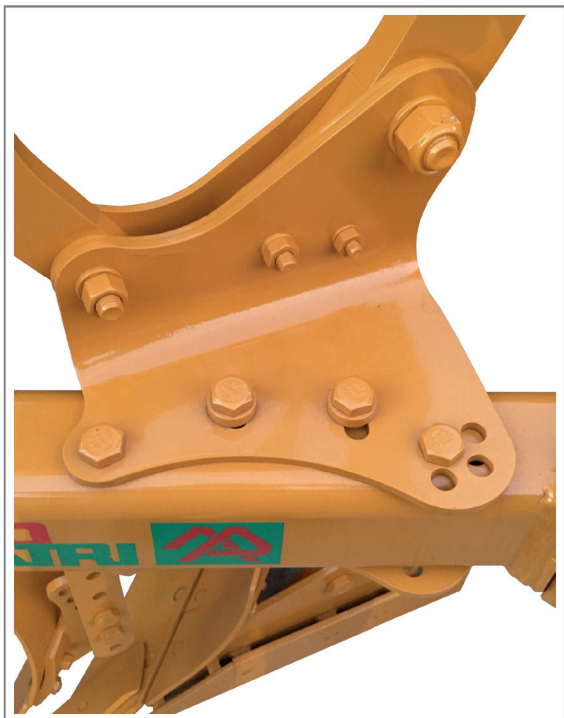
DRAGON S

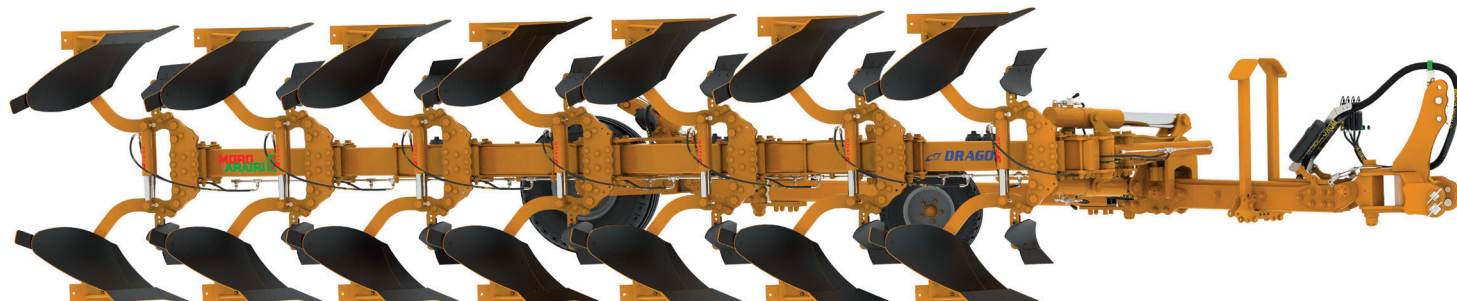


MECHANICAL FURROW WIDTH ADJUSTMENT

Equipped with the mechanical furrow width adjustment, the Dragon S. ploughs allow the operator an accurate setting, according to different soil and climatic conditions. Available in version from 5 to 9 bodies, the plough is also provided with all the necessary adjustments for the perfect match and alignment to the tractor:

- First body adjustment through tractor-track mechanical adjustment (in furrow version)
- First body hydraulic adjustment (on land version)
- Tilt adjustment
- Working depth adjustment with memory, placed on the wheel



