



FINEST IN THE FIELD

# John Shearer Vineyard Machinery

Vineyard Machinery



- Vineyard Seeder
- Offset Disc Plough
- Handcult Cultivator

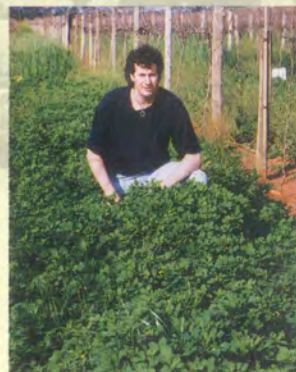


# Vineyard Seeder

## COVER CROPS IN VINEYARD MANAGEMENT SYSTEMS

The use of a cover crop is now recognised as the best mid row management option for achieving long term sustainability of production in a vineyard. Correct cover crop selection and management is crucial in maximising benefits and minimising the demand on vineyard resources.

Cover crops are used in vineyards to address a range of management issues, including:- degraded soil structures; low soil fertility; poor water use efficiency; the loss of topsoil via wind and water erosion; the suppression of some pests; higher levels of organic matter in the topsoil, and vine nutrition.



Richard Porter, cover crop adviser.

## VERSATILE, ACCURATE & ROBUST

Richard Porter, cover crop adviser, conducted research over a four year period into the application and management of cover crops in vineyards in a programme funded by the Grape and Wine Research and Development Corporation. During the course of this program more than 70 cover crop demonstration and research trials were established, using a number of different seeders.

At the completion of the program, Richard provided the following assessment. "Cover crops sown with the John Shearer vineyard seeder demonstrated consistent and uniform emergence of a variety of crop species in a range of soil conditions. The seeder has good trash clearance and soil penetration, enabling it to be used for direct drilling in certain circumstances. The seed and fertiliser bins are both large, meaning fewer stoppages for refilling, and easy to fill from the platform across the rear of the machine. Sowing rate calibration is easy and repeatable, with a very wide range of seed and fertiliser application rates. With growers now using a variety of cover crop types within a vineyard, seeders must be able to sow small seeds such as grasses and brassicas, as well as large seeded crops such as Faba beans. This adaptability was an area in which the Shearer machine excelled. The seeder itself is short and narrow which allows for easier row access and good manoeuvrability on headlands. The overall seeding width of 1.8 metres (6') can easily be reduced by blocking the outside seed ducts in the seed box in cases where a narrow crop strip is desired. In conclusion, of all the seeders used over the four year research period, the John Shearer vineyard seeder proved to be the most versatile, accurate and robust, as well as being the simplest to use."

are both large, meaning fewer stoppages for refilling, and easy to fill from the platform across the rear of the machine. Sowing rate calibration is easy and repeatable, with a very wide range of seed and fertiliser application rates. With growers now using a variety of cover crop types within a vineyard, seeders must be able to sow small seeds such as grasses and brassicas, as well as large seeded crops such as Faba beans. This adaptability was an area in which the Shearer machine excelled. The seeder itself is short and narrow which allows for easier row access and good manoeuvrability on headlands. The overall seeding width of 1.8 metres (6') can easily be reduced by blocking the outside seed ducts in the seed box in cases where a narrow crop strip is desired. In conclusion, of all the seeders used over the four year research period, the John Shearer vineyard seeder proved to be the most versatile, accurate and robust, as well as being the simplest to use."

## UNIVERSAL SOWING SYSTEM

Fluted distributors in the seed compartment suit a wide range of sowing applications, from small pasture seeds to large legumes such as Peas and Lupins. These distributors give uniform sowing, especially at very low rates. For sowing narrower than 1.8m (6') the excess distributors are easily blanked off using shut off covers. Adjustable rubber gates minimise seed damage and fertiliser build-up.



Premium grapegrower Don Oliver of McLaren Vale, who assisted with the development of the John Shearer vineyard seeder, has successfully operated his seeder for the past 3 vintages.

## DISC UNDERCARRIAGE

The patented disc undercarriage on the Vineyard Seeder, incorporates 10 individual assemblies. Each assembly consists of a drawbar, a single 330mm (13") high carbon steel disc and a spring adjustable mechanism. Being spring adjustable, the disc pressure can be easily set to suit soil conditions. In some vineyards the coil spring would be adjusted, to enable the disc to easily ride up over roots, prunings and rocks. When operating in hard ground and in a direct drilling operation, additional spring tension will provide greater downward pressure for penetration.

The single disc assembly, is less prone to block-up in damp sticky conditions and will not catch on prunings and roots.



A seed hose adjacent to the disc, delivers seed and/or fertilizer into the bed at a predetermined depth.

