

SPIDER

RANGE OF SUBSOILERS

EN



MORO
YOUR OWN FURROW

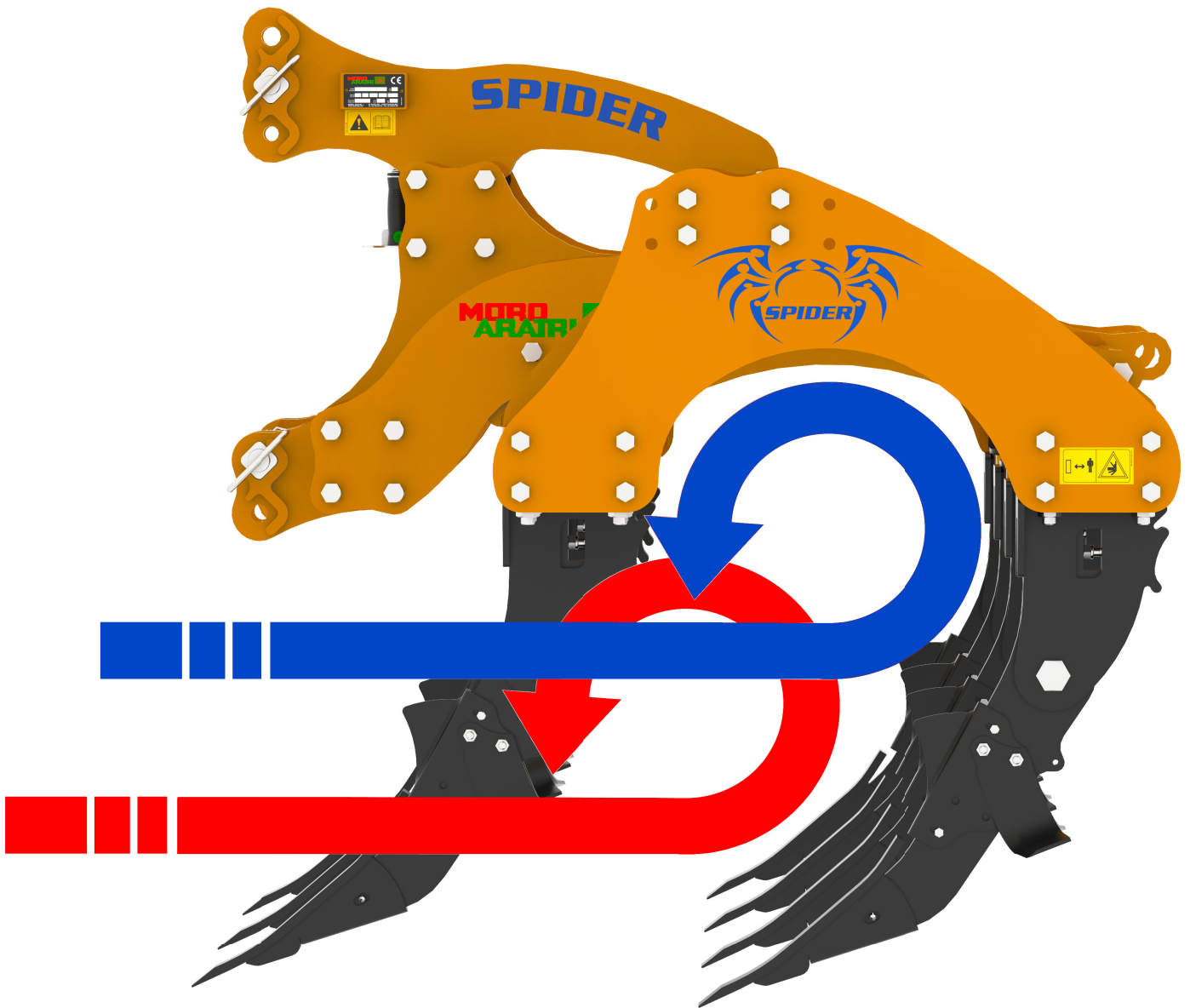
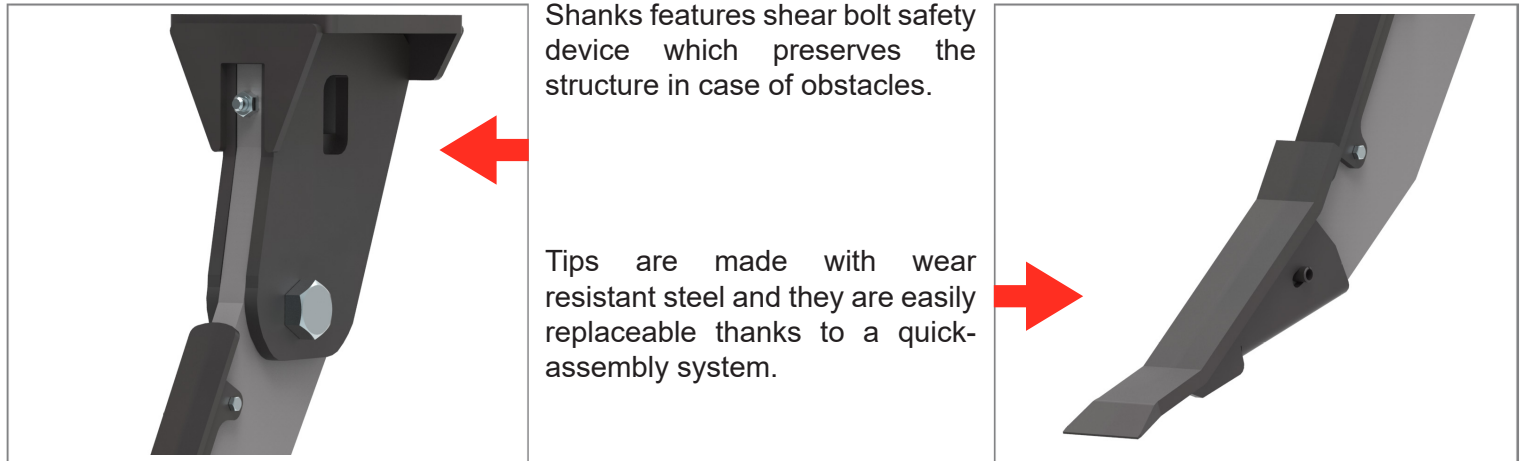


SPIDER

The subsoiler “SPIDER” was designed and built to meet the requirements of heavy and intense use. The characteristics of the steel used and the particular structure with bolted joints make the SPIDER suitable for all working conditions. Each shank features a shear bolt safety device and a quick-release tip, and can be equipped with the appropriate winged points. The position and distance of the shanks is customizable and can be easily changed to best fit the needs of the most demanding users.

The SPIDER subsoiler range includes several models, divided into the lines X,G,M, and S ,with a variable number of shanks: from 5 to 11. The different configurations allow the SPIDER to match tractors with 70 HP up to over 600 HP.

The subsoiler can be used in standard version or equipped with the special double roller with the mechanical or hydraulic depth adjustment.



