XCEL SPREADER

BROCHURE

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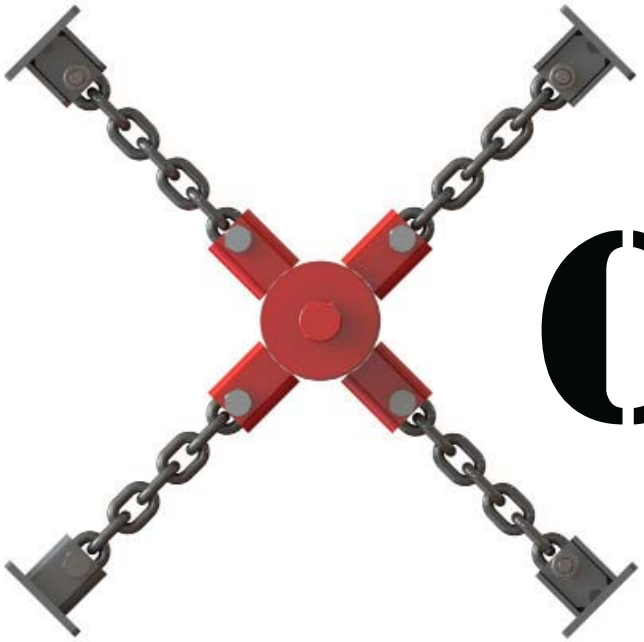
HiSPEC