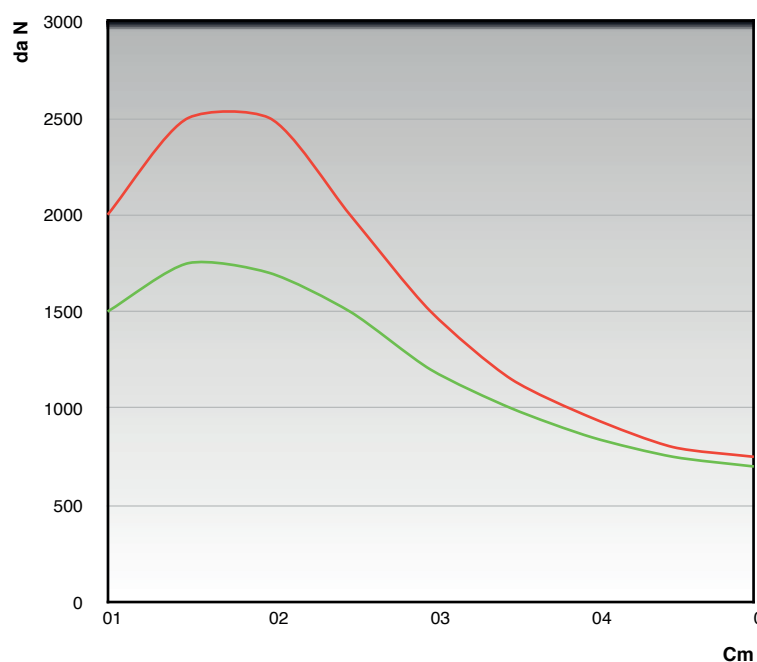


STONE SYSTEM

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.

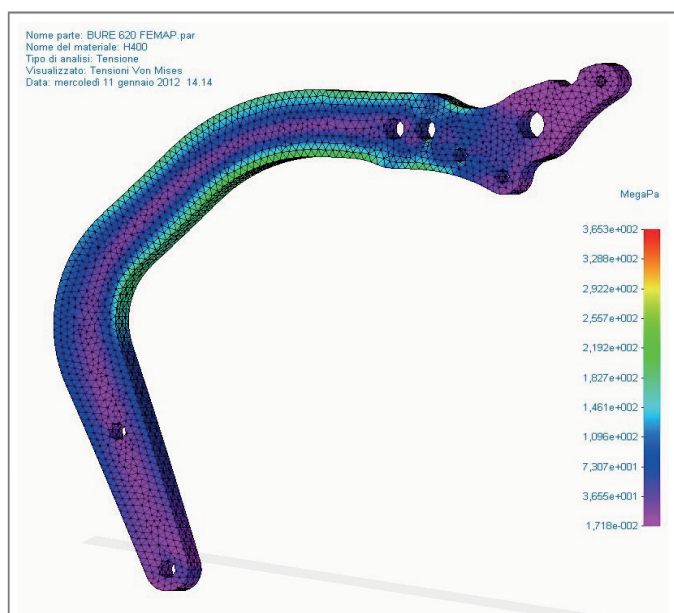
The triggering pressure is adjustable, thus allowing the ploughing both in tenacious and light soils, avoiding the extraction of stones.



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.