The presence of abundant crop residues is not problematic, since the considerable height from the ground and the distance between the rows of shanks ensure the free flow of the soil even while deep working. Therefore, undesired accumulations between the anchors and the structure are avoided, allowing an optimal mixture of the soil.

SPIDER X



The “SPIDER X” subsoiler is available in 9 and 11-shank versions. The 90° folding system reduces the working width to 2.85 meters, facilitating transport.

In working position, the structure ensures maximum rigidity and strength, essential for pairing with high-power tractors and for intensive use.



The “SPIDER X” subsoiler can be used alone or paired with the specific “RCX” double roller, which features hydraulic depth adjustment.

The combination of the front roller, with a diameter of 360mm, and the rear roller, with a diameter of 220mm, ensures excellent clod breaking and better leveling of the soil, preventing the clogging typically associated with rollers of smaller diameters.



COMPACT

The task of ensuring the secure coupling of the folding frame to the main structure is entrusted to a hydraulic system.

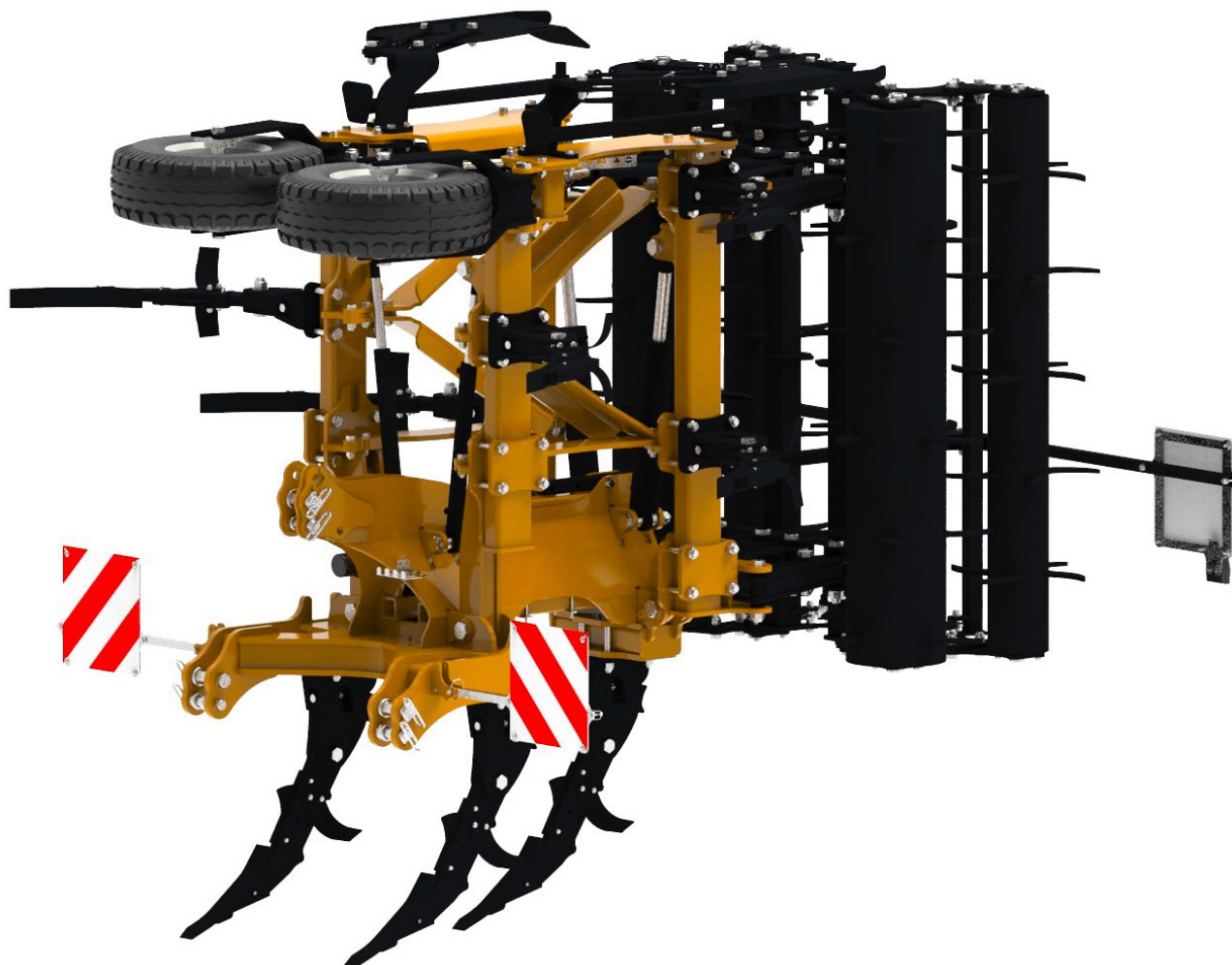


On the road, movements are agile and safe.

SPIDER X

250-600 HP

9/11 shanks



STONE SYSTEM

The “SPIDER X Stone System” subsoiler, available in 9 and 11-shank versions, represents the latest evolution of the hydraulic-pneumatic subsoiler designed for use in stony soils. The main structure is entirely designed with bolt joints, an innovative solution in the industry, offering a true challenge compared to traditional designs.

The 90° folding system reduces the working width to 2.9 meters, facilitating the transport phase.

WHEELS

The “SPIDER X” subsoiler can be equipped with optional front depth control wheels.

The adjustment of the working depth of the rear rollers is synchronized with that of the front wheels and is carried out using a single hydraulic control.



SPIDER G,M,S



The SPIDER subsoiler range includes the models G,M, and S ,with a variable number of shanks: from 5 to 9. The different configurations allow the SPIDER to match tractors with 70 HP up to over 550 HP.

The subsoiler can be used in standard version or equipped with the special double roller with the mechanical or hydraulic depth adjustment.