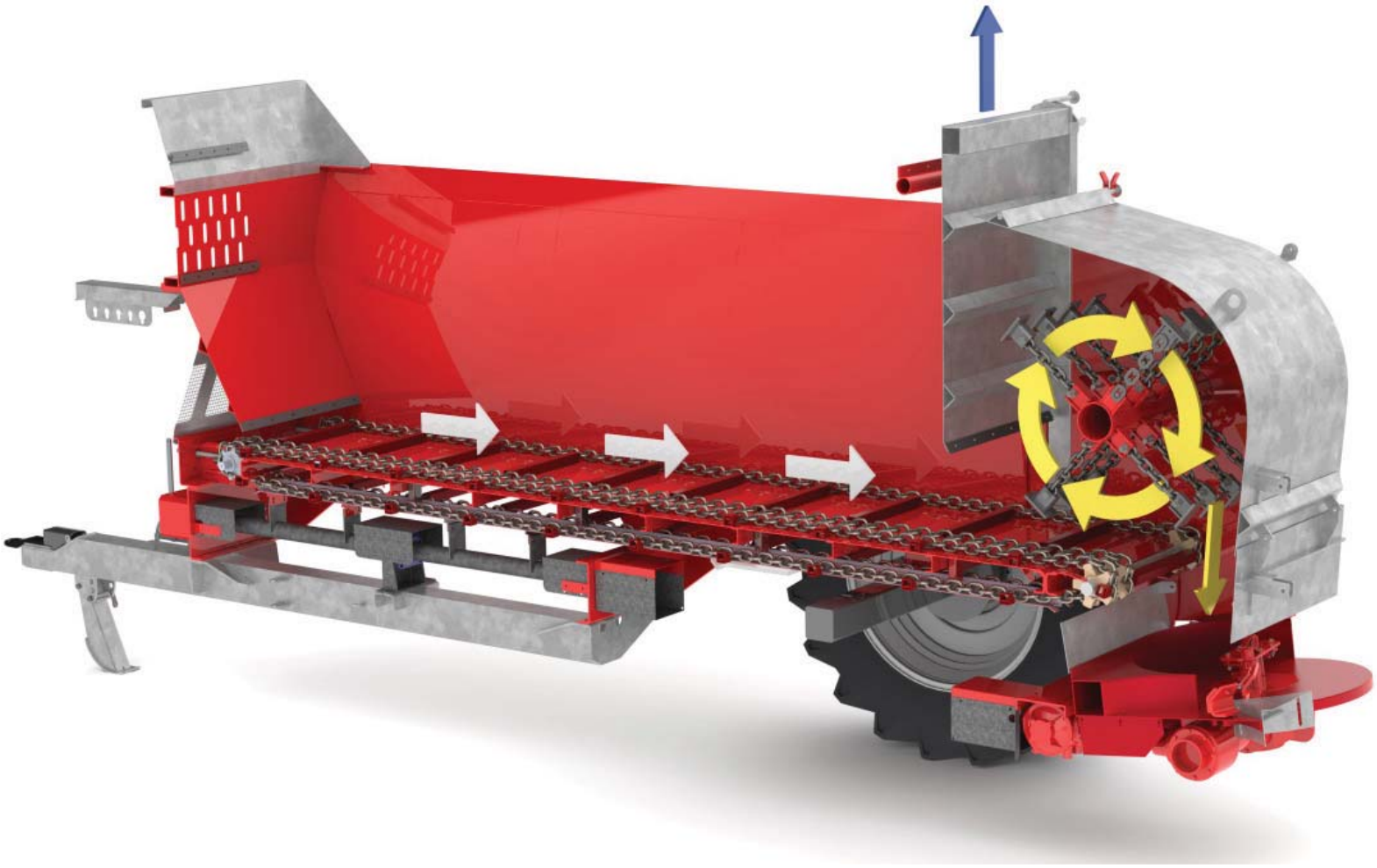


XCEL 1250

HISPEC BUILD XCELENT PERFORMANCE

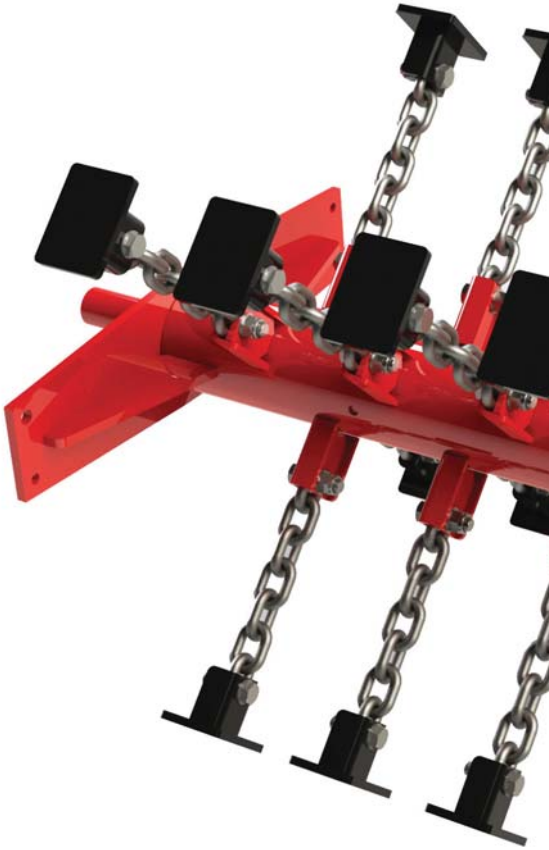
Our unique patented and proven chain and disc spreading achieves better consistency, and at greater widths than can be achieved using standard vertical auger machines. What separates the Xcel from other disc spreaders is our unique chain and flail rotor. The Xcel uses 2 floor chains to convey manure towards this rear rotor. The rotor is built for breaking manure with 22 heavy duty Hardox heads fixed on 16mm marine grade chain. This rotor achieves a speed in excess of 230rpm to pulverise any manure it encounters.

The rotor is spinning in a clockwise direction and the enclosed galvanised Hardox hood guides the manure towards the spinning discs. These large 1.1 metre diameter discs are spinning at 520rpm. The manure is deposited onto the spinning discs where the Hardox plated vanes throw the manure into a consistent 24 metre pattern. The leads to more accuracy and more precision with the application of manure. A simple unique approach along with the superior HiSpec build quality ensures you have a spreader built to last. The Xcel is built to handle a wide variety of manures including: FYM, compost, sludge, industrial cake, poultry litter and numerous others applications.

