



Rotosark



Rotovert



Colibrì




Optyma


INTER ROW WEEDING MACHINES RANGE


Discover our weeding machines *suitable for your crop!*





 BEETS	Rotosark	Rotovert	Colibri	Optyma
SUGAR BEET	•			


 BULB				
GARLIC	•	•		
ONION		•	•	
LEEK	•			


 ARTICHOKE				
ARTICHOKE	•			
THISTLE	•			


 CEREAL				
CORN	•			
SORGHUM	•			
RICE		•	•	

 CRUCIFERE				
CABBAGE	•			•
BROCCOLI	•			•
CAULIFLOWER	•			•


 FLOWER				
SUNFLOWER AND RAPESEED	•			


 LEAF				
SALAD-LETTUCE	•	•		•
RADISH	•	•		•
CHICORY	•	•		•
RED BEET		•	•	•
CHARD	•			•


 FRUIT				
TOMATO	•			
STRAWBERRY	•			
PUMPKIN	•			


 STEM				
FENNEL	•			
CELERY	•			




 HERBS	Rotosark	Rotovert	Colibri	Optyma
PARSLEY		•	•	
BASIL		•	•	


 BABY LEAF				
LAMB'S LETTUCE/VALERIANA			•	
SALAD			•	
MIXED SALAD			•	
ROCKET		•	•	

 GRAFT				
WINE-CUTTINGS		•		
ROOTSTOCKS	•			
ROSES	•	•		

 LEGUMES				
SOY	•			
BEAN- GREEN BEANS	•			
PEANUTS	•			
CHICKPEA	•			
LENTILS AND PEAS	•			
FAVA BEANS	•			

 ROOT				
CARROT		•	•	
PARSNIP		•	•	
RADISH		•	•	
TURNIP		•	•	

 TUBER				
POTATO	•			

 OTHER CROPS				
OFFICIAL HERBS	•			
TOBACCO	•			
HEMP	•			

Rotosark



“Rotosark” inter row weeding machine with fixed, shifting or foldable frame; modular with variable load parallelograms that work on the sown or transplanted row.



TYPE OF SOIL	Sandy / medium and stony texture (with small stones: about 3 - 4 cm in diameter)
INTER-ROW DISTANCE	Min. 35 cm 13' ½ (inches) – 80 cm 31' ½ (inches)
INTERPLANT DISTANCE	-
ROTOR DIMENSIONS	Fixed inclination at 28° Rotoblizz: Ø 30 cm on 35-45 cm row spacing; Ø 35 cm on 45-55 cm row spacing; Ø 40cm on 55 cm row spacing
WORKING SPEED	3 - 7 Km/h
PREPARATION OF THE LAND REQUIRED	Good
SOWING / TRANSPLANT	Centered on bed
NO. OF FILES	It depends on the transplanter / seeder in use, even on more ridges/beds
SYSTEM TYPE	Mechanic
STEERING CHOICE	1. Mechanical with a handlebar that acts on the front wheels of the machine with a fixed frame, rear operator for control, required. 2. With RTK on the tractor, the driver can shift the hoeing machine with the hydraulic frame with a joystick in the cabin, controlling 1 or more rows sown on a 10.4" HD monitor. 3. Without RTK, hydraulic steering with joystick that acts on the front wheels on a fixed frame or on a hydraulic shifting frame - suitable for heavy machines), rear operator for control required. 4. Automatic with T&H camera on hydraulic shifting frame, without rear operator.
SMART FARMING	Agricoltura 4.0
USE	Intuitive and modular

Rotosark elements



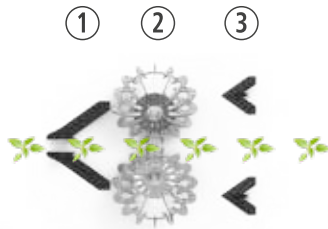
The elements consist of a variable load parallelogram with crank and a spring with a three different lengths support to carry the required accessories.
They are composed of a pair of steel Rotoblizz rotors with Agrihub bearing (maintenance free), with a pair of rear tines for the inter-row and two ridges to hearth up the plant.

System: The Rotoblizz rotors act directly on the transplant row without causing damage to the root and foliar system for their round shape.
Measures diameter 30 - 35 - 40 cm.
Made of steel, with 3 cm wide curved blades, with anti-intrusion reinforcement rod for stony ground, fixed inclination of 28 ° towards the plant and working depth up to 3 - 4 cm.
Rotating opposite each other, they push the crust of the soil towards the center, breaking it and the blades move outwards the germination of weeds or the weeds themselves.