The G and M lines are also available with the STONE SYSTEM



SPIDER G

150-550 HP

5/7/9 shanks



TECHNOLOGY

SPIDER M

110-240 HP

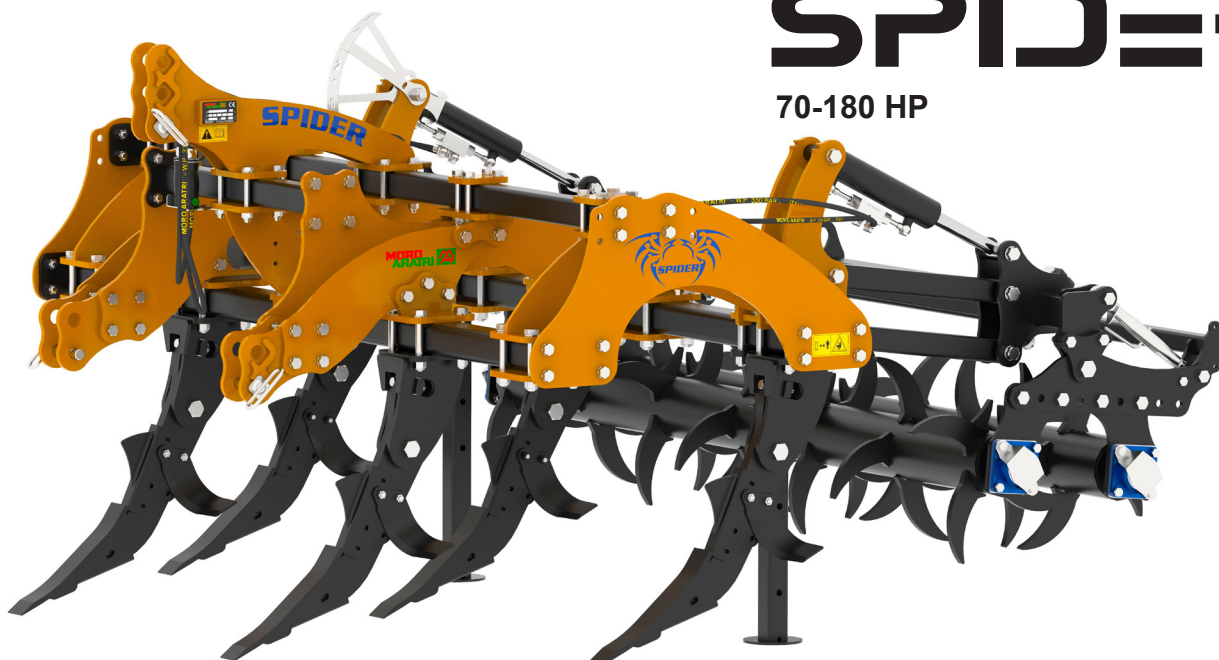
5/7 shanks



SPIDER S

70-180 HP

5/7 shanks



STONE SYSTEM



STONE SYSTEM

The subsoiler “SPIDER Stone System”, available with 5, 7 and 9 shanks, represents the latest concept of hydraulic subsoiler for stony soils. The main structure is designed entirely with bolted joints, an absolutely innovative solution in the industry and a real challenge compared to the older, traditional concepts.

The oleopneumatic system is also state-of-the-art, featuring an oversized battery of small high-pressure nitrogen-charged accumulators.

These accumulators are designed to store, in the shortest possible time, the energy produced by the impact with stones or obstacles. Once the obstacle is cleared, this stored energy is used to return the system to its operational position.

The hydraulic system pressure is adjustable to adapt to different working conditions.





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 SPIDER STONE SYSTEM is able to continue to work even in case of failure of one or more accumulators.





UNIQUE

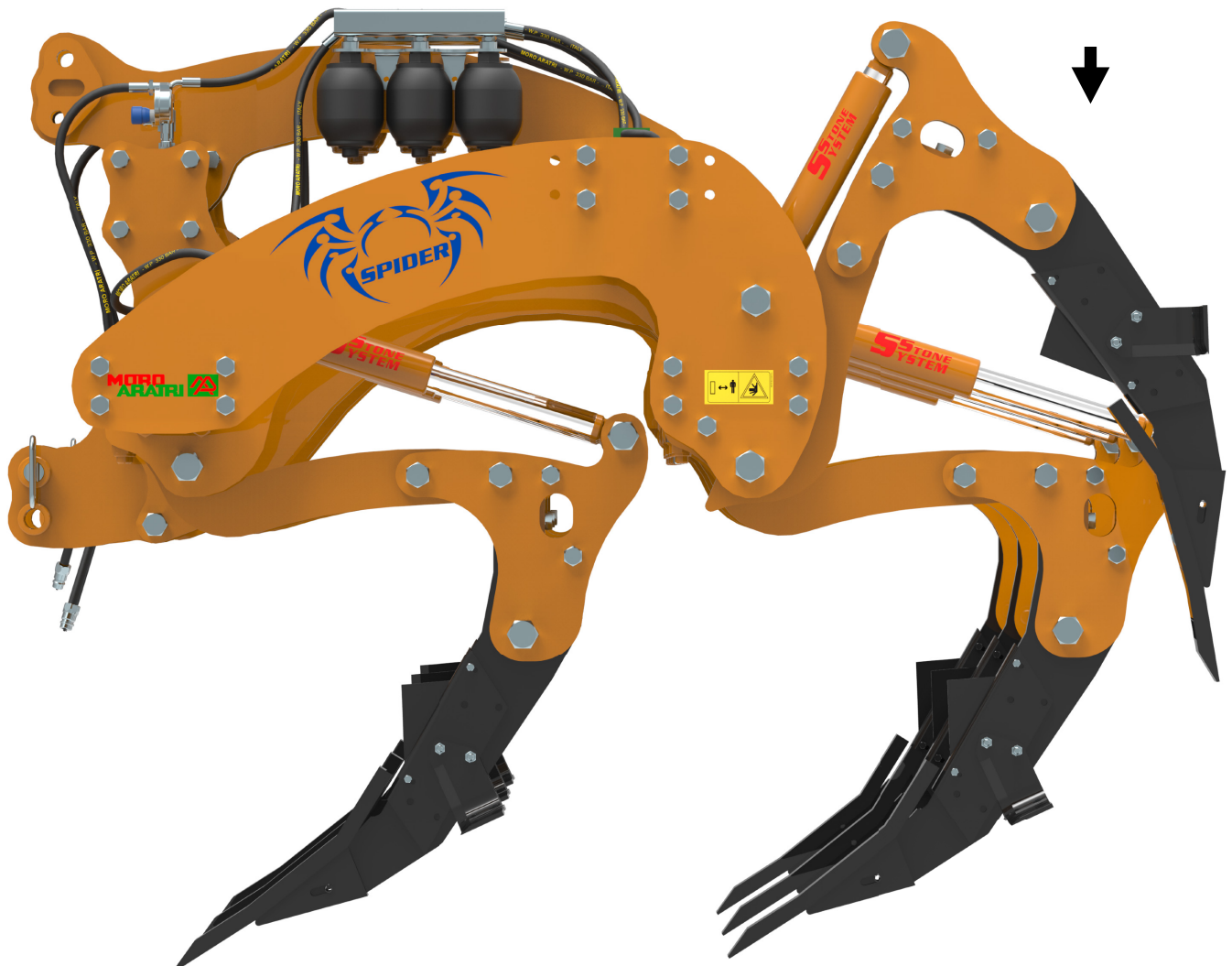
The special shank shape ensures an optimal release and movement in case of impact: the shank is quickly guided outside the soil.

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 SPIDER G

160-450 HP *5/7/9 shanks*

STONE SYSTEM element simulation: the joint geometry allows an extraordinary elevation able to overcome big obstacles, maintaining the optimum shank inclination while working.

