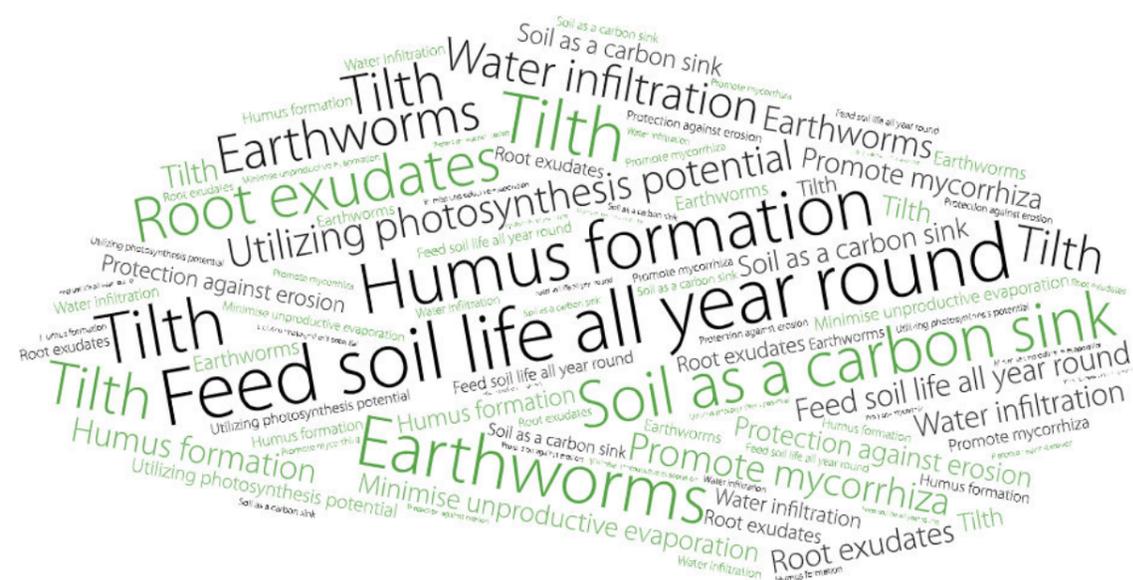




The MulchTec RotoSeeder
130 to 250



The MulchTec RotoSeeder

Tool for permanent root penetration and soil cover
– the key to soil fertility in intensive cultivation.

ROTARY-SOWING IN MULCH

The seeder combination for regenerative mulch systems

The MulchTec RotoSeeder enables you to sow grains and various cover crops under a layer of mulch and/or fresh crop residues. Existing crops and weeds are reliably terminated by the full-width undercut with a precise height guidance. To ensure optimum germination, the seed is placed on the cultivation horizon and is thus connected to the capillary soil water. The seed is not mixed with the fresh organic material from the rotary tiller stream. Therefore germination is not inhibited by the decomposition processes.



Use residual mulch and crop residues as ground cover

After harvesting the main crop, the residues are shredded with a flail mower. Together with the remaining mulch available from a previous mulch planting, this provides a considerable mulch cover. This potential should be used to cover the ground over the winter. Thus, there is no need to incorporate the mulch material in the soil and thereby disturb the biological tilth and soil organisms

Sowing a cover crop under the residual mulch

With the MulchTec RotoSeeder, the soil or mulch layer gets a flat undercut with precise height guidance. Since the blades rotate against the driving direction, the material is lifted and the tilling horizon is exposed. Here, the seed is now broadcast via a seeding bar. It is then covered again by the stream from the rotary tiller (soil-mulch mixture).

Seeds are connected to the capillary water.

A great advantage of this seeding method is the immediate and constant supply of moisture from the capillaries of the underlying soil layer. Evaporation of this water is effectively prevented by the overlying soil-mulch mixture. Water can also infiltrate quickly. Siltation and even erosion over winter are thus avoided.

Feed soil life during the winter

If the soil was covered with organic mulch over the main vegetation period, a substantial earthworm population will have developed there. They want to be fed with mulch continually, especially in spring and autumn.

With only one pass after harvesting, the cover crop can be established with the RotoSeeder. Valuable time for photosynthetic activity is thus fully utilized.

Soil cover and root exudates make the most important contribution to humus build-up.



ROTARY TILLING SEEDING TECHNIQUE

The smart combination to build up your soil

The cornerstone of the MulchTec RotoSeeder is a stone burier with overlapping angular blades to undercut the entire surface without a smeared horizon. This is combined with an air seeder, which broadcasts the seed at the depth of cultivation over a seeding bar. To ensure an exact and consistent drilling depth the machine features a mechanism for precise height guidance.