Use: 7 days after transplanting, 10 days after sowing and each time the weed is in 1-2 cotyledon or germinating form to obtain an optimal result.

RODOSARK ELEMENT BASE L 700 mm

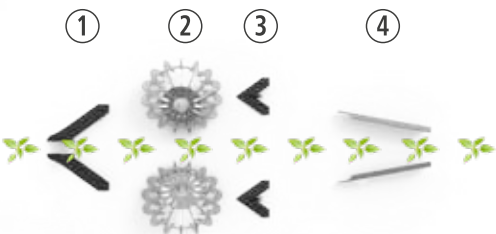
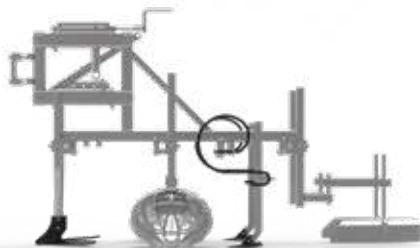
WORKING OVER THE ROW



- ① **Front side hoes:** to break the ground and undermine the stones. Suitable for heavy soils.
- ② **Rotoblizz rotors**
- ③ **Inter-row weeding kit:** operates in uncovered areas of land not reached by the Rotoblizz.

RODOSARK ELEMENT STANDARD L 1050 mm

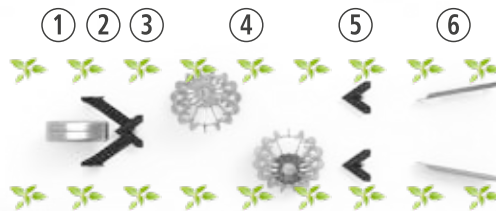
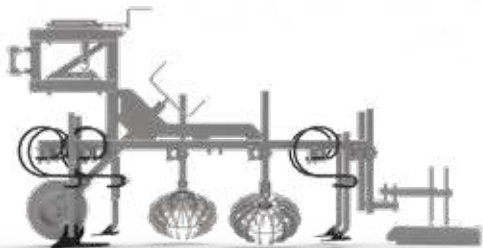
WORKING OVER THE ROW



- ① **Front side hoes:** to break the ground and undermine the stones. Suitable for heavy soils.
- ② **Rotoblizz rotors**
- ③ **Inter-row weeding kit:** operates in uncovered areas of land not reached by the Rotoblizz.
- ④ **Pair of ridges:** to fill up the soil.

RODOSARK ELEMENT INTER ROW ELEMENT L 1620 mm

WORKING IN THE INTER ROW

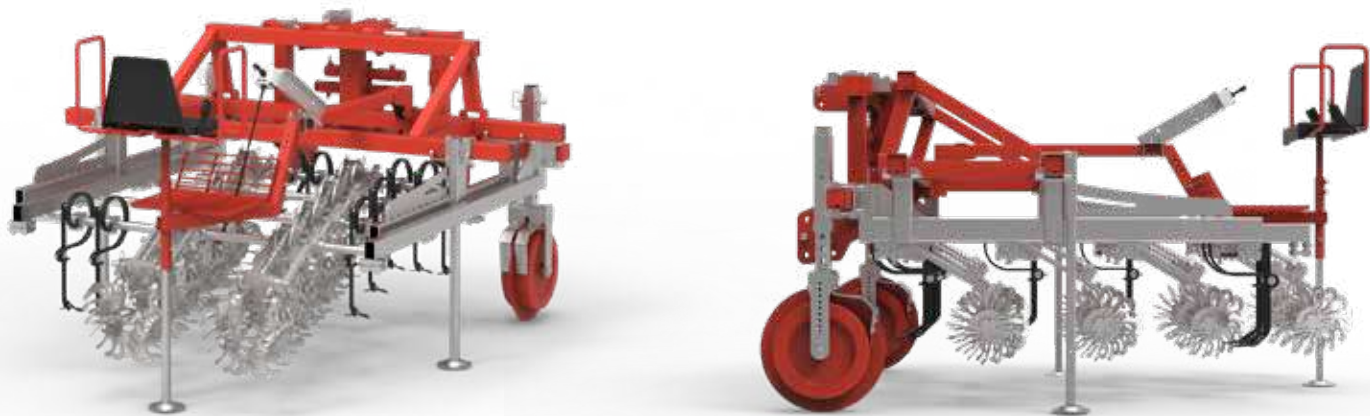


- ① **Soil depth Wheel:** to adjust the element on the correct soil level.
- ② **Front side hoes:** to break the ground and undermine the stones. Suitable for heavy soils.
- ③ **Marking hoe:** to move the ground following the passage of the level wheel.
- ④ **Rotoblizz rotors**
- ⑤ **Inter-row weeding kit:** operates in uncovered areas of land not reached by the Rotoblizz.
- ⑥ **Pair of ridges:** to fill up the soil.