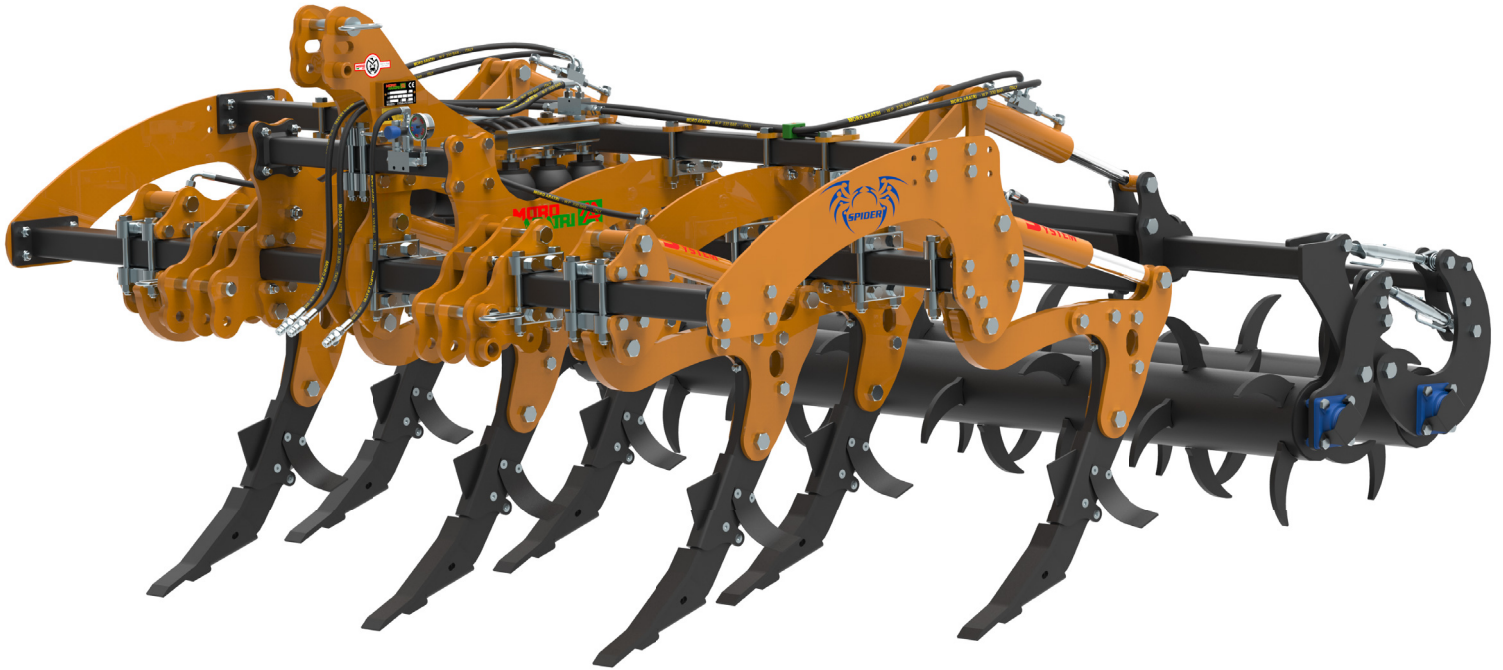


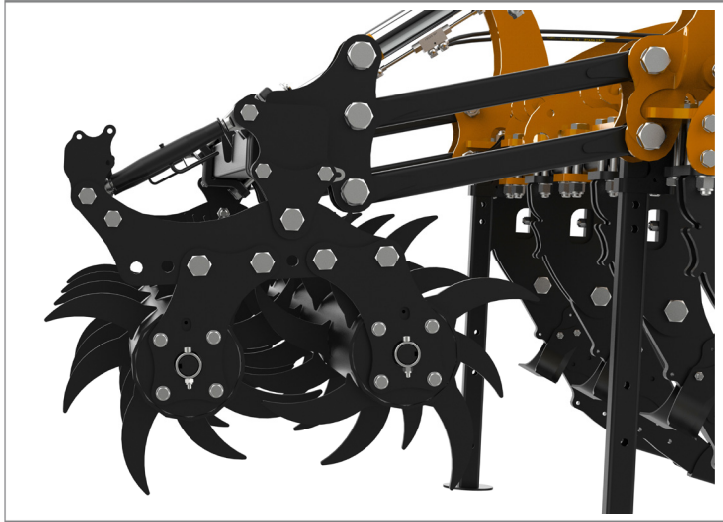
**STONE
SYSTEM**

SPIDER M

90-230 HP

5/9 shanks





PARALLELOGRAM

The SPIDER subsoiler is equipped with an hydraulic parallelogram linkage, which ensure a quick and precise adjustment of the working depth. The system comes with a special system for continuous variation of the inclination and a mechanical adjustment of the distance between the 2 rollers. This allows an ideal adaptation of the implement to any working condition.



INTEGRATED BEARINGS

The models X,G,M are provided with a new protection system of the lateral bearings : they are integrated inside the roller and so sheltered from dust and shock

This solution allows to increase the working area of the rollers

The rollers achieve a preliminary and significant soil tillage, facilitating and reducing the following operations.

In addition, the double roller particularly contributes to the mixture of crop residues.



ROLLER RX

Special roller with a diameter of 360 mm for soil crushing without clogging.



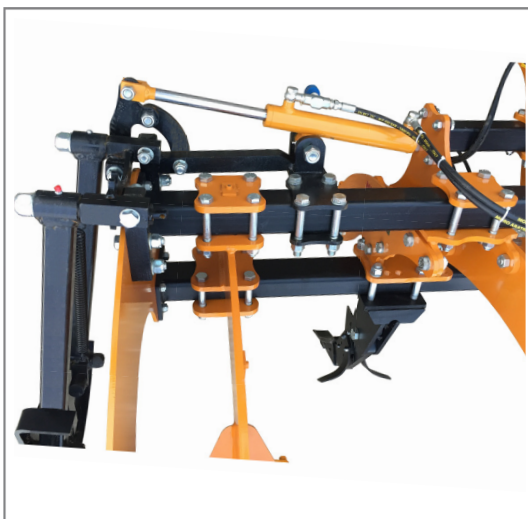
DOUBLE ROLLER

Double roller with different diameters depending on the model:

