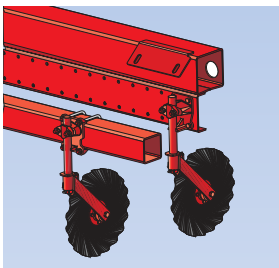
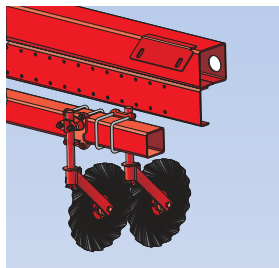


HOW TO ASSEMBLE COULTERS FOR NO-TILL FARMING...?

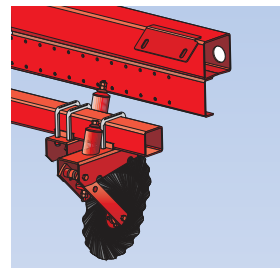
This machine can be assembled with different support and coulters configurations according to the areas and jobs to be carried out.



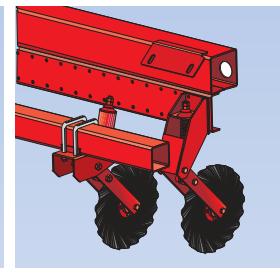
COULTERS FIXED TO CHASSIS AND TO BAR
Typical configuration that has 13 coulters to chassis and 12 to bar; useful for future incorporation of discs for applying lateral fertilization.



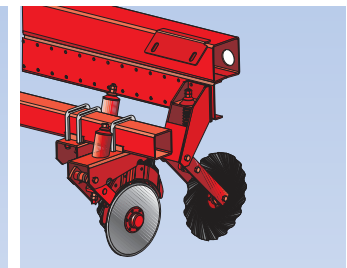
COULTERS FIXED TO BAR
Very common configuration for having all equal supports; but little chance for lateral fertilization (wheat).



FLOATING COULTERS TO BAR
Used when soil surfaces have logs or stones (clearing in the north or hardpan in the hills); little chance for lateral fertilization (wheat).



FLOATING COULTERS TO CHASSIS AND FLOATING COULTERS TO BAR
Configuration that distributes 13 coulters to chassis and 12 to bar. Used for soil surfaces having logs or stones; foreseen future incorporation of lateral fertilization (wheat).

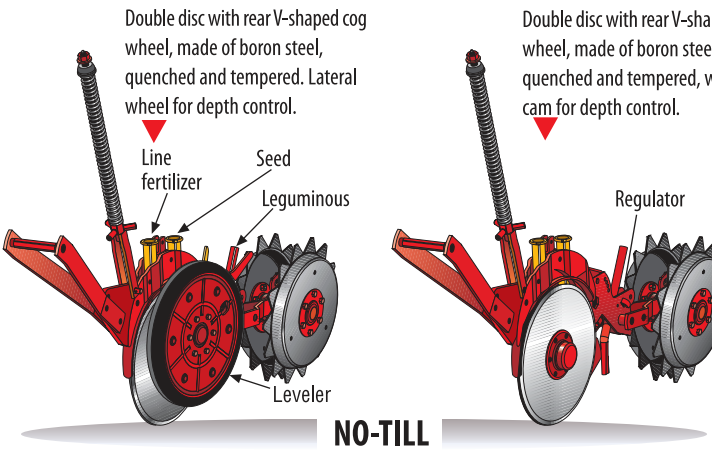


FLOATING COULTERS TO BAR AND DOUBLE DISC FERTILIZER APPLICATOR BY SIDE OF LINE
Our seeders offer the possibility of placing a double-disc furrow opener and a fertilizer hopper on the tool bar in order to carry out lateral fertilization. This is the same previous configuration with fertilization discs.

TYPES OF MICROBALANCE COULTERS



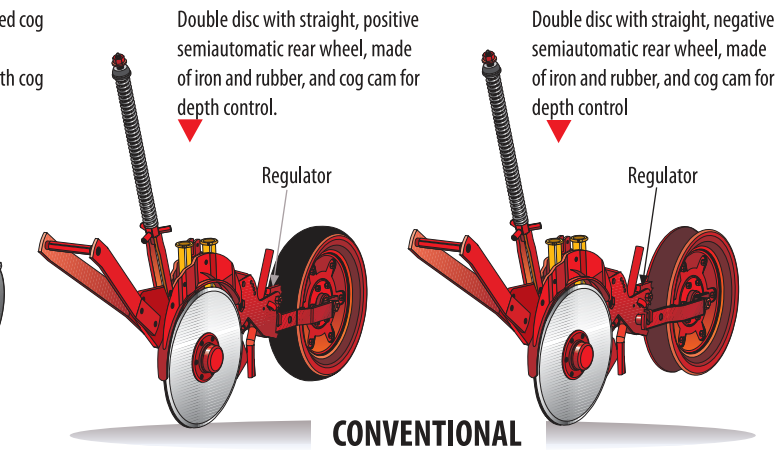
Presently, the following coulters models are available. The necessary weight to dig depends on the soil conditions and on the width of each coulters. The choice depends on the area the machine is to work.