Rotovert

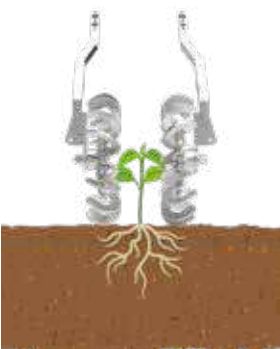


“Rotovert” inter row weeding machine with fixed, shifting or foldable frame; modular with variable load or “tilt” parallelograms that work on the sown or transplanted row.



TYPE OF SOIL	Sandy / medium and stony texture (with small stones: about 2-3 cm in diameter)
INTER-ROW DISTANCE	Min. 12,5-35 cm - 6' to 13' ½ (inches)
INTERPLANT DISTANCE	-
ROTOR DIMENSIONS	A unique Rotovert model with adjustable inclination
WORKING SPEED	3 - 5 Km/h
PREPARATION OF THE LAND REQUIRED	Good
SOWING / TRANSPLANT	Centered on bed
NO. OF FILES	It depends on the transplanter / seeder in use, even on more ridges/beds.
SYSTEM TYPE	Mechanic
STEERING CHOICE	1. Mechanical with a handlebar that acts on the front wheels of the machine with a fixed frame, rear operator for control, required. 2. With RTK on the tractor, the driver can shift the hoeing machine with the hydraulic frame with a joystick in the cabin, controlling 1 or more rows sown on a 10.4 '' HD monitor. 3. Without RTK, hydraulic steering with joystick that acts on the front wheels on a fixed frame or on a hydraulic shifting frame - suitable for heavy machines), rear operator for control required. 4. Automatic with T&H camera on hydraulic shifting frame, without rear operator.
SMART FARMING	Agricoltura 4.0
USE	Intuitive and modular

Rotovert elements



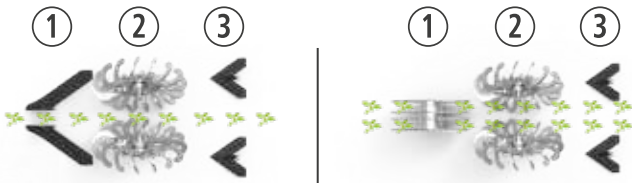
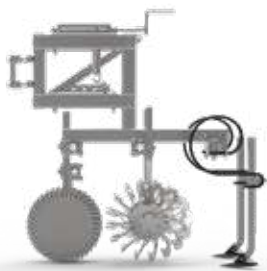
The elements are formed by a parallelogram with variable load by crank and / or a spring with a support to carry the required accessories or in the “TILT” version with spring load. The elements are configured -as standard- with a pair of steel Rotovert rotors with Agrihub bearing, with a pair of rear hoes to work in the inter-row, filling up the soil at the same time.

System: The Rotovert rotors act directly on the transplant row without damaging the root and leaf system thanks to their round shape. Made of steel, with curved blades having a width of 3 cm, adjustable inclination in different positions towards the plant and working depth up to 3 - 4 cm. By rotating opposite each other, they push the crust of the soil towards the center, break it and the blades move the germination of the weeds or the weeds themselves towards the outside.

Use: 7 days after transplanting, 10 days after sowing and each time the weed is in cotyledon or germinative form to obtain an optimal result.

ROTOVERT ELEMENT UNIQUE L700 mm

WORKING OVER THE ROW



- 1 **Front side hoes/ kit Colibí discs:** to break the crust and undermine the stones. Suitable for heavy soils / “COLIBRI” kit discs to work between the twin lines.
- 2 **Rotovert Rotors**
- 3 **Inter-row weeding kit:** operates in uncovered areas of land not reached by the Rotovert

ROTOVERT ELEMENT TILT

WORKING OVER THE ROW

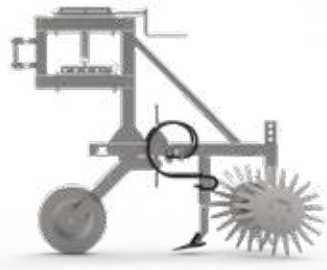


Independent tilting element with load variation on the soil by a spring.

- 1 **Rotovert rotors:** on the Tilt element they act directly on the transplant row without causing damage to the root and leaf system due to their round shape, allowing inter-row distances of 12-25 cm.

