

MULTI FARMING SYSTEMS

120ft (36m) and 160ft (48m) Multiplanters from Multi Farming Systems – even bigger!

Multi Farming Systems (MFS) have been manufacturing the Multiplanter commercially since 1984. 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:

Giant New Model Multiplanter Features:

- Modular frames connected via uniballs and buffers for good flotation over undulation. Up to 302ft (92m) currently on the drawing board.
- Pull pole hinged to cross contour banks or gullies. Swivel hitch and hinge.
- End tow with swing around rear tines and a pull pole that rolls into end tow position on a removable pneumatic tyre.
- Fit two airseeders for maximum product output and minimal stoppages.
- 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.
- External manifold with air chambers to eliminate messy gas bladders and accumulators. Oil return is direct to the tractor.
- 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.
- Steer in end tow position to navigate through gates and narrow crossings.
- Steer in working position with both the tractor and Multiplanter 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.
- Fit sensor tine system for additional power and fuel requirement savings.
- 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 press 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 press wheel, which can be adjusted on the run from the tractor.



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

Tilth - seed bed preparation is achieved in one pass via a 2" (50mm) spear tip with wings, digging at a 15° 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.

Moisture - with just a small 2" (50mm) spear tip per tine, soil throw is minimised and valuable soil moisture retained. Post seeding rain is harvested via a deep seed bed trench, retaining further valuable moisture for the crop. This trench also protects young seedlings against frost and/or sandblasting until they are sturdy enough to withstand these adverse conditions.

Press Wheels – large 18" diameter Manutec press 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.



◀ 160ft (48m) Multiplanter has sown down to depths of 9" (228mm).

Planting on the Calender - in any dry land farming operation, the farmer must have the ability to put the seed where the moisture is. Seeds can be accurately sown down to 9" (228mm) 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. Ever heard of planting prior to seeding rains and harvesting 1 ton of wheat without any subsequent rains?

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.

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

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

Renovating pasture grass or busting up hard pans - with a reinforced frame, a planter 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 spear tip, the ability to adjust the digging tip depth and the right press 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. The trench also protects young seedlings against sandblasting, and gives them a better chance of handling such adverse conditions.

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.

Any configuration can be accommodated, including tram line (controlled traffic), linkage and linkage assist, end tow, folding wing, double shoot, liquid and Big N gas application. Sizes vary from single tine machines to 160ft (48m) 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.



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

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.

NEW! Sensor Tine System - preliminary test results from the automatic tine pressure controlled system are extremely positive. Reduced horsepower and therefore fuel requirements over and above savings already achieved with the Multiplanters' depth controlled digging tip is keeping money in the farmers pocket! One customer with a 100ft (30m) machine reports a 30% reduction in fuel consumption after engaging the load sensor. This is OVER AND ABOVE the savings achieved by depth controlling the digging tip!

For further information please visit www.multifarmingsystems.com.au or call Multi Farming Systems on +61 7 4995 7230.



◀ 120ft (36m) world record breaking Multiplanter being lined up by John Coggan.