Double disc with rear V-shaped cog wheel, made of boron steel, quenched and tempered. Lateral wheel for depth control.

Line fertilizer
Seed
Leguminous
Leveler

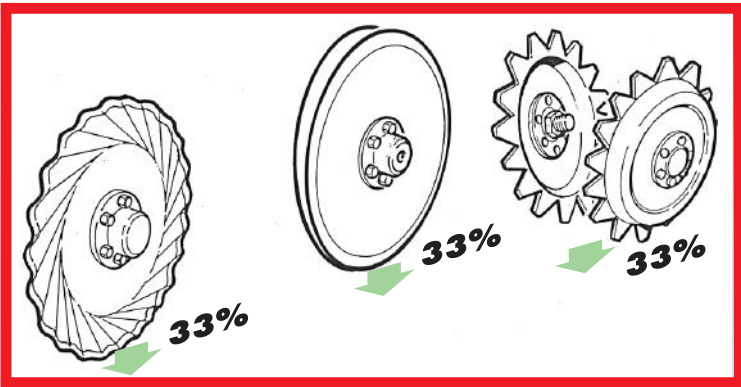
NO-TILL



Double disc with rear V-shaped cog wheel, made of boron steel, quenched and tempered, with cog cam for depth control.

Regulator

CONVENTIONAL



A good no-till farming is achieved by placing the seed at the desired and constant depth, with close soil-seed contact. BERTINI seeding unit attains a seeding bed with a fluted coulters blade (dura-fluted, wavy, rippled or turbo), which cuts and digs through the stubble remainders. A very narrow double disc places the seeds into that seeding bed. A strong plastic device forces soil-seed contact within the furrow. A set of V-wheels with attack angle correction presses the furrow sideways, leaving the middle part loose to make emergence of shoot possible.

“THE FARMING PRODUCER WAS WAITING FOR IT...!!”

NEW TRANSPORT SYSTEM... “DRAWBAR PULL”... EASY OPERATION AND HUGE CLEARING

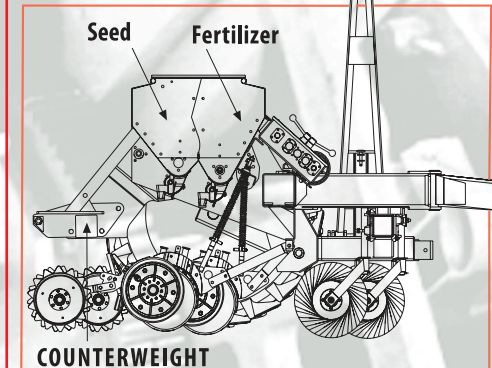
Four compensated cylinders with rack system operate the four transport wheels (6.50 x 16). Front-end wheels with revolving forks and fixed rear wheels. With a

concept of “clean” design, it neither interferes with the platform nor with the farming coulters in the tool bar. It has large stability due to the four wheels placed at the ends. Transport width: 2.5 m.



The seeder has a standard hopper divided into two by a plate, like a partition. The position of the partition determines different fertilizer and seed volumes. The double disc opener includes a tube for fertilizing in-line seeding. This practice is employed when using starter fertilizers or low dosis, so seeds are not damaged. When high dosis which may affect cultivation are needed, fertilizers should be applied on one side of the seeding line. To do that, a fertilizer hopper can be placed on the tool bar, and the corresponding double discs for application can be placed on the bar.