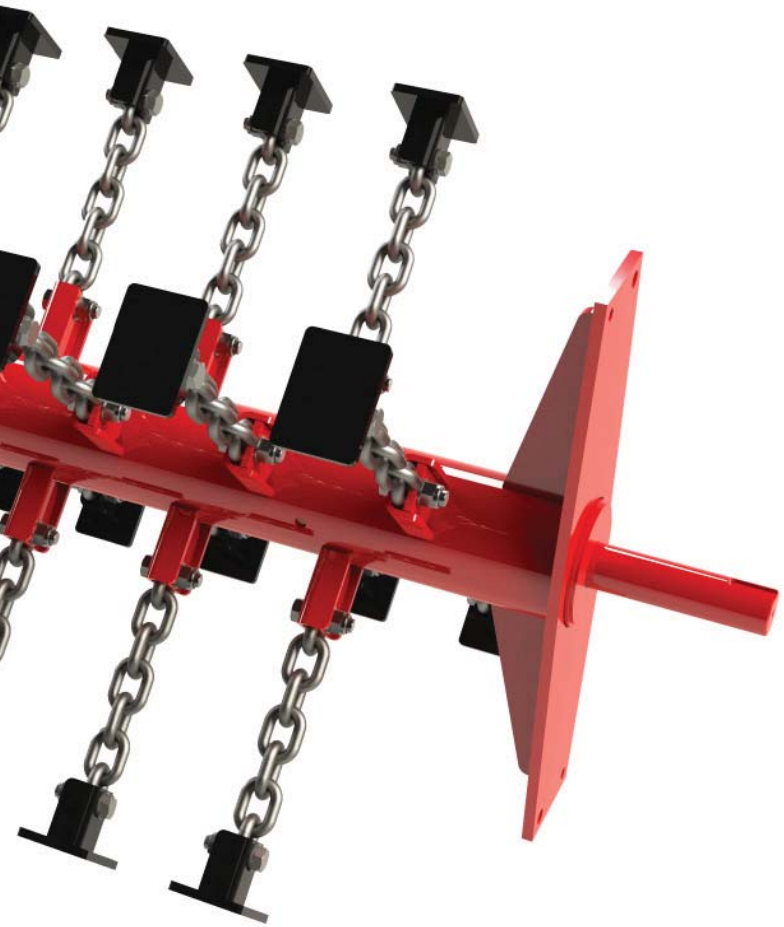


XCEL 1250 How it works

1. *A hydraulic chain and slat floor conveys the manure towards the chain and flail rotor.*
2. *A hydraulic slurry door controls the passage of manure towards the rotor.*
3. *The rear rotor (spinning at 230rpm) complete with Hardox heads, shreds the manure and deposits it onto the spinning discs.*
4. *The rear discs (spinning at 520rpm) pulverise the manure further as they spread in excess of 24m. (dependant upon material weight)*
5. *Manure is further broken down as it crashes to the ground. The spread pattern is consistent.*
6. *Due to the unique chain and flail rotor design foreign objects can pass through with less risk than fixed rotors.*



Rear rotor spins at 230rpm and c/w Hardox hea



ds fixed on 16mm marine grade chain

Spread the word and the muck.

The HiSpec Xcel is packed with unique high strength features at the business end of our spreader. The unique design of the Xcel has been refined and perfected over the years to produce a spread pattern that is consistent up to 24 metres. The overall design simplifies spreading manure and spreads it fast.

Here's how it happens.....

High Strength Floor Boxes
80 x 40 x 5mm floor boxes convey the manure towards the chain and flail rotor. This single box slat spans from left to right to eliminate any bridging to the floor. The floor boxes are also slotted into a dry cleat on the floor chain to make replacement and refitting easy over time. The high strength floor box is also placed flat to provide strength in the direction of travel. Floor boxes are placed every 30cm to provide consistent feed to the rotor. The floor is driven hydraulically via tractor spool. An in-cab control is optional allowing the operator to control floor speed via a dial.

Galvanised Slurry Door
The galvanised slurry door controls the passage of manure to the chain and flail rotor. A front mounted height indicator displays the current door height. The slurry door is raised and lowered via tractor spool. The working height of the slurry door will be dependent upon material loaded and HP availability. The slurry door is reinforced and slides vertically within a set of guides on the body. A rubber seal is fitted at the bottom to prevent leakage when loading. The slurry door is also used to lift the Hardox hood for maintenance.

Hardox Hood
The galvanised Hardox hood encloses the rotor and guides the manure towards the spinning discs. The clockwise rotation of the rotor scoops the manure upwards and along the path of the hood. This requires the hood to be strong and fit to withstand corrosive material. The Hardox hood is held in place under its own weight and lifted for maintenance purposes only. The lower hood is spring loaded to fine tune spreading and allow passage of foreign objects easier through the spreader.