- 220 mm
- 160 mm



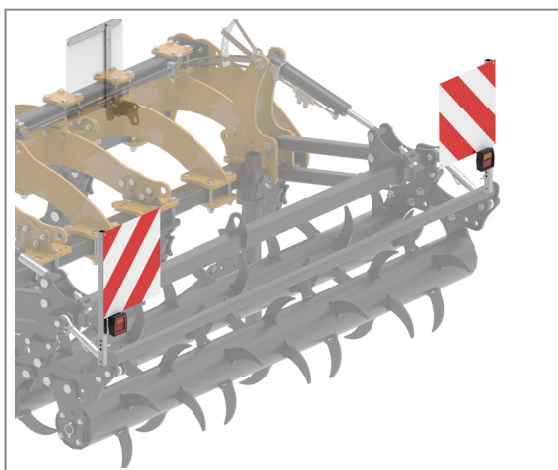
TECHNOLOGY



CLOD CONTAINMENT

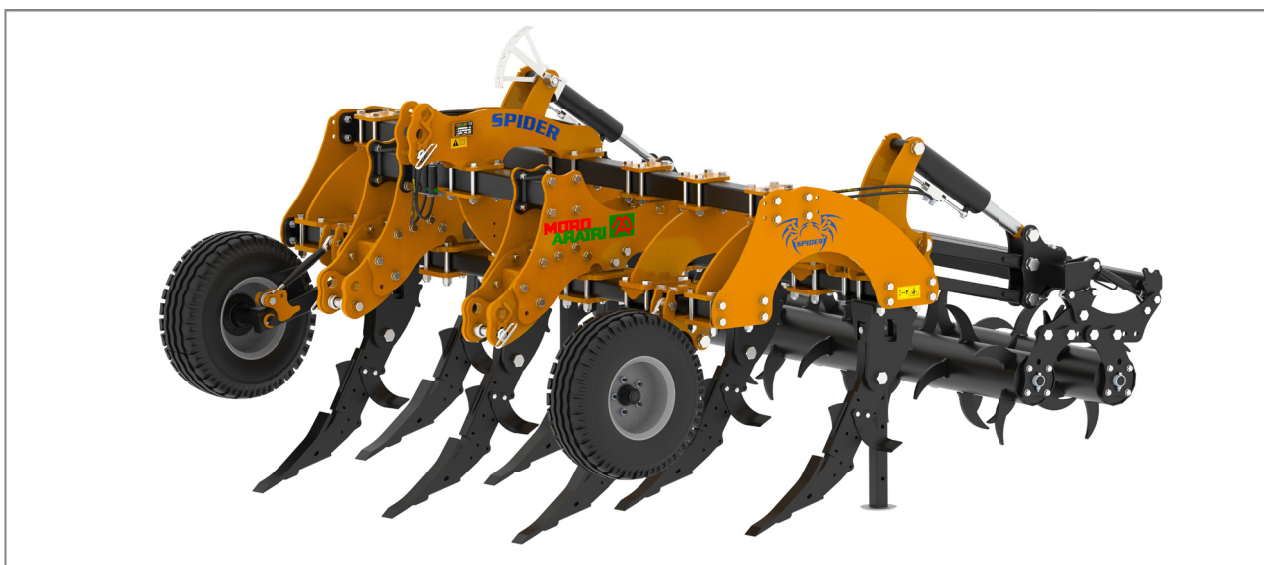
The clod containment device, foldable to limit the transport width, is available with manual or hydraulic drive.

The hydraulic drive of the clod containment device is a **MORO Aratri** patent.



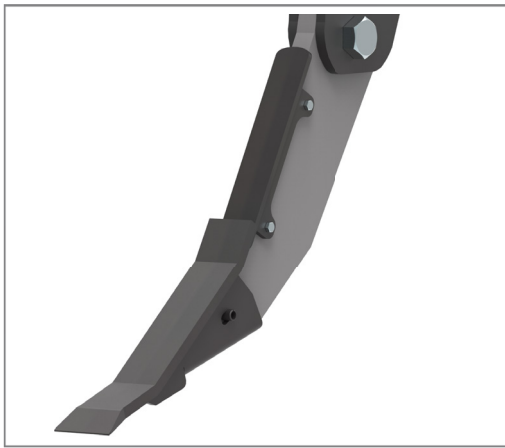
MARKER BOARDS AND LIGHTING

For road transport, it is possible to add the marker boards and lighting.



WORKING WHEEL

Working wheel with depth adjustment is available for each model



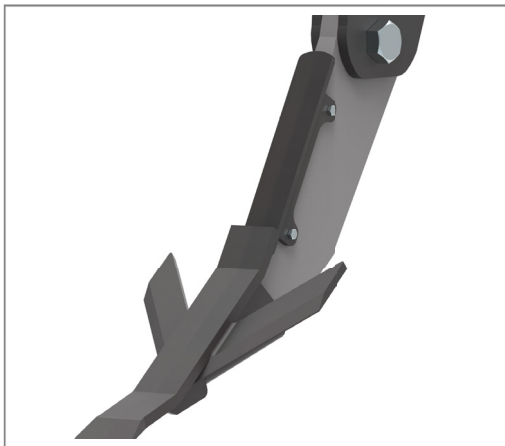
STANDARD SHANK

- Shear bolt safety device
- Wear resistant tip with quick-release device
- Wear resistant shank protection



CLOD SHATTERING SHANK

- Shear bolt safety device
- Wear resistant tip with quick-release device
- Clod shattering fins



FINS SHANK

- Shear bolt safety device
- Wear resistant Fins tip with quick-release device
- Wear resistant shank protection

TUNGSTEN

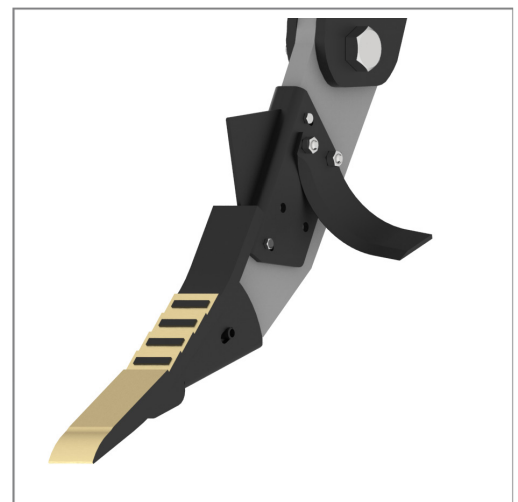


PREMIUM SILVER TIP

- Tungsten tip with partial covering
- Tungsten overlay

PREMIUM GOLD TIP

- Tungsten tip with full covering



FERTIBOX



FERTI BOX KIT

Subsoiler models G & M, with 5, 7, 9 and 11 shanks, can be equipped with a localised distribution system of chemical fertiliser. In a single pass, it is possible to both work the soil and spread precisely the fertiliser at a variable depth depending on the implement adjustment.



This allows to localise the fertilizer in such way that, during the plant growing, roots will meet the nutrient in depth, creating so the optimal condition for a better growth and yield.

STAINLESS STEEL:

II FERTIBOX is fully made in stainless steel, having a thickness of 1,5mm.

It is oxidation and corrosion resistant.

GPS PRECISION:

The distributor flow is driven by a powerful electrical engine, controlled by an electronic device with microprocessor.

In the tractor cab, a remote display allows to easily set the quantity per hectare.