STONE SYSTEM

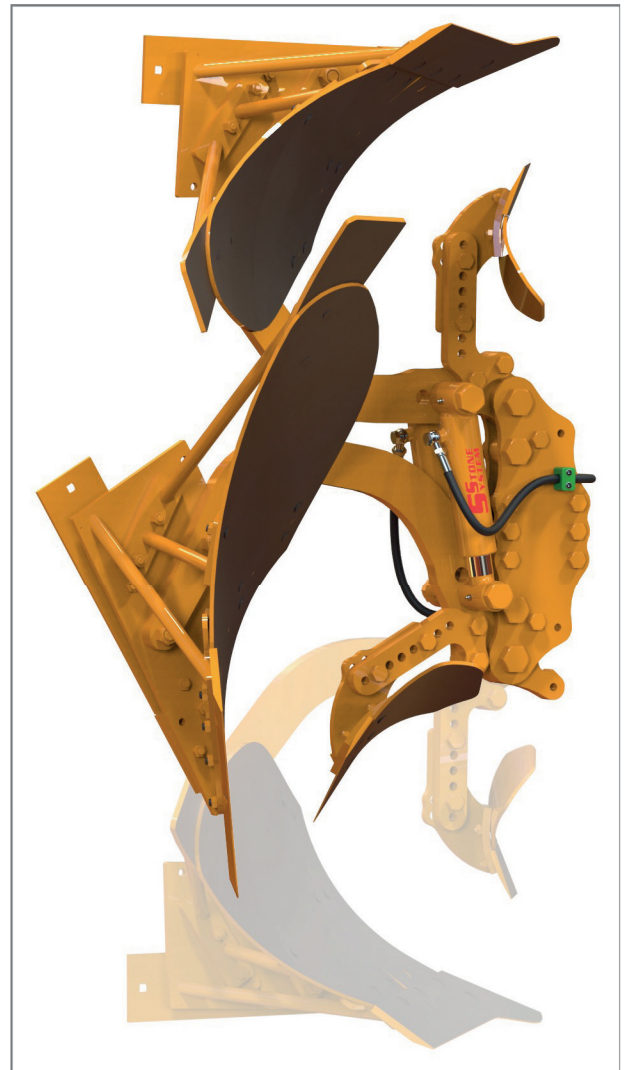


PATENTED

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 obstacleo



STONE SYSTEM

ON ROADS

TRANSPORT ON ROADS:

DRAGON plough, rotated in central position, allows a safe transport on roads. In this position, the wheel has a transport function, and thank to the hydraulic jack with shock absorption (optional), the plough is protected against the typical stress while transporting .

The turning system is equipped with 2 hydraulic shutters, which block safely the plough in transport position.



AGILE

The plough acts as a tractor trailer

Manoeuvring on roads is easy, and it is also possible to drive at a sustained speed.



EQUIPMENTS



SINGLE DEPTH WHEEL

Depth wheel adjustable via turnbuckles.

Positioned on the second body and particularly indicated while ploughing on land, it helps controlling the working depth



PRECISION JOINT

On request, it is possible to add a precision joint which allows the addition or the removal of the last plough body, making the plough extremely versatile.



SHARES

Made with high quality born steel, heat treated and wear resistant. MORO shares guarantee an excellent penetration in each soil condition.

Available with:

- Reversible point
- Premium tungsten point.
- Length 450 mm (standard)
- Length 650 mm

EQUIPMENTS



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.

(for further information please contact the sales network)



EXTRA LARGE LANDSIDE

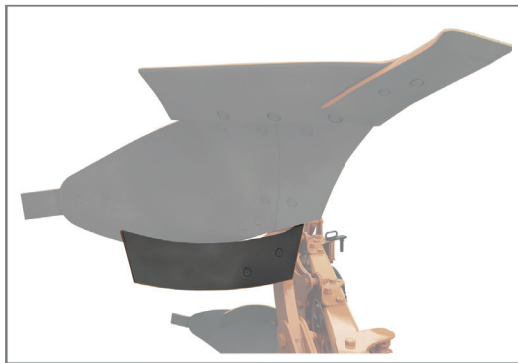
For a better stability of the plough. Available on all the plough bodies, it can be turned for an efficient use of the material.

EQUIPMENTS



SKIMMERS

Rice field / Maize - Synthetic - Steel



TRASHBOARDS

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

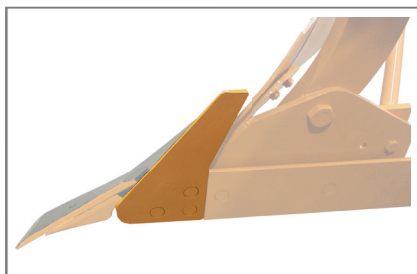


DISC COULTER

Smooth or scalloped coultter disc, 500 mm diameter.

Easy to set in every soil condition.

Non-stop version available.



KNIFE COULTER

Available on all the plough bodies

EQUIPMENTS



UNDERBEAM CLEARANCE

Models DRAGON A can be ordered with an under beam clearance of 89 CM (optional)

Models DRAGON AP can be ordered with an under beam clearance of 94 CM (optional)



QUICK ADJUSTMENT SKIMMER

Some skimmer models can be equipped with the quick adjustment.

(for further information please contact the sales network)



MORO NEXT

All models DRAGON can be equipped with the MORO NEXT system, for the implement control, data collection and sending.

