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KONDIRIN GROUP

Seed cleaner scores 100% buy again rating

Kondinin Group evaluated the DE Engineers seed cleaner based on a survey of 19 owners asking them to rate their seed cleaner's performance.

Photo: DE Engineers

Functionality: Owners were impressed with the simplicity, ease-of-use and scalpers of their seed cleaners but were disappointed they did not receive an operator's manual and were concerned about platform safety.



Kondinin Group rating

	Frame	
	Wheels	
	Bin	
	Engine	
	Driveline	
	Cleaning system	
	Auger	

NUMBER OF MACHINES IN THE SURVEY 19

Price

- Two-barrel standard unit from \$14,850 inc GST
- Four-barrel 'Mega' unit from \$80,300 inc GST

Buy again

	YES	NO	UNCERTAIN
	100%	0%	0%

Owners of DE Engineers seed cleaners praised the units for their simplicity, cleaning capacity, ease-of-use and scalpers but some owners were disappointed with the ease of moving or folding the auger, not having an operator's manual and platform safety.

Kondinin Group surveyed 19 owners and found all would buy the same or similar seed cleaner again. Units had been used for an average of 158 hours and cleaned 2772 tonnes of product. All units surveyed were manufactured during 2003 or later.

DE Engineers produce a range seed cleaners, with either two, three or four cleaning barrels (see Figure 1) with cleaning capacities of 20–60t/hr. Some models include storage bins and fan-assisted cleaning.

Most owners used the machines for cleaning wheat at an average of 23.5t/hr.

Frame

Chassis frame and pull strength impressed owners, both scoring at 95 per cent. Frame

cracking resistance was rated very highly by owners at 93%.

Most owners were pleased with the ease of hitching scoring 82%, although one Western Australian owner of a four-barrel unit stated the jack stand was fitted with the wrong cogs which made hitching difficult. Another WA owner replaced the Chinese-manufactured jack stating it was too weak.

Owners praised the ease of transport, rating it 88%. A South Australian owner of a two-barrel unit stated the jockey wheel was too small making the unit difficult to manoeuvre by hand.

Some owners reported concerns with the safety guarding which scored 68% overall. Four owners of three-barrel cleaners stated the unit needed a safety platform or stepping plate between the grain tank and cleaning barrels, describing it as unsafe and dangerous. A WA owner of a three-barrel

FIGURE 1 Number of barrels owned

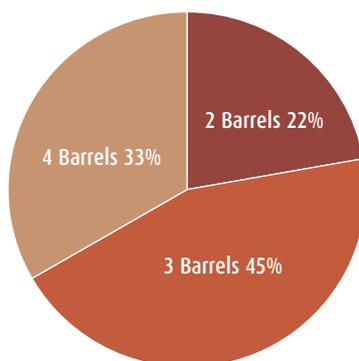


FIGURE 2 Seed cleaner usage

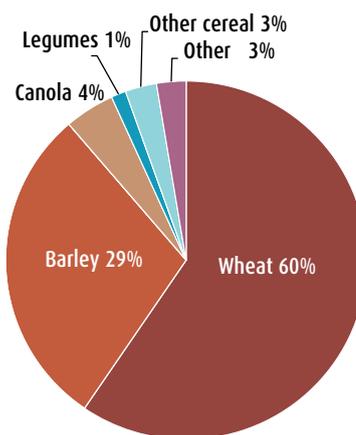




Photo: DE Engineers

Cleaning and moving: The units cleaning capacity pleased owners although some found the auger heavy and difficult to manoeuvre.

Best features

- ✓ Simplicity
- ✓ Cleaning capacity
- ✓ Ease-of-use
- ✓ Scalpers

Worst features

- ✗ Ease of moving/folding the auger
- ✗ No operators manual
- ✗ Platform safety

Summary

Owners of DE Engineers seed cleaners praised the machine's reliability (rated at 84%), performance (84%), quality of finish (84%), and were satisfied with its value for money (79%). Parts availability pleased owners scoring 82%. Machine warranty was rated highly at 88%. Owners were also impressed with dealer and manufacture service scoring 87% and 84% respectively. Several owners were disappointed they did not receive an operator's manual with their machine, those who did scored it 66%.

TABLE 1 Product performance

	Cleaning capacity t/hr	Screenings removed %	Value added \$
Wheat	23.75	9.18	\$60.56
Barley	21.75	13.69	\$87.50
Canola	15.00	8.33	\$63.33
Legumes	16.67	5.33	\$150.00
Other cereal	18.50	21.50	\$25.00
Other	15.67	12.00	\$30.00

Generally, owners were satisfied with the reel fan, which scored 73% although a WA owner suggested a variable speed fan might work better. A Queensland owner stated the main issue was the delivery point to the fan which did not handle trash well.

Owners praised the screens rating them 86%. While ease of set-up and ease of adjustment both rated well at 83%. A WA owner stated clip on screens would be much easier to use and take up less storage space.

The cleaning capacity of the unit impressed owners scoring 87% with six owners stating it was one of the unit's best features (see Table 1).