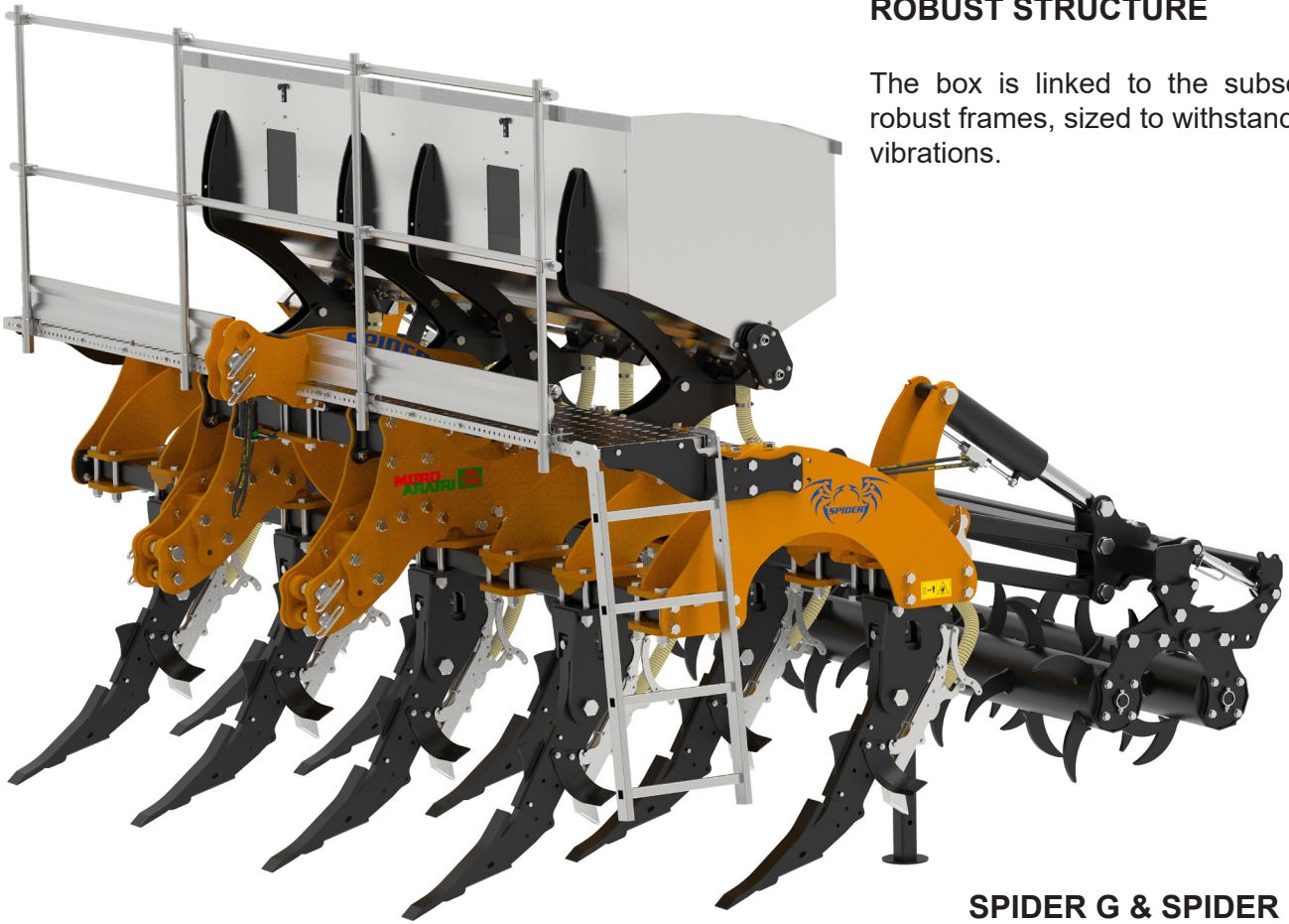
GPS sensor automatically adapts the flow to the tractor speed, respecting the operator parameters.



FERTIBOX

ROBUST STRUCTURE

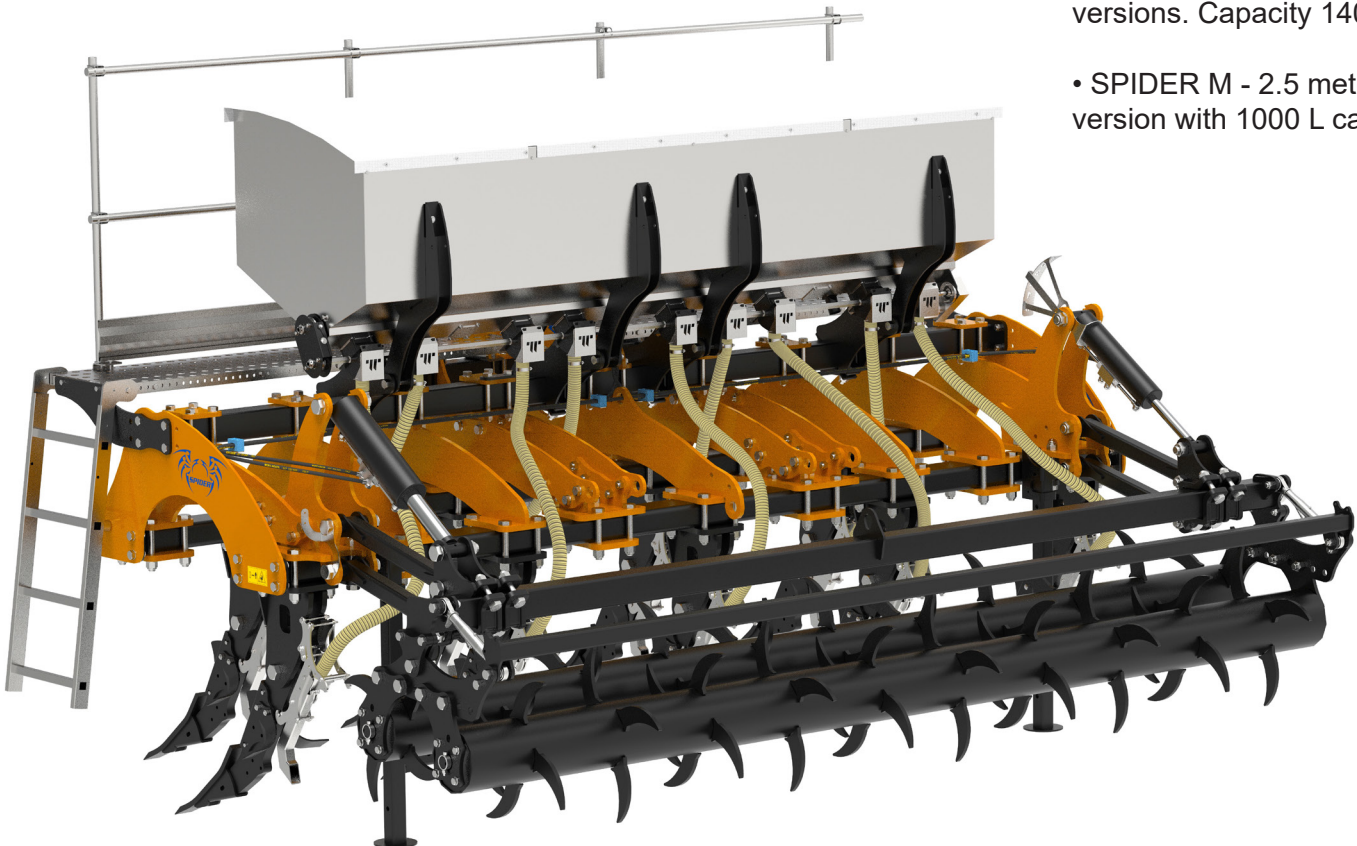
The box is linked to the subsoiler by robust frames, sized to withstand strong vibrations.