(for further information please contact the sales network)



KIT MOTHER REGULATION

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

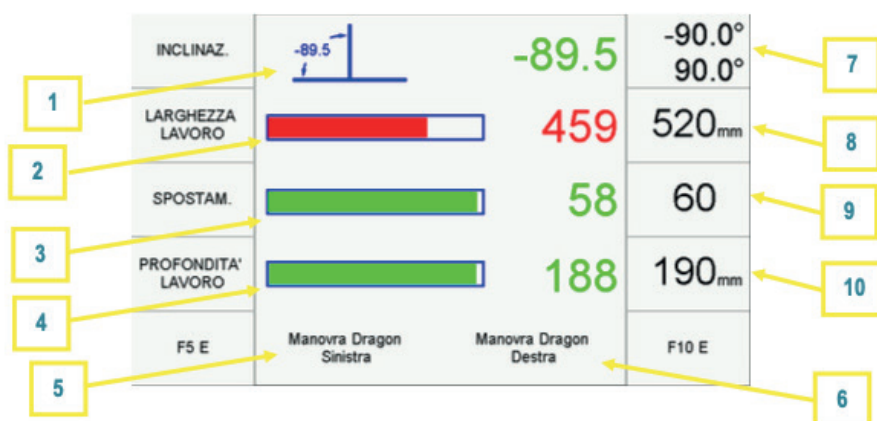
- Fast System
- Lighting system with signal panels
- Side reflectors
- Safety locks
- Share protections
- Chocks

FEATURES OF THE SYSTEM

Moro Next is an integrated system, which allows to both visualise the data of the MORO Aratri range of ploughs, and to interface with the web environment, giving the possibility to access and modify the data remotely.

The main features are:

- TERA7 control : system management, entry and visualisation of the plough data (Tilt, Working depth, Working width and On land shifting)
- CAN Live: data collection and sending to the IT InTouch system for the visualisation.
- InTouch service : database cloud, system management, planning, remote programming.



1 Tilt measurement	6 Sequence set description F10
2 Working width measurement	7 Required tilt value (right & left)
3 On land shifting measurement	8 Required working width value
4 Working depth measurement	9 Required on land shifting value
5 Sequence set description F5	10 Required working depth value

MORO NEXT

SENSORIAL PLOUGH

Interconnected and equipped with special sensors, the plough becomes SMART.



TECHNICAL DATA

DRAGON W

MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
						HP	MAX*
DRAGON 8+1 A W	100	28-50	85	200x120	4970	320-500	550
DRAGON 8+ A W	100	28-50	85	200x120	4630	300-450	500
DRAGON 7+1 A W	100	28-55	85	200x120	4550	300-450	500
DRAGON 7+ A W	100	28-55	85	200x120	4220	230-350	370
DRAGON 6+1 A W	100	28-57	85	200x120	4140	230-350	370
DRAGON 6+ A W	100	28-57	85	200x120	3800	200-280	310
DRAGON 5+1 A W	100	28-57	85	200x120	3800	200-280	310
DRAGON 5+ A W	100	28-57	85	200x120	3470	180-260	300
DRAGON 6+1 AP W	120	32-70	89	200x120	4360	280-400	480
DRAGON 6+ AP W	120	32-70	89	200x120	4000	250-380	400
DRAGON 5+1 AP W	120	32-70	89	200x120	4000	250-380	400
DRAGON 5+ AP W	120	32-70	89	200x120	3640	230-320	380
DRAGON 5 AP W	130	32-73	89	200x120	3600	230-320	380

DRAGON S

MODEL	BODY SPACINGV cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
						HP	MAX*
DRAGON 8+1 A S	100	33-37-42-47	85	200x120	4460	320-500	550
DRAGON 8+ A S	100	33-37-42-47	85	200x120	4180	300-450	500
DRAGON 7+1 A S	100	33-37-42-47	85	200x120	4100	300-450	500
DRAGON 7+ A S	100	33-37-42-47	85	200x120	3820	230-350	370
DRAGON 6+1 A S	100	33-37-42-47	85	200x120	3740	230-350	370
DRAGON 6+ A S	100	33-37-42-47	85	200x120	3450	200-280	310
DRAGON 5+1 A S	100	33-37-42-47	85	200x120	3450	200-280	310
DRAGON 5+ A S	100	33-37-42-47	85	200x120	3170	180-260	300
DRAGON 6+1 AP S	120	39-45-51-56	89	200x120	3970	280-400	480
DRAGON 6+ AP S	120	39-45-51-56	89	200x120	3660	250-380	400
DRAGON 5+1 AP S	120	39-45-51-56	89	200x120	3660	250-380	400
DRAGON 5+ AP S	120	39-45-51-56	89	200x120	3350	230-320	380