Operation of the crane jib was rated at 78%, while some owners experienced difficulty changing the screens which scored 71% overall. Two owners reported using a forklift to change the screens. A WA owner stated the unit needed a tool to grip screens for lifting. Another WA owner modified his unit adding a strap down the back of the machine to prevent screen bounce during

unit added a ladder and safety rail to his machine. Another owner reported modifying his three-barrel machine to improve safety. Two owners of four-barrel machines stated the safety rails needed to be sturdier and required a better finish.

Wheels

Owners praised the tyres and rims rating both at 87%. Although a SA owner of a two-barrel unit stated larger tyres would make the unit easier to push around.

The axle strength and axle bearings were rated very highly both scoring 92%.

Bin

Bin strength and capacity were praised by owners scoring 91% and 86% respectively. A WA owner stated the cone bottom join was poor and the silicon attempts to cover up the poor workmanship failed after less than one year. Another WA owner of a four-barrel unit made the bin 600 millimetres higher and the augers one metre longer to get to the middle of a 45t field bin.

Most owners were satisfied with the ease of cleaning out the bin scoring it 79%. Two owners stated the bin was difficult to clean out, with one owner stating it was especially hard to clean out in whiskery crops such as barley with the last 800-900 kilograms needing to be scraped in.

Owners were disappointed the bin did not come with a cover as standard, with 12 owners reporting it caused problems particularly during rainfall events. A WA owner reported adding 25mm pipe across the centre of the bin to hold up a tarp in wet weather. Two other owners reported the bin was difficult to cover as there was no deck to stand on during tarping.

Engine

The performance of the Honda engine was rated highly by owners scoring 89%. A WA owner of a four-barrel unit stated the 18 kilowatt motor was very fuel efficient and did the job easily. A SA owner of a two barrel unit stated the engine mounting plate needed gusseting as vibration cracked all the welds under the engine.

Owners praised the startability of the engine (93% rating), while most owners were impressed with the fuel economy

(87%). However, one Queensland owner of a four-barrel unit said the motor was the worst Honda engine he had owned. He replaced the electrical components twice and stated the motor used a lot of fuel.

Six owners reported problems with the auto shut-off function which scored 74% overall. Four owners reported the function was unreliable and failed many times. A WA owner stated the auto shut off switch was opposite to the direction shown on the label. Another WA owner said the auto shut off relied on a sensor in the bin attached to a plate, when filling the bin wheat would hit the plate changing the angle of the sensor, which affected the auto shut down performance.

Driveline

Driveline performance pleased owners scoring 82%. One SA owner of a two-barrel unit stated the V-belts required changing every 50 hours. He suggested the unit needed an additional belt to prevent slippage.

The durability of the driveline was rated well by owners at 80%. Although one WA owner of a three-barrel unit stated the cage came loose causing wear on the shaft. A WA owner of a four-barrel unit stated the larger models needed heavy duty chains in some areas.

Most owners were satisfied with the ease of servicing scoring it 76%, although two owners reported difficulties greasing some components. A WA owner of a three-barrel unit stated some chains were difficult to service because the guards were difficult to remove.

Owners praised the driveline simplicity, rating it 84% with two owners describing it as strong, well made and simple.

Cleaning system

Owners were generally pleased with the cleaning quality of the unit (scoring it 81%), and the cleaning evenness (83%). A WA owner of a three-barrel unit said the seed cleaner worked only on material size, which caused problems removing rubbish, particularly from barley. Another WA owner of the same unit modified the diverter on the intake auger to provide a more even grain distribution.



transport. He also increased the crane jib length by 500mm.

Auger ⋮

The auger capacity was rated very highly by owners at 90%. A WA owner stated the auger from the tank limited the capacity of the machine, he suggested it needed to run faster. Two owners reported adding extensions to their augers to allow them to fill bigger capacity storages such as 45T field bins. A WA owner stated the auger pick up could be improved.

Most owners were pleased with the ability to fold the auger scoring it 81% overall, despite four owners stating it was heavy and difficult to move. A SA owner of a two-barrel unit stated the auger was so heavy it took two

men to unfold and push it into the bin. He added a spring and cable to the top of the unit to take the weight. A WA owner reported damage due to the auger coming over centre when folding. It was too heavy to prevent it crashing down causing a bulge in the pivot point at the base of the auger. A WA owner of a four-barrel machine suggested the auger transport height could be lower.

Owners praised the drive gearbox rating its performance at 87%. A SA owner of a two-barrel unit drilled and tapped the cast to add a grub screw to hold the keyway on the drive shaft. Auger durability pleased owners scoring 82%. **FA**

SPECIFICATIONS

Number of barrels	2				3		4	
	Standard	Inlet auger	Inlet and outlet auger	Catch bin	Standard	Air	Mother	Mega
Barrel length (m)	2.4						3.6	
Capacity (t/hour)*	20				30		40	40-60
Honda motor (kW)	4.5	6.75	9.75		15		18	
Catch bin	Nil			15T				

* Wheat at approximately 12% seconds down to 2% seconds

Manufacturer's comment

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