ELEMENT ACCESSORIES ROTOCLEAN

WORKING IN THE ROW



- 1 **Double adjustment element:** for pressure on the ground with variable load parallelogram with crank and for depth with adjustment on the wheel.
- 2 **Track loosener**
- 3 **Rotoclean rotors:** in steel, with straight star-shaped blades, variable inclination towards the side of the bed at a depth of 2 cm, dropping germination of weeds or the weeds themselves on the base of the furrow.
- 4 **Furrower:** adjustable or fixed.

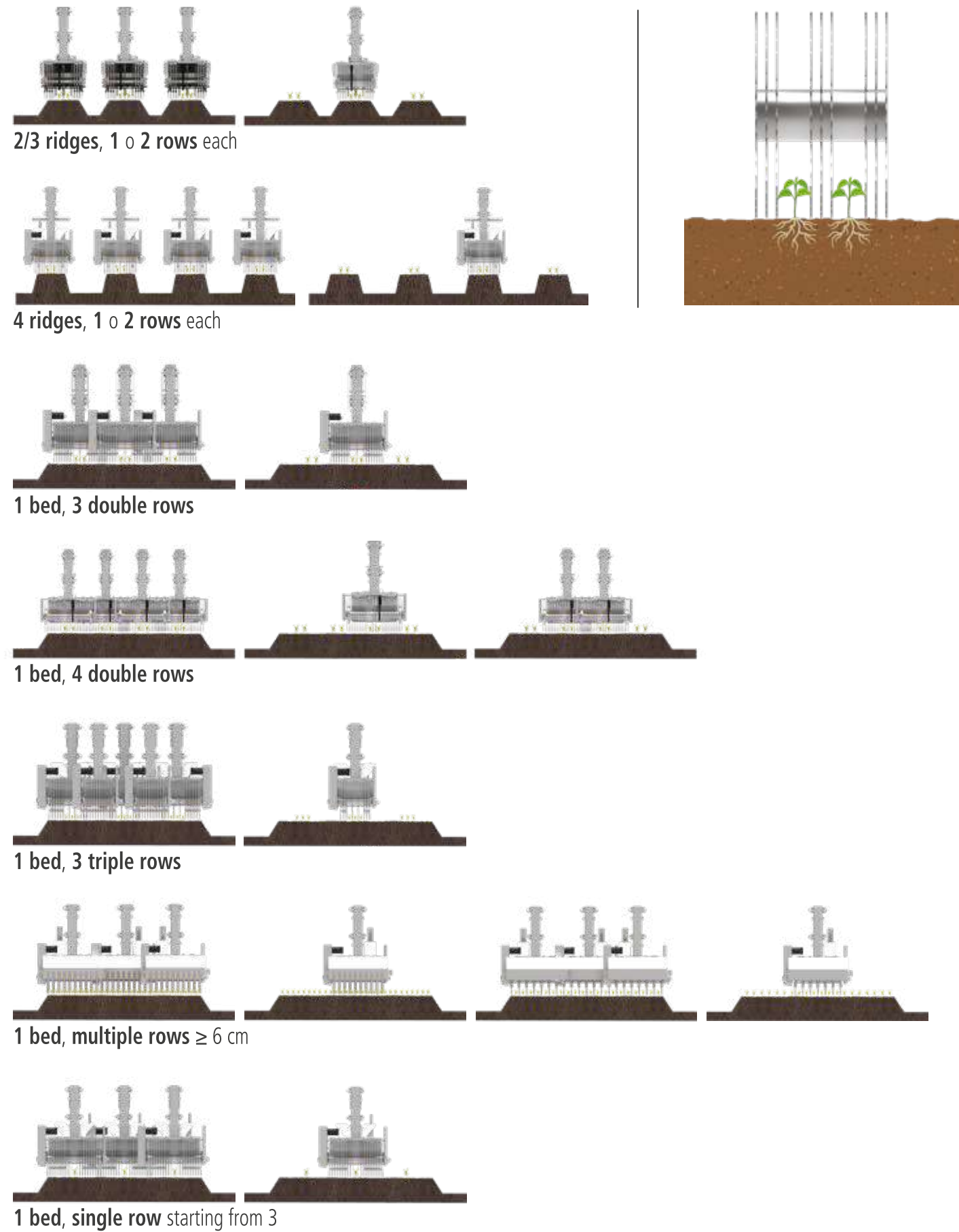
The “COLIBRI” weeder acts directly next to the sown row 2 cm from the plant with minimum inter-row distances of 4.5 cm on carrot and 6 cm on baby leaf, without damaging the root and leaf system, preventing the germination of weeds.

Thanks to its active weeding given by the motorized rotation of the discs, COLIBRI gently shreds the soil without moving the plant. The speed and configuration of the discs can be adjusted and required according to the stage of the plant and the type of soil.