TECHNICAL DATA

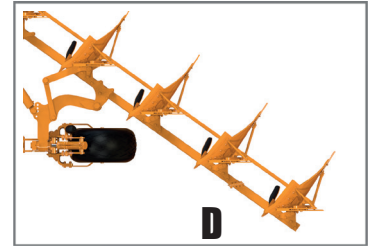
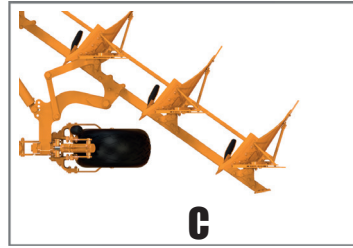
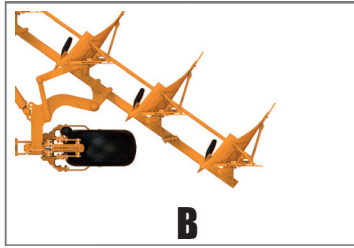
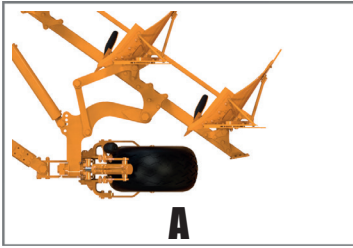
STONE SYSTEM

DRAGON W							
MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
						HP	MAX*
DRAGON 8+1 AW Stone	100	28-50	85	200x120	5370	320-500	550
DRAGON 8+ AW Stone	100	28-50	85	200x120	5000	300-450	500
DRAGON 7+1 AW Stone	100	28-55	85	200x120	4900	300-450	500
DRAGON 7+ AW Stone	100	28-55	85	200x120	4540	230-350	370
DRAGON 6+1 AW Stone	100	28-57	85	200x120	4450	230-350	370
DRAGON 6+ AW Stone	100	28-57	85	200x120	4080	200-280	310
DRAGON 5+1 AW Stone	100	28-57	85	200x120	4080	200-280	310
DRAGON 5+ AW Stone	100	28-57	85	200x120	3720	180-260	300
DRAGON 6+1 APW Stone	120	32-70	89	200x120	4640	280-400	480
DRAGON 6+ APW Stone	120	32-70	89	200x120	4250	250-380	400
DRAGON 5+1 APW Stone	120	32-70	89	200x120	4250	250-380	400
DRAGON 5+ APW Stone	120	32-70	89	200x120	3860	230-320	380
DRAGON 5 APW Stone	130	33-73	89	200x120	3820	230-320	380

DRAGON S							
MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
						HP	MAX*
DRAGON 8+1 A S Stone	100	33-37-42-47	85	200x120	4830	320-500	550
DRAGON 8+ A S Stone	100	33-37-42-47	85	200x120	4510	300-450	500
DRAGON 7+1 A S Stone	100	33-37-42-47	85	200x120	4430	300-450	500
DRAGON 7+ A S Stone	100	33-37-42-47	85	200x120	4110	230-350	370
DRAGON 6+1 A S Stone	100	33-37-42-47	85	200x120	4030	230-350	370
DRAGON 6+ A S Stone	100	33-37-42-47	85	200x120	3710	200-280	310
DRAGON 5+1 A S Stone	100	33-37-42-47	85	200x120	3710	200-280	310
DRAGON 5+ A S Stone	100	33-37-42-47	85	200x120	3390	180-260	300
DRAGON 6+1 AP S Stone	120	39-45-51-56	89	200x120	4220	280-400	480
DRAGON 6+ AP S Stone	120	39-45-51-56	89	200x120	3880	250-380	400
DRAGON 5+1 AP S Stone	120	39-45-51-56	89	200x120	3880	250-380	400
DRAGON 5+ AP S Stone	120	39-45-51-56	89	200x120	3540	230-320	380