Solid tilling technology

The stone burier FORIGO G35 has working widths between 130-250 cm. It is worth mentioning that the overlapping angular blades are mounted in opposite directions to undercut the entire surface. The ideal tillage depth is between 2-5 cm. The direction the blade shaft rotates determines that the tilled horizon is already cleared when the blades penetrate the soil. Therefore, the ground is not pre-compacted. When the blades first reach the soil, the angle between the blade and the soil is 40° and changes to 15° when they lift off. This ensures the blades do not smear and thus do not create a plough pan. At 540 rpm at the PTO, the rotor speed is 240 rpm. Driving speeds between 4 and 6 km/h will give an optimum result.



Height guidance

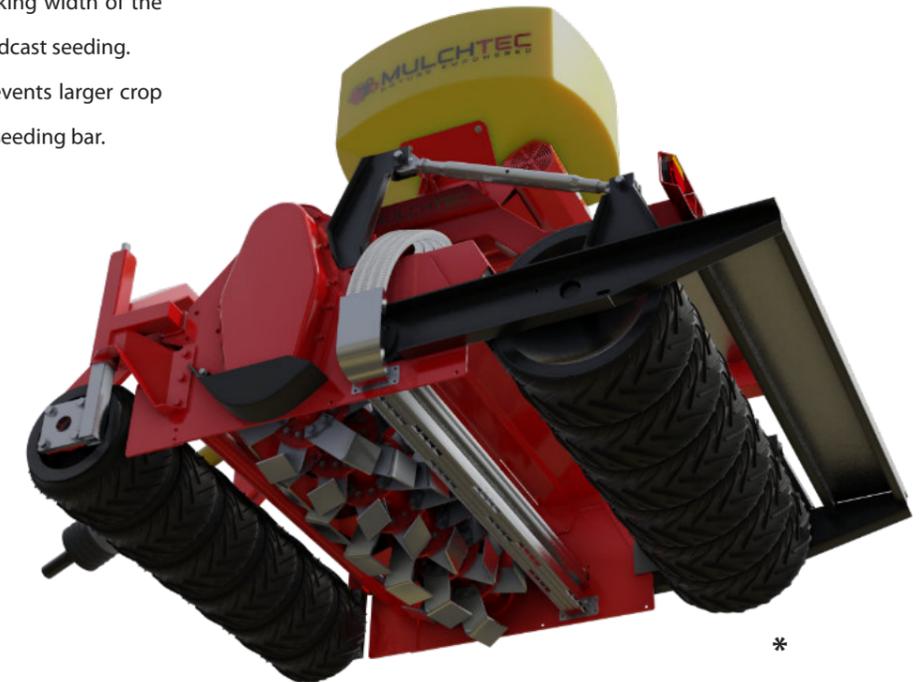
The MulchTec RotoSeeder includes a front and a rear roller (each height-adjustable) and additionally a slotted hole on the upper link to ensure the adjusted seeding depth independent of uneven ground. Self-cleaning 'farmflex rollers' are used for this purpose to ensure optimum results even in wet conditions.

Seeding bar

The seeding bar is located in the space just behind the blade shaft, which is outside the general flow of material. It has a special distribution system with eight outlets, each with a width of 16-30 cm (depending on the working width of the machine). This design enables uniform broadcast seeding. A rotating roller above the seeding bar prevents larger crop residues etc. from accumulating above the seeding bar.

Pneumatic seeder

A pneumatic seeder from APV with a capacity of 300 to 500 liters is used for seeding. This can be filled from the rear via safe steps. The seeder has an optional seeding shaft for fine or coarse seed. The seeds are precisely metered by the 'Control Box 5.2' via a hydraulic fan, depending on the forward speed, and conveyed into the side of the seeding bar by the air stream. Of course, details such as a calibration slide with bag and seed scale have also been considered. Fill level sensor, calibration button and sensor for headland management are available options.



Technical data and configuration options

Type	Working width	Outer width	Number of blades	Seeder type	Weight	HP requirement
MTS - 130	130	152	36	APV PS 300 M1	1220	50
MTS - 150	150	172	42	APV PS 300 M1	1300	60
MTS - 170	170	192	48	APV PS 300 M1	1400	65
MTS - 185	185	207	54	APV PS 300 M1	1480	70
MTS - 200	200	222	54	APV PS 500 M2	1640	80
MTS - 230	230	252	66	APV PS 500 M2	1680	90
MTS - 250	250	272	72	APV PS 500 M2	1800	100

* The actual machine may differ in details from the drawings.



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Mulchtec is a brand of live2give gGmbH. This non-profit organization runs projects to promote health, education and research.