SPIDER G & SPIDER M

Fertibox can be equipped on the following models:

- SPIDER G : 3 meters width versions. Capacity 1400 Lt.
- SPIDER M - 2.5 meter wide version with 1000 L capacity.



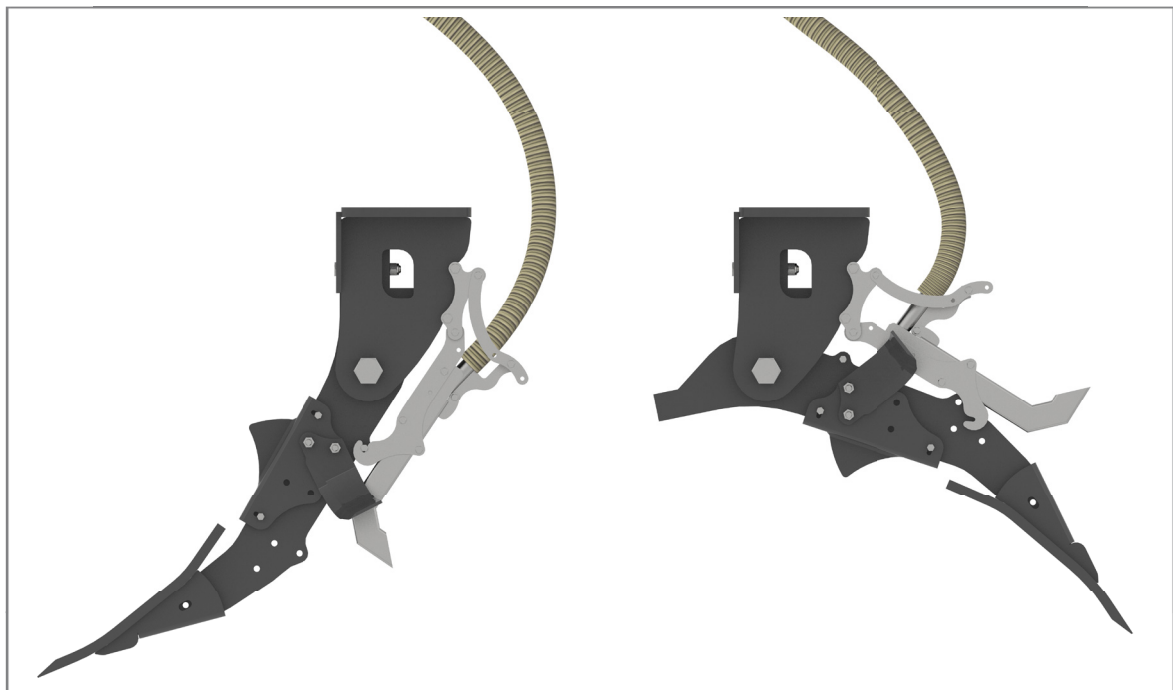
FERTIBOX

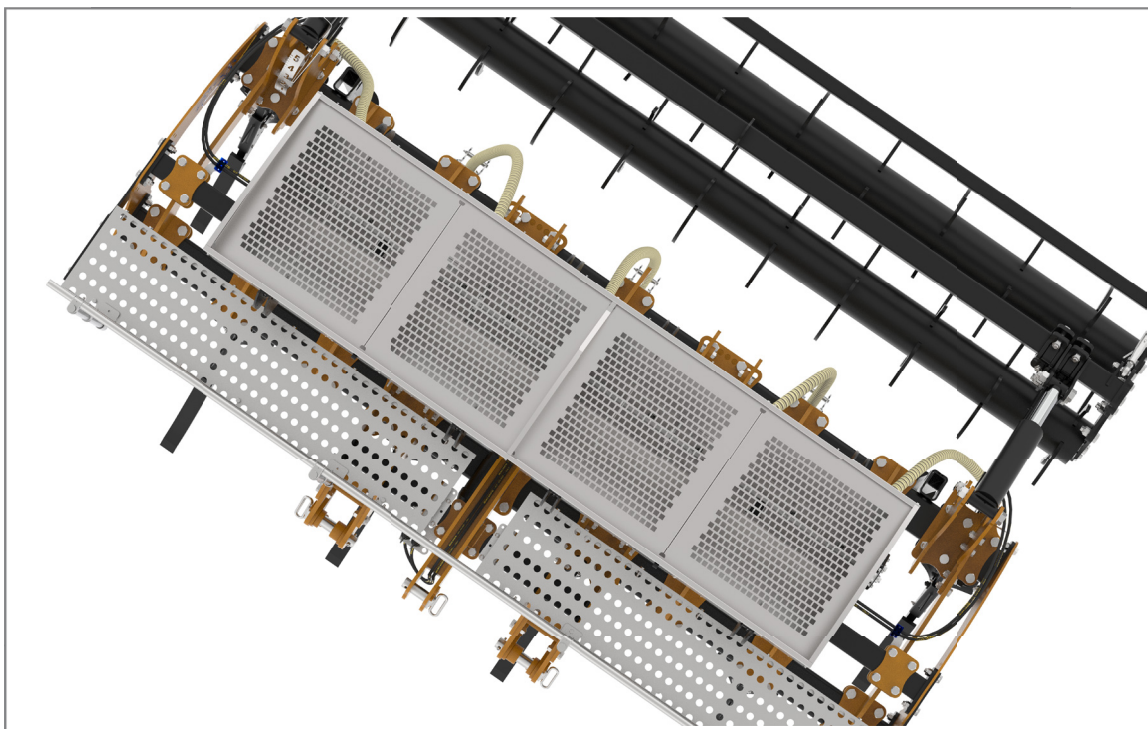


SPIDER SHANKS DISTRIBUTION KIT

A special stainless steel distributor, placed behind the shank, is adjustable in 3 positions. The combination between the subsoiler working depth and the distributor adjustment , defines the fertilisation depth.

The system is also engineered in order to promptly react in case of the security bolt shears. A simple but efficient unlocking system allows the distributor to follow the shank movement, avoiding any kind of damage to the tube or any other component. By replacing the shank in working position , the system is restored.



