Quick: The Rotacon air seeder features a unique folding mechanism and has a transport speed of 50km/h. Photo: Mark Saunders

Unique seeder is a speed demon

The Rotacon is unique design which includes a clever folding mechanism, a main structural member which also doubles as a liquid fertiliser tank and the way the openers are attached to the frame.

Kondinin Group first saw the big yellow Rotacon at the Henty Field Days a little more than a year ago and since then the machine has been inspected working on its inventor's property near Mulwala in New South Wales.

The brainchild of Nico Sieling, the Rotacon has been designed and built from scratch.

COOL FRAMES

The frames to which the openers are attached are supported in working mode only, by the openers themselves. Each opener has a small support wheel and there are no wheels directly attached to the frames.

Each opener also has a hydraulic ram across its main parallelogram frame and this ram is used to determine the height of the frame. Each ram is connected to the rams on the adjacent openers and they share a common volume of oil.

This means that if the ram on an individual opener is forced back (by the wheel passing over a rise in the ground or the fertiliser or seeding tine or press wheel striking an obstacle), then the oil displaced from this ram will go into the common ram system and all the other rams will be extended slightly, having the effect of raising the frame slightly and hence reducing the load on the effected opener.

The opposite will occur if the opener drops into a depression. The overall effect is that each and every opener supports in own weight and its share of the frame weight (about 150kg).

The Rotacon also has a sideways break out mechanism via a ram and a heavy spring. So the support wheel, coulter and press wheel all can move sideways if any one of them receives a large enough sideways force.

CENTRAL BEAM

A big feature of the Rotacon its long, cylindrical central beam which is rigidly connected to the seed/fertiliser bin trailer at the rear of the machine. The long cylinder also doubles as a liquid tank with a capacity of 1000 litres. The inside of the steel tube is lined with a poly pipe to ensure corrosion resistance.

The clever design features continue with the metering system for the grain and granular fertiliser.

There are no fluted rollers or augers. Instead, the Rotacon uses a unique system which can be best described as a rotary solid conveyor.

The seed and fertiliser rate is altered simply by altering the speed of the motor mounted directly below a stainless steel disc. There is very little to block.

The prototype machine has a working width of 12m and the transport width is 3m with a height of 4m.

More details: www.rotacon.com

Accurate: The Rotacon's metering system uses a spinning disc and rates are altered by varying the rate of rotation.