DRAGON

TECHNICAL DATA



MODEL	WHEEL POSITION	ON LAND - TRACTOR TRACK MAX WITH WORKING DEPTH OF 40cm (about 20cm from the furrow wall)
DRAGON 8+1 A W	D	3900
DRAGON 8+A W	C	3900
DRAGON 7+1A W	D	3900
DRAGON 7+A W	C	3900
DRAGON 6+1A W	D	3900
DRAGON 6+ A W	C	3900
DRAGON 5+1A W	B	3900
DRAGON 5+ A W	A	3900
DRAGON 6+1 AP W	D	3900
DRAGON 6+ AP W	C	3900
DRAGON 5+1 AP W	B	3900
DRAGON 5+ AP W	A	3900
DRAGON 5 AP W	C	3900

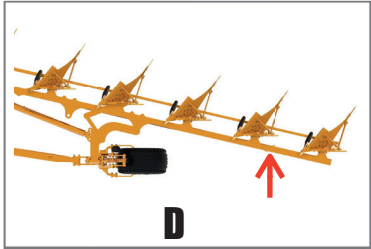
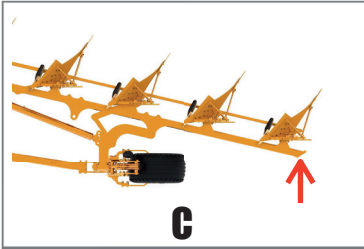
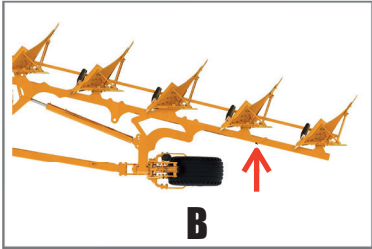
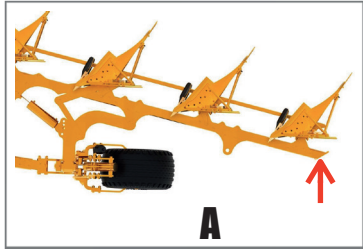
MODEL	WHEEL POSITION	ON LAND - TRACTOR TRACK MAX WITH WORKING DEPTH OF 40cm (about 20cm from the furrow wall)
DRAGON 8+1 A S	D	3850
DRAGON 8+A S	C	3850
DRAGON 7+1A S	D	3850
DRAGON 7+A S	C	3850
DRAGON 6+1A S	D	3850
DRAGON 6+1A S	C	3850
DRAGON 5+1 A S	B	3850
DRAGON 5+ A S	A	3850
DRAGON 6+1 AP S	D	3850
DRAGON 6+ AP S	C	3850
DRAGON 5+1 AP S	B	3850
DRAGON 5+ AP S	A	3850



DRAGON DYNAMITE

DRAGON DYNAMITE

Semi-mounted on land plough for high-power tractors (670 HP)



MODEL	WHEEL POSITION	ON LAND - TRACTOR TRACK MAX WITH WORKING DEPTH OF 40cm (about 20cm from the furrow wall)
DRAGON 6+1 D W	D	3900
DRAGON 6+ D W	C	3900
DRAGON 5+1 D W	B	3900
DRAGON 5+ D W	A	3900
***The red arrow indicates the position of the flange		

TECHNICAL DATA

DRAGON D W							
MODEL	BODY SPACING cm	WORKING WIDTH cm	UNDERBEAM CLEREANCE cm	BEAM CROSS SECTION mm	WEIGHT kg	POWER	
						HP	MAX*
DRAGON 6+1 D W	130	32-73	89	230 R	4600	500-620	670
DRAGON6+ D W	130	32-73	89	230 R	4200	500-620	670
DRAGON 5+1 D W	130	32-73	89	230 R	4200	500-620	670
DRAGON 5+ D W	130	32-73	89	230 R	3800	500-620	670



V 3.0 English

DISCALIMER:

The data indicated in this folder are approximate. The models described here can be subjected to modifications without any notice by the manufacturer. The drawings and photos may refer to equipment that is either optional or intended for other countries. Please apply to our Sales Network for any further information.

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MORO
YOUR OWN FURROW