## SIMPLE SOWING RATE ADJUSTMENT

The Vineyard Seeder features a 31 speed, fully enclosed, oil bath gearbox to give simple calibration and a wide range of sowing rates for both seed and fertiliser.

## DEPTH WHEELS & CHAIN GUARD

Pneumatic wheels and screw assemblies on both right and left sides, are used to level the machine and maintain working depth. A fully enclosed chain guard on the drive wheel prevents soil (mud) build-up on the chain.

## LID GAS STRUTS

Gas struts are standard equipment on either side of the box to assist the operator when opening and closing the lid.

## EASY MAINTENANCE

Maintenance time is reduced with the easily accessible remote greasing facility which is fitted to the grain and fertiliser shaft bearings.

## ELECTRONIC AREA COUNTER

The cab mounted electronic area meter provides convenient visual readout of area sown per block and speed of travel.

## LARGE SIGHT GLASS

An extra large sight glass provides the operator with a quick visual reference of the seed level from the tractor seat.

## DUAL COMPARTMENTS FOR SEED AND FERTILISER

The extra large seed and fertiliser compartment, of approximately 471 litres, means less stops between refills and reduced travelling time. Seed and/or fertiliser can be sown from both compartments.

Another feature is the heavy duty footwalk/loading platform, which assists when filling the compartments.



## COVERING HARROWS (Optional)

To promote a smooth seed bed, optional spring tooth covering harrows are available.





## Specifications 10 ROW VINEYARD SEEDER

Sowing width	1.8m (5'11")
Overall width	1.86m (6'2")
Hopper Capacity (471 Litres)	Rear Wheat 160kg (352lbs) Front Super 220kg (484lbs)
Disc diameter	330mm (13")
Weight (approx.)	Empty: 518kg (1140lbs)
Depth Wheels	185 x 14 x 4ply - screw adj.
Gearbox	Fully Enclosed 31 speed oil bath
<b>SEED / FERTILISER DISTRIBUTORS</b>	
Seed	Fluted w/- restrictor for small seed
Fertiliser	Nylon peg distributor roller
Gates	Adjustable rubber in both compartments
Optional Equipment	Broad Beans rollers, fertiliser screens and covering harrows

## HEAVY DUTY HANDICULT

Size (no. of tynes)	12 tynes	16 tynes
Width of cut	1.92m (6'4")	2.56 (8'5")
Tyne Spacing	160mm (6.3")	
Jump Height	300mm (12")	
Underframe Clearance	580mm (23")	
Maximum Tyne Breakout	75kg (165lbs)	
Optional Equipment	2+4 tyne extension	

## VINEYARD OFFSET DISC - TRAILING MODELS

Size: (no. of discs)	14 plate	16 plate	20 plate
Overall Width	1.855m (6'2")	2.06m (6'9")	2.48m (8'2")
Width of Cut	1.61m (5'5")	1.82 (6'0")	2.25m (7'5")
Disc Spacing	230mm (9")		
Approx. Weight	882kg (1940lbs)	992kg (2187lbs)	1230kg (2712lbs)
No. of Disc Bearings	6	6	8
Main Frame	100mm x 100mm (4" x 4") RHS		
Gang Bolt	40mm square		
Discs	600mm x 6mm (24" x 1/4") scalloped		
Disc Bearings	Regreasable triple lip seal, ball bearing		
Disc Scrapers	Standard equipment		
Optional Equipment	Furrow filler disc kit, hydraulic tensioner kit		

## VINEYARD OFFSET DISC - 3 POINT LINKAGE MODELS

Size (no. of discs)	14 plate	16 plate
Width of Cut	1.6m (5'3")	1.8m (6'0")
Disc Spacing	230mm (9")	
Approx Weight	340kg (748lbs)	410kg (902lbs)
Discs (for 14 & 16 plate)	508mm x 5mm (20" x 3/16") or 560mm x 5mm (22" x 3/16")	
Disc Scrapers	Standard equipment	
Optional Equipment	Furrow filler kit	

## HEAVY DUTY MODEL

Size (no. of discs)	14 plate	16 plate
Overall Width	1.85m (6'2")	2.06m (6'9")
Width of Cut	1.61m (5'5")	1.82m (6'0")
Disc Spacing	230mm (9")	
Approx Weight	800kg	910kg
Main Frame	100mm x 100mm (4" x 4") RHS	
Gang Bolt	40mm square	
Discs	600mm x 6mm (24" x 1/4")	
Disc Scrapers	Standard equipment	
Optional Equipment	Furrow filler kit, Hydraulic tensioner kit	

John Shearer Ltd, ACN 007 871 472  
Share Street, Kilkenny, South Australia 5009  
Tel: 08 8268 9555 Fax: 08 8268 4099  
International Tel: 61 8 8268 9555

Due to our policy of continuing research, these specifications are subject to change without prior notice.