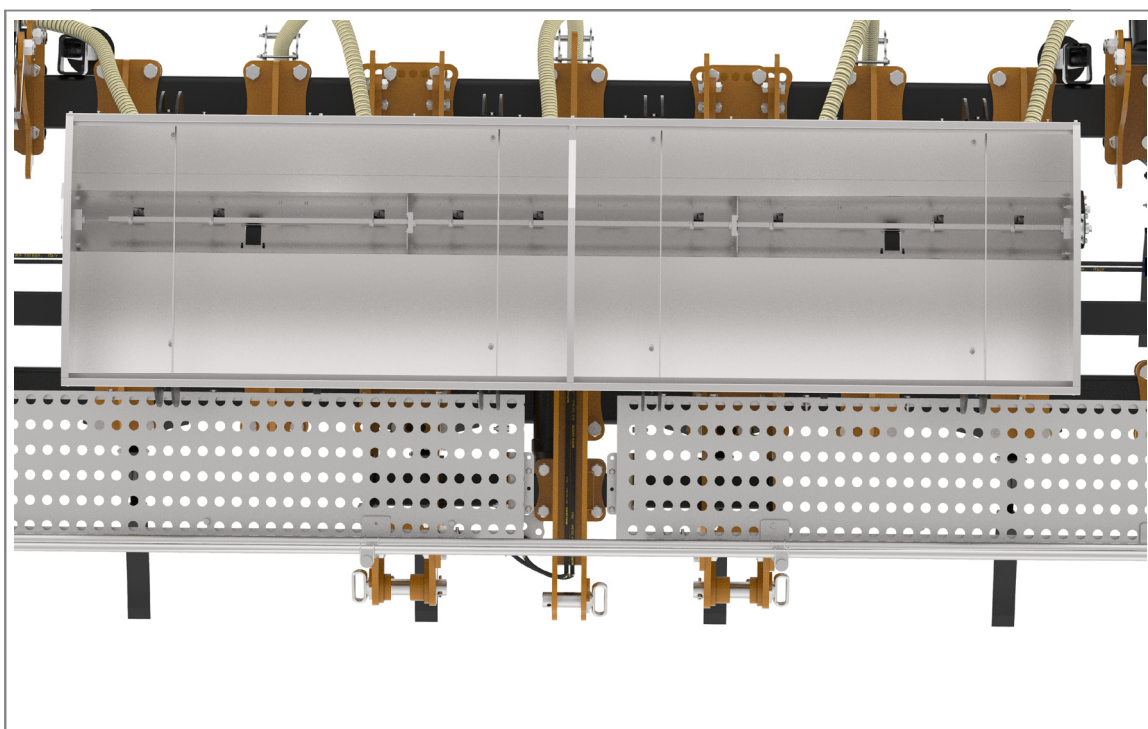


FILTERING GRID

Inside the box there are grids which allows an homogeneous, gradual and clogging free loading of the fertiliser, avoiding any foreign object introduction in the box.

SHAKER

An internal shaker, driven by an electrical engine, moves the fertilizer, brakes any residual clog and keeps the flow constant.



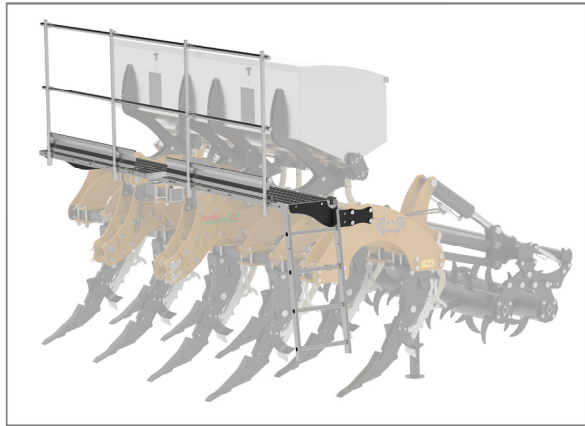
FERTIBOX



ELECTRICAL ENGINE

A powerful high-torque engine allows to spread the fertilizer even at low dosage.

Automatic and instantaneous adaptation to feed speed rate.



SAFETY

A frontal platform with railing and a retractable ladder allow the operator to work safely.

Loading and maintenance operations are convenient and they can be performed also on the field.



CONTROL

2 frontal windows enable the operator to visually check the fertiliser level from the tractor cab or the platform.



START AND STOP DEVICE

Start and stop system of the fertiliser flow.

It can be adjusted based on the type of tractor, and it is automatically powered while rising or lowering the subsoiler.



CONTROL BOX

Placed in the tractor cab, it allows to program and control the whole system.

SPX									SPIDER X	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 11X	5+6	4,9	60	2,85	87	92	2500	3760	320-550	600
SPIDER 9X	4+5	4	60	2,85	87	92	2270	3410	300-500	550

SPG									SPIDER G	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 11G-500	5+6	4,9	65	5	87	92	2430	3400	300-500	550
SPIDER 9G-400	4+5	4	65	3,9	87	92	2100	2900	250-400	450
SPIDER 7G-400	3+4	4	65	3,9	87	92	1880	2680	200-370	400
SPIDER 5G-400	2+3	4	65	3,9	87	92	1580	2380	150-250	280
SPIDER 7G-350	3+4	3,6	65	3,5	87	92	1740	2490	190-370	400
SPIDER 7G-300	3+4	3,1	65	3,	87	92	1700	2400	190-370	400
SPIDER 5G-350	2+3	3,5	65	3,5	87	92	1480	2230	150-250	280
SPIDER 5G-300	2+3	3,3	65	3	87	92	1440	2140	150-250	280
SPIDER 5G-250	2+3	2,75	65	2,5	87	92	1400	2040	150-250	280

SPM									SPIDER M	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 7M-300	3+4	3	55	3	80	78	1170	1670	130-220	240
SPIDER 7M-250	3+4	2,55	55	2,5	80	78	1150	1600	130-220	240
SPIDER 5M-300	2+3	3,2	55	3	80	78	980	1480	110-170	200
SPIDER 5M-250	2+3	2,6	55	2,5	80	78	940	1390	110-170	200

SPS									SPIDER S	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 7S-300	3+4	3	50	3	75	71	850	1250	100-160	180
SPIDER 7S-250	3+4	2,55	50	2,5	75	71	830	1200	100-160	180
SPIDER 5S-250	2+3	2,65	50	2,5	75	71	690	1060	70-120	140
SPIDER 5S-200	2+3	2	50	2	75	71	670	1000	70-120	140

SPX STONE									SPIDER X STONE SYSTEM	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 11X Stone	5+6	4,9	60	2,9	100	113	3520	4720	320-550	600
SPIDER 9X Stone	4+5	4	60	2,9	100	113	3060	4140	300-500	550

SPG STONE									SPIDER G STONE SYSTEM	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 9G Stone	4+5	4	60	4	100	100	2280	3050	250-400	450
SPIDER 7G-400 Stone	3+4	4	60	3,9	100	100	1840	2600	210-370	400
SPIDER 7G-300 Stone	3+4	3,1	60	3	100	100	1800	2450	210-370	400
SPIDER 5G-300 Stone	2+3	3,1	60	3	100	100	1490	2180	160-250	280
SPIDER 5G-250 Stone	2+3	2,75	60	2,5	100	100	1450	2050	160-250	280

SPM STONE									SPIDER M STONE SYSTEM	
MODEL	NUMBER OF SHANKS	WORKING WIDTH	WORKING DEPTH	TRANSPORT WIDTH	ROW SPACING FRONT-REAR	UNDERBEAM CLEARANCE	WEIGHT	with ROLLERS	POWER	
		m	cm	m	cm	cm	Kg	Kg	HP	MAX *
SPIDER 7M Stone	3+4	3	50	3	85	87	1100	1690	110-200	230
SPIDER 5M-300 Stone	2+3	3,2	50	3	85	87	840	1380	90-180	200
SPIDER 5M-250 Stone	2+3	2,6	50	2,5	85	87	800	1340	90-180	200

V 3.0 Inglese

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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