## **FERENCE CHIEF** STRIP TILL WITH PLANTER

Strip-till is a growing conservation system that uses a minimum tillage principle. It combines the soil drying and warming benefits of conventional tillage with the soil-protecting advantages of no-till, by only disturbing the portion of soil that is to contain the seed row.

The FarmChief Falc PTO Rotor Strip-till System, creates a perfect seedbed for row crops in a single pass. The untilled strips help prevent erosion, compaction and preserve moisture. Through optional fertilizing, sub-soiling, chip hoeing and seeding in one single pass you are saving both time, and money, while preserving a high-yielding soil structure.



## > BENEFITS OF STRIP TILLAGE

**1. Reduces labour, saves time & saves fuel -** As little as one pass for planting compared to two or more tillage operations means fewer hours on a tractor, fewer labour hours to pay and less fuel.

**2. The window of cultivation/sowing opportunity -** is greatly widened especially with commonly inclement spring weather, because of a one pass job done, versus plough, power harrow, roll level, etc.

**3. Wind protected planting -** Good wind protection for the young plants from the plant residue in the unworked row, preventing soil blasting the tender saplings.

**4. Improves soil tilth -** A continuous no-till system increases soil particle aggregation (small soil clumps) making it easier for plants to establish roots. Excellent crop yields because of deeper root establishment from the aerated ground beneath the plant and better fertilizer uptake with no seed burn. Improved soil tilth also can minimize compaction. Of course, compaction is also reduced by reducing passes in the field.

**5.** Increases organic matter - Research shows the more soil is tilled, the more carbon is released to the air and the less carbon is available to build organic matter for future crops. Carbon accounts for about half of organic matter.

**6. Traps soil moisture to improve water availability -** Keeping crop residue on the surface traps water in the soil by providing shade. The shade reduces water evaporation. In addition, residue acts as tiny dams slowing runoff and increasing the opportunity for water to soak into the soil. Another way infiltration increases is by the channels (macropores) created by earthworms and old plant roots. In fact, continuous no-till can result in as much as an additional 55mm of water available to plants in late summer.

## > BENEFITS OF STRIP TILLAGE cont.

7. Winter grazing advantages - firmer ground between the rows, for stock to winter on without excess mud.

8. Less spray required - for weed eradication, with strip spray options.

**9. Reduces soil erosion -** Crop residues on the soil surface reduce erosion by water and wind. Depending on the amount of residues present, soil erosion can be reduced by up to 90% compared to an unprotected, intensively tilled field.

**10. Improves water quality -** Crop residue helps hold soil along with associated nutrients (particularly phosphorous) and pesticides on the field, to reduce runoff into surface water. Additionally, microbes that live in carbon-rich soils quickly degrade pesticides and utilize nutrients to protect groundwater quality.

**11. Improves air quality -** Crop residue left on the surface improves air quality because it: Reduces wind erosion, thus it reduces the amount of dust in the air; Reduces fossil fuel emissions from tractors by making fewer trips across the field; Reduces the release of carbon dioxide into the atmosphere by tying up more carbon in organic matter.



## The FarmChief Falc PTO Rotor Strip-till is available in various strip pitches and widths.

The sub-soiling tines are running in a depth of around 15-30 cm. These can be easily adjusted to the desired depth in which the soil is to be loosened. The rotavator is incorporating any applied fertilizer into a depth of 7-15 cm. Within the strip, the soil is raised into the rotavator with the wide wing allowing the soil to settle, consequently avoiding any hard-panning through smearing of the rotavator. Strong root growth is stimulated with a penetration of roots into even deeper layers of the soil for greater nutrient uptake and stronger plant growth. A uniform and finely structured seedbed is created. The packer roller obtains a compact soil to seed contact. All of this amounts to a perfect growing medium which is the best basis for strong root growth.

With a PTO strip-till unit, rear 3ptl, rear mounted precision planter and front fertiliser tank, you can both prepare the ground for planting, apply fertiliser and precision plant your crops in one pass. All this while reducing your tillage costs, improving the soil ecology and producing a better stronger crop.



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