Technical Specifications

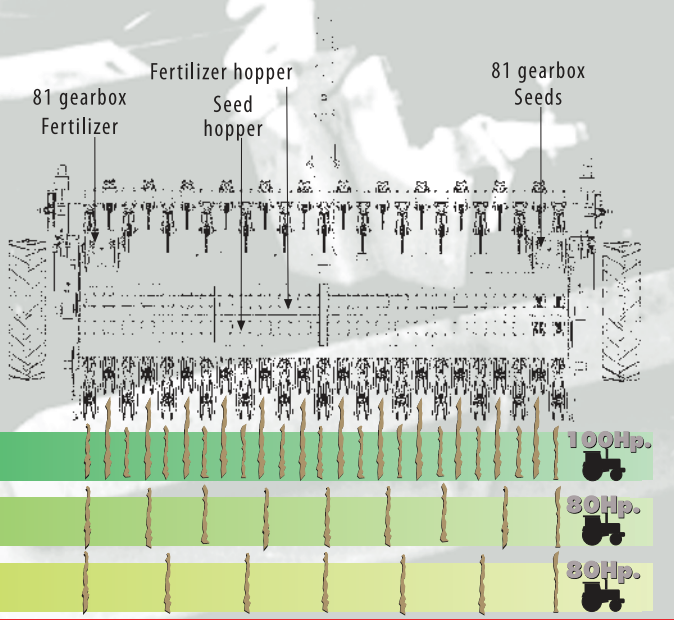


Seed
Fertilizer

COUNTERWEIGHT

4,3 m of nominal width
25 furrows at 17.5 cm
up to 7 furrows at 70 cm

Furrows	(cm)	Working width	Cultivation
25	17,5	4,37	
9	52,5	4,7m	
7	70	4,9m	



81 gearbox Fertilizer
Fertilizer hopper
Seed hopper
81 gearbox Seeds

BERTINI
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The company reserves the right to change or modify the design of their products.

P L A N T E R

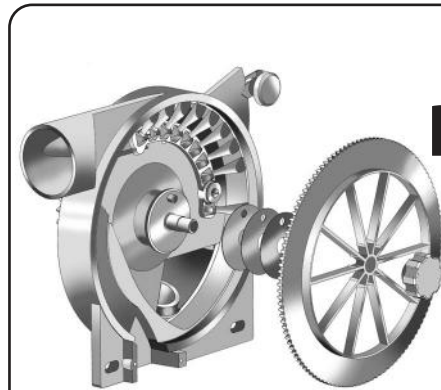
BERTINI

10.000



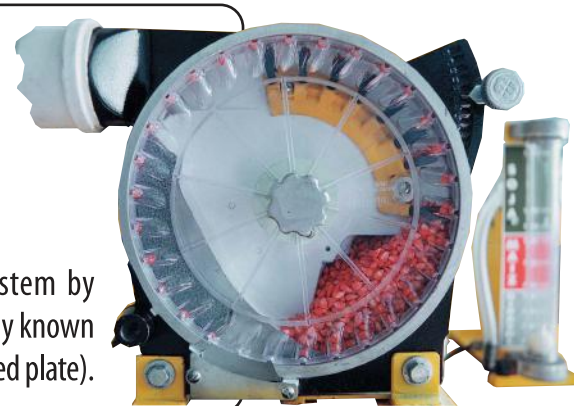
Leader in no-till farming





BERTINI PNEUMATIC SYSTEM BY BLOWING...!

Bertini has developed a pneumatic system by blowing with huge advantages over already known systems (suction, fingers, flat plate or inclined plate).



Operating principle:

The greatest advantage of this system relies on its operating principle.

The air is handled in a positive way. The air comes into the distributor case at a reduced speed of approximately 5 km/hour.

The plate has cells with holes or slots to let the air out.

The seed occupies a cell and tries to block the air outlet; in that narrowing place the air speed increases considerably at 18 km/hour.

In this way, the seed remains midair and stays up in the cell.

The advantage to be emphasized is that the seed is supported by a force proportional to its size; so, big or small seeds are held in the plate in a similar way.

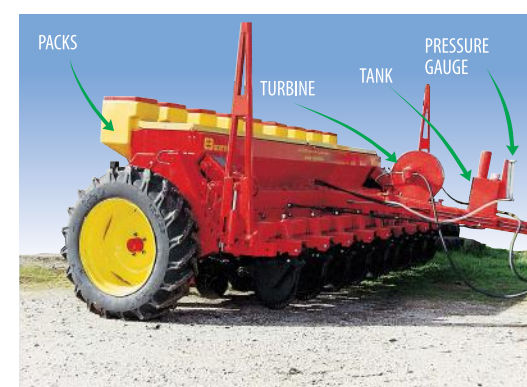
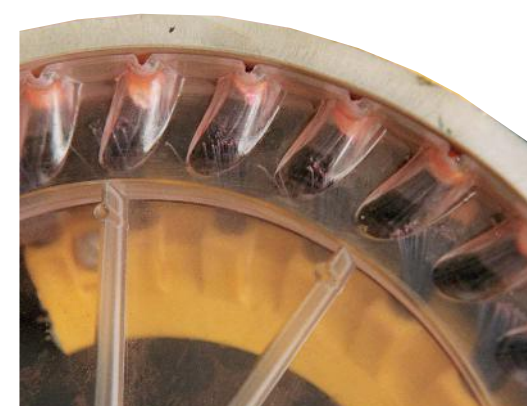
A levelling brush (adjustable from the exterior) brushes and expels the excess seed which might come in a compartment. Then an airflow lock (or felt) accompanies the seed that automatically travels to the exit point, free-falling -with zero initial velocity- in the same direction the planter is moving, going through the centre of the seeding tube without touching or bouncing off the walls; thus, the maximum precision planting at high speed is achieved.

