MULTI FARMING SYSTEMS

Setting the standard for long term, cost effective, viable farming systems

80ft (24m) end tow Multiplanter
No till direct drill from Multi Farming Systems

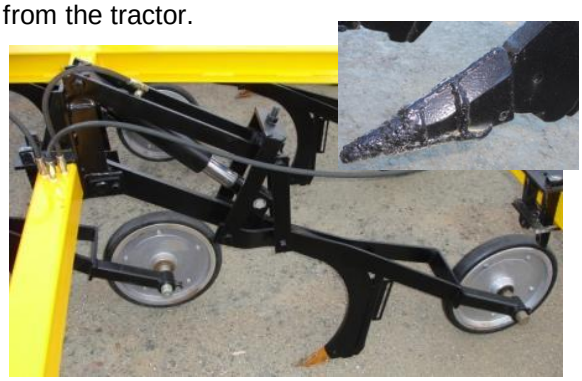
Multi Farming Systems (MFS) have been manufacturing the no till direct drill Multiplanter commercially since 1985. In 2008 the company received international recognition as the manufacturers of the 120ft (36m) Multiplanter the Coggan Family used to smash the world record by planting 2,237 acres (905ha) of wheat over a 24 hour period. Here's how:

80ft (24m) Multiplanter Features

- Modular frames connected via uniballs and buffer plates for good flotation over undulating countryside.
- End tow with swing around rear tines and a pull pole that rolls into end tow position on a removable pneumatic tyre.
- Eight, 16 ply 24" (610mm) Agricultural tubeless castoring wheel assemblies, placed fore and aft for high underframe clearance and optimal trashflow. 18" castor on the front for greater stability and 10" on the rear.
- 72 Multiplanter tine assemblies on 13 1/3" (333mm) row spacings for optimal trashflow.
- External manifold with air chambers to eliminate messy gas bladders and accumulators. Oil return is direct to the tractor.
- Digital pressure gauge for hydraulics mounted outside the tractor cab for ease of monitoring.
- Grease points and moving wear points are virtually eliminated, saving the farmer time and money.
- Fit steer for the end tow position to navigate through gates and narrow crossings.
- Fit rear steering for the working position. Both the tractor and Multiplanter can be fitted with GPS autosteer for accurate inter row cultivating. Avoid slope creep (due to the long pull pole), minimise overlap, and allow manoeuvrability for extremely wide set ups.
- 100x100x9mm RHS (4"x4"x3/8") with 100x10mm FMS (4"x3/8") bracing for robust and hardwearing Multi Farming Systems frame.

Multiplanter General Features

Precision seed depth - the packer wheel acts as a depth gauge for the hydraulic tine tip and seed tube to ensure consistent placement of seed. Each tine assembly is parallelogram controlled and works independently of the frame, thus enabling it to follow the contours of the land. This enables tremendous power and therefore fuel savings across larger models. Seed to soil contact is maintained via firm pressure of the packer wheel, which can be adjusted on the run from the tractor.



▲ Multiplanter tine assembly with (2") 50mm speartip.

Tilth - seed bed preparation is achieved in one pass via a 2" (50mm) speartip with wings, digging at a 15º soil entry angle. This unique combination acts like a submarine with minimal soil disturbance as it slides through the ground. The slight angle prevents smearing that would come with flat entry. This provides the perfect seed bed tilth that is unachievable with a chisel plough or knife point without wings.

Packer Wheels – large 18" diameter Manutec packer wheels minimise mud sticking in wet conditions. 80mm (3") wedge are used for the sandy, soft soils and 55mm (2") flat semi pneumatic for normal operations. Disc mud scrapers are currently being trialled and are showing exciting results.

Digging Tip Penetration - the weight of the machine helps the hydraulics force the tip into the ground. This means less hydraulic pressure is required and there is less wheel track compaction. The C shaped tine naturally wants to dig in.

► Sow on the calendar direct into moisture. Depths down to 9" (228mm) can be achieved with just a matchbox depth of soil over the seed. 80ft direct drill ready to sow in Montana.

Planting on the Calender - seeds can be accurately sown where the moisture is, down to 9" (228mm) deep, while still covering them with just a small amount of dirt. This allows the farmer to take advantage of sub soil moisture and plant on the calender, which can significantly extend the planting window.

Germination - is consistent across all soil types and is due to the moisture seeking and precision depth planting abilities of the Multiplanter. Seedling emergence is quick at depths of 2" (50mm) and plant growth is vigorous.

▲ Plant shallow, compact each seed in moist soil, and every seed will come up, quickly and evenly. Same day planting trials.

Renovating pasture grass or busting up hard pans - with a reinforced frame, a drill can be built strong enough so that renovating and planting tine assemblies can be interchanged. This cuts capital costs down significantly and is ideal for the diversified farmer who has crops and livestock.

Water Harvesting and Weed Control - with a narrow 2" (50mm) spear tip, the ability to adjust the digging tip depth and the right packer wheel, post planting rain can be harvested into the seed bed trench. This will not only channel valuable moisture directly to the crops' roots, but deprive any inter row weeds of moisture. This trench may help to protect young seedlings against frost and/or sandblasting.

Multiplanter construction – built by a farmer for farmers. The machine is robust and hardwearing, with minimal maintenance and spare parts required. The Multiplanter is light to pull, at around 4hp per tip in average soil conditions.

Trash clearance – with 33" (838mm) underframe clearance, wheels placed fore and aft, and the C shape tine, trash flow is optimised.

The Disc Debate - the debate has heated up in recent years because of the movement towards minimal soil disturbance. The fact remains that discs:

- Leave a smear that is difficult for roots to penetrate, leaving the plant stunted with a wedge shaped root system,
- Do not provide a seedbed and tilth,
- Cannot create a water harvesting trench,
- Cannot penetrate extremely hard country,
- Can hairpin on crop residue and won't penetrate the ground, and most importantly
- Cost a fortune in both time and money to maintain.

▲ Multiplanter. ▲ Disc opener. Planted on the same day, note the stunted root system with the disc opener.

Any configuration can be accommodated, including tram line (controlled traffic), linkage and linkage assist, end tow, folding wing, double shoot, liquid and gas application. Sizes vary from single tine machines to 212ft (65m) and more. Chisel points and 15-20" (381-508mm) sweeps can be fitted for conventional farming. Construction can be modular so additional frames can be added as operations grow. Components are interchangeable and any tine from the MFS range can be used on the same machine.

Multi Farming Systems are not in the business of spare parts sales, and make cost effective, durable machines with minimal maintenance.

For further information please contact MFS via:
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► 80ft (24m) end tow Multiplanter has recently sown wheat in the Golden Triangle near Fort Benton, Montana.