

PRO-TiL



SPECIAL-PURPOSE MACHINES

THE MZURI PRO-TIL SEEDING MACHINE

It tills and cultivates precisely a narrow band of soil, places seeds at controlled depths, provides the ideal environment for each group of seeds, and helps their germination and healthy growth, so the seeds can produce to their full potential. Strip-till means cultivating only the target area, leaving the remaining crops on the surface, between the cultivated bands of soil, which facilitates keeping in moisture and organic matter for the purpose of improving the soil structure, and its fertility. Tillage coulters and wheels are arranged alternately in two rows, providing plenty of space for the flowing through harvest residue.

Tillage and seeding coulters are connected within independent hydraulic systems, which ensure uniform pressure in each section. This controlled pressure guarantees accurate depth and excellent contact of the seeds with the soil. PRO-TIL is designed specifically as a machine for stubble fields, and it performs tillage, fertilisation and seeding in one pass.

THE MAJOR FEATURES OF THE PRO-TIL

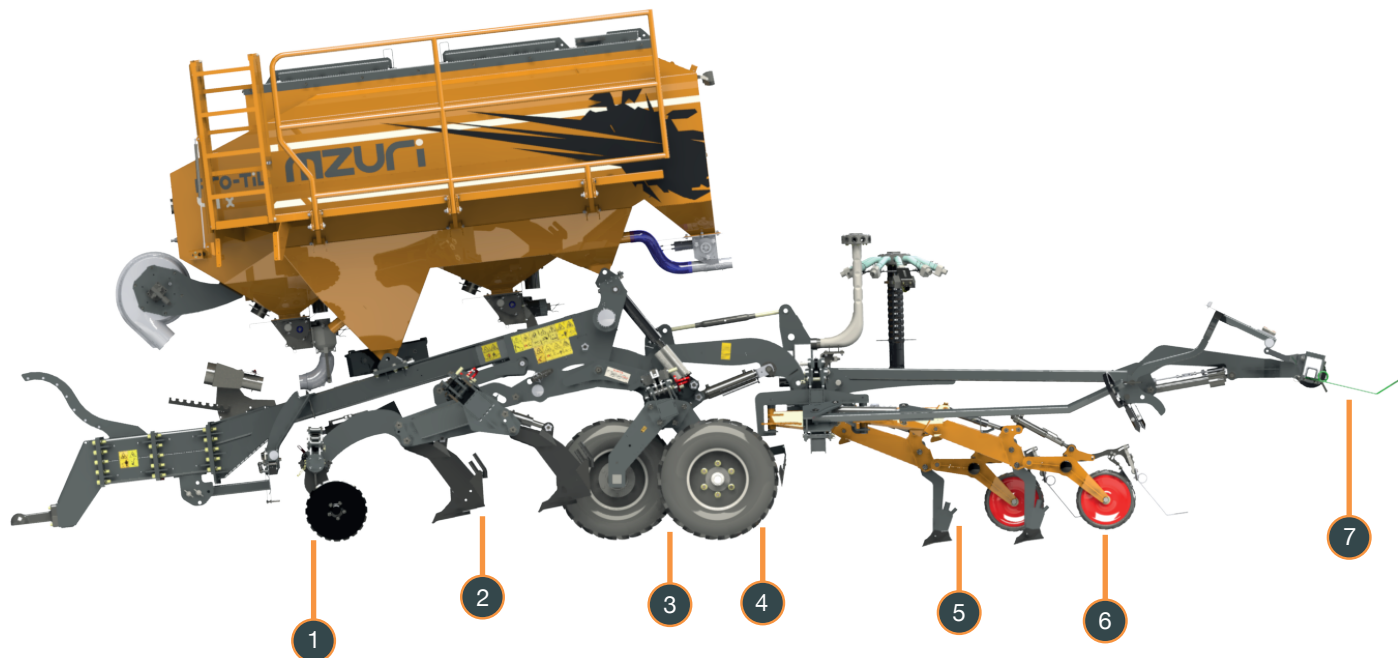
- Hydraulically protected tillage coulters
- Variable amounts of seeds,
- Single- and double-row coulters,
- Hydraulically driven fan,
- Seed-flow sensors,
- Hydraulic pass marker,
- Hydraulically adjustable drag harrow,
- Semi-pneumatic dispenser,
- RDS Artemis controlling computer,
- Independent swinging sowing arms, with hydraulic protection, connected by an adjustable pressing wheel.

Being so versatile and able to sow directly into the stubble, after minimum tillage or even after ploughing, makes the PRO-TIL the ideal machine to move on to direct sowing. Multiple crossings of plots by machines cause the degradation of arable soil structure through the excessive increase in its density, and also by the destruction of biological life in the soil. Excessive soil density results in the disturbance of the air-to-water ratio, which leads to shortage of oxygen and nutrients for the crop roots.

The seed dispenser is very simple, and consists of electric motors controlling the speed, and driving particular seed rollers. The choice of seed shafts facilitates the sowing of virtually all types of seeds. The calibration process is simple and accurate - just press the electric switch button, then weigh the collected seeds and enter their number on the control panel. RDS Artemis adjusts the quantity of sown seeds on-the-fly, and provides all functions of inspection and monitoring of the fertilisation and sowing processes.



| SAVINGS | IMPROVEMENTS | BENEFITS |
|---------------------|-----------------------------|-------------------------|
| fuel | content of organic matter | efficiency |
| work time | in the soil | improvement |
| machine maintenance | efficiency of fertilisation | cost reduction |
| capital | water retention in the soil | sustainable development |
| | soil structure | increased profitability |



1 Optional front discs for cutting residues on the surface.

2 The hydraulically protected tillage coulters continuously ensure the proper growth of roots and clean the sowing band from any harvest residues (spreading them aside), and leaving a clean seedbed.

3 Placing the fertiliser precisely under the seeds Drag harrow. reduces the startup dose and ensures the early availability of nutrients.

4 Consolidating wheels arranged in 2 rows thicken the soil in the cultivated belt.

5 Hydraulic pressure on each of the individual sowing sections guarantees the safe and accurate following of the outlines of the ground.

6 Individual depth adjustment for each sowing-coulter wheel.

7 Drag harrow.

| Specification | 3T | PRO-TIL 3T | PRO-TIL 4T | PRO-TIL 6T |
|--------------------------|-------------|-------------|-------------|-------------|
| working width | 3 m | 3 m | 4 m | 6 m |
| transportation width | 2.95 m | 2.95 m | 2.95 m | 2.95 m |
| tank capacity | 1200 l | 3400/5400 l | 3400/5400 l | 4300/6500 l |
| split container | --- | 40/60 | 40/60 | 40/60 |
| row spacing | 33.3 cm | 33.3 cm | 36.3 cm | 35.3 cm |
| number of rows | 9 | 9 | 11 | 17 |
| Power requirement (min.) | 150 HP | 150 HP | 200 HP | 300 HP |
| working speed (km/h) | 6 - 15 km/h | 6 - 15 km/h | 6 - 15 km/h | 6 - 15 km/h |
| suspension type | suspended | trailed | trailed | trailed |
| fan drive | hydraulic | hydraulic | hydraulic | hydraulic |
| seed flow control | + | + | + | + |