Distributor and plate do not wear off. The planting plate does not touch any surface; it has neither outer nor front-end seals - on the contrary, it has between 0.20 and 0.30 mm clearance in its entire surface - that is why there is no wear in the plate. The advantage of these plates is that they never get clogged with grains or husks as they have compartments and grooves in their periphery; they are always clean; the air goes out from the interior of the distributor so no dust is absorbed, which may wear off gears and/or locks).

The key point is to handle the air in a positive way.

All the advantages of the system are based on the handling of air in a positive way. Blowing is more economical than sucking.

Examples of daily life show us that using pressure in a positive way is more efficient: water-pressure washing, air blowers, hydraulic pressure in tractors, irrigation system for crops, injection pump, air brakes systems in trucks, etc.



ALFALFA SYSTEM



The alfalfa distribution system is of maximum precision. Plastic helicoidal distributors driven by gearbox offer accuracy in time and minimum quantities from 1 kg per hectare are possible. Desired depth is achieved by means of continuous adjustment, controlled by the delivery tube in the seeding unit.

FREE PLATFORM WITHOUT INTERFERENCES



PLANTER

10.000

It is one of the most successful planters in Argentina. Created in 1991, it has undergone some changes in form but not in content.

The change from conventional to no-till farming was a reality and this 10.000 model can be perfectly used for conventional sowing and then convert it for no-till cultivation.

More than 14 years have passed, and for many reasons this seeder model has kept its leading role in the market...

The high resale value of used planters places 10.000 model as a widely wanted and well-known machine in the market.

PRINCIPLES:

The no-till planter should fulfill three aims:

1) cut and obtain a small strip of dug soil (33%).

2) open the furrow and place the seed (33%).

3) firm down and cover (33%).

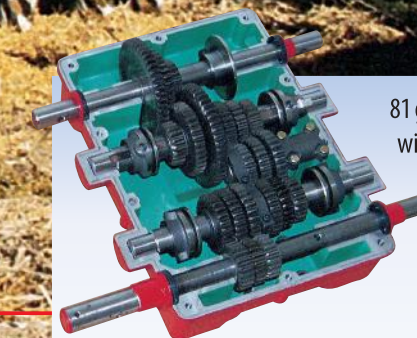
In order to do that and from the beginnings of its manufacturing, the characteristics which achieve these aims have been kept intact. Ploughing blades, very narrow-angle double disc, covering V-shaped cog discs, fertilizer and seeds hopper (standard), very versatile for any type of soil because it employs the lever principle to transfer load to the coulters from the counterweight under the platform, stable and strong, easy and low maintenance, prepared to sow wheat, soya, corn and alfalfa, to fertilize in and out of the line. 12.4 x 28 wheels (big diameter) are placed in the same line which the 25 furrow openers sow, making it light to draw and of excellent operation in flooded areas.



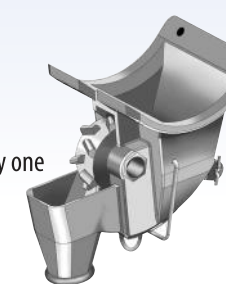
BERTINI

CHARACTERISTICS:

The seeder owns a large capacity hopper divided into two parts, one for seeds and the other for fertilizers. Plastic box and seed hoppers distribution system with chevron-type wheel, allow for precise and constant regulation of seeding rates in time. 25 double disc furrow openers at 17.5 cm distance. It lifts and lowers the chassis, transferring all weight to the microbalance coulters. It lifts and lowers the chassis by means of 2 hydraulic cylinders with piston rods - this guarantees the scanning of the land, the use of the tool bar and the use in no-till as well as in conventional farming. Provided with 12.4 x 28 tyres. One or two strategically placed counterweights guarantee a 4.000 kg tare.



81 gearboxes were externally improved, with aluminium injected cases; no oil leakage, easy to open for repairs; spare parts standardized.



The ejector wheel of the typical plastic chevron distributor with cleaning gate can be changed by one with blades allowing 3 more times dosification. This option is recommended for large fertilizer rates and when the fertilization table does not cover required kilograms.