TYPE OF SOIL	Sandy, medium texture, without stones
INTER-ROW DISTANCE	CARROTS: Min 4,5 cm 1,8 INCHES BABY LEAF: 6 CM, 2,40 INCHES
INTERPLANT DISTANCE	-
DISCS DIMENSIONS	standard Ø 320 mm – 12.6 INCHES
WORKING SPEED	1,5 - 3,5 Km/h
PREPARATION OF THE LAND REQUIRED	The ground must be level and without stones (Stone burier, bed former with smooth leveling roller) Use of GPS RTK from soil preparation, planting and weeding.
SOWING / TRANSPLANT	Centered on the bed
NO. OF FILES	It depends on the transplanter / seeder in use, on a ridges/beds at a time.
SYSTEM TYPE	Automatic
STEERING CHOICE	Agricoltura 4.0
SMART FARMING	
USE	Some attention to the setting of the camera and depth sensors.

Some *Colibrì* configurations



“OPTYMA” is our patented, automatic inter-row and inter-plant hoeing machine, starting from 25 cm between the rows.

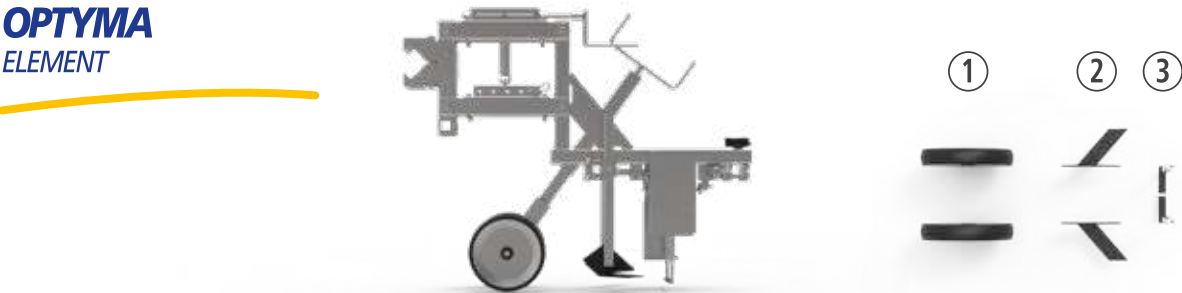
It is characterized by a simple plant recognition system by optical fiber sensors. With OPTYMA we can perform total weeding between the rows and between the plants without passing on the same bed again.



TYPE OF SOIL	Sandy, medium texture, without stones
INTER-ROW DISTANCE	Min. 25 cm -10’ inches
INTERPLANT DISTANCE	Min. 10 cm – 4’ inches
WORKING SPEED	1,2 - 1,5 Km/h
PREPARATION OF THE LAND REQUIRED	The ground must be level and without stones (Stone burier, bed former with smooth leveling roller)
SOWING / TRANSPLANT	Centered on the bed
NO. OF FILES	It depends on the transplanter / seeder in use, even on more than one bed
SYSTEM TYPE	Automatic
STEERING CHOICE	1. Hydraulic steering with joystick on sideshift frame, rear operator for control, required. 2. With T&H automatic camera
SMART FARMING	Agricoltura 4.0
USE	Some attention to the setting of the camera and photocells.

Optyma element

OPTYMA
ELEMENT



- ① **Pair of support wheels:** adjustable by crank which supports a variable load parallelogram.
- ② **Pair of front side undercutting hoes:** a pair of side hoes are applied to the front of the row.
These are arranged on the same axis as the rear opening knives and have the task of undermining or bringing to the outside of the row any foreign bodies such as a stone or weed, leveling the clods, cleaning and preparing the ground for reading the photocells.
When the reading of the photocells is interrupted by the passage of the plant, an immediate impulse is sent from the system via a latest generation optical fiber (hence the patent) to the control unit that controls the synchronized opening of the knives fed with compressed air via a solenoid valve.
Opening may be more or less delayed depending on the parameters set in the control unit, based on the crop, plant volume and speed of advancement
- ③ **Pair of rear opening knives:** having dimensions 6x2 cm for inter-plant cleaning, they are operated by front photocells, slightly inclined to facilitate sliding and reduce friction in the ground.
The working depth (adjustable as needed) is just below the crust of the soil so we will not touch the pot or the root of the plant).
As the plant passes, they open in a rotational direction of 90 ° backwards following the advancement and thus making a small radius. The movement in this case is a movement that subtracts and does not add so the system will not throw soil on the plants.

* A series of hoes for inter-row weeding and other accessories required according to needs can be combined to close the element.



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