Chain and Flail Rotor
The chain and flail rotor is the heart of the Xcel. It beats at 230rpm. The rotor is fitted with 16mm marine grade chains complete with solid Hardox heads. The simple design of the chain and flails allows foreign objects to pass through with a reduced risk compared to a fixed rotor. Chains that become stretched or worn over time are easily replaced or shortened with a single bolt. The rotor is chain driven via the rear gearbox, reducing maintenance and simplifing the Xcel design further.

Spinning Discs
The 1.1 metre rear discs are spinning via a Berma gearbox at 520rpm (tractor input 1000rpm) to pulverise any manure that lands on them. The large diameter of the discs ensures a high tip speed on the vanes as they are spinning. The discs are fitted with 2 vanes each as standard, and can be fitted with 4 for more compostible materials. The vanes are Hardox plated and shear bolt protected. They are easily replaced when required.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Robust design

The Xcel is designed to be robust and easy to use. Weighing in at just under 7 tonnes, the Xcel 1250 features a strong body for handling manure. The body wall is constructed in 4mm steel plate and buttressed along both sides. The body is also tapered towards the front to prevent bridging as the manure is conveyed back.

The floor of the Xcel is manufactured in 5mm steel and reinforced underneath. The floor is manufactured from large angle plates that run the entire sides of the floor. These angles provide the strength that allows the floor boxes to easily span from left to right.

The Xcel body is further braced at the top by a folded plate to provide additional strength and reinforcement. An 11m cubed water level volume is provided at this point, and a heaped manure weight of 12.5 tonnes is easily carried.

The entire beater body of the Xcel is bolted to the main carcass for ease of manufacturing and this allows the body shape to be maintained. The axle is placed as far back as possible to allow a comfortable ride. An interchangeable drawbar hitch is fitted as standard to suit a future spoon hitch fitting.

Galvanised bolt on mudguards, a strong red enamel paint, self-closing light protectors and 580/70 R38 tyres complete the look.

Feature Packed

Door Indicator

The slurry door indicator is placed at the front of the spreader for easy viewing. As the door weight slides up and down the indicator it also provides the added benefit of keeping the indicator clean from manure or muck from the tractor tyres.

Floor Tensioners

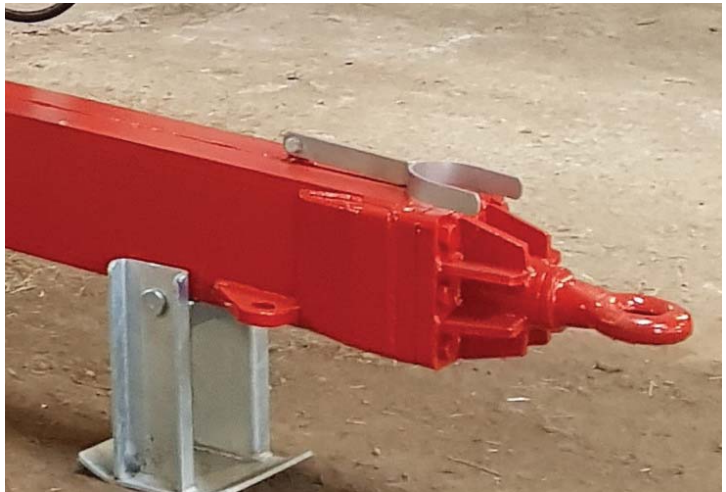
The Xcel is fitted with two floor tensioners at the front. These spring loaded tensioners allow the operator to manual tension the floor chains as required. A custom fit spanner is fitted alongside for convenient tensioning.

Hydraulic Drawbar

A hydraulic drawbar can be fitted as an optional feature to provide greater comfort on the road and in the field. Two hydraulic rams fitted with accummulators dampen any shock loading through the drawbar and ensure a smooth ride.

LED Lighting

The Xcel is fitted with automatic LED road-lights. As the slurry door is lifted, a galvanised cover will descend to protect the lighting. Once spreading is complete and the slurry door is fully closed will the lights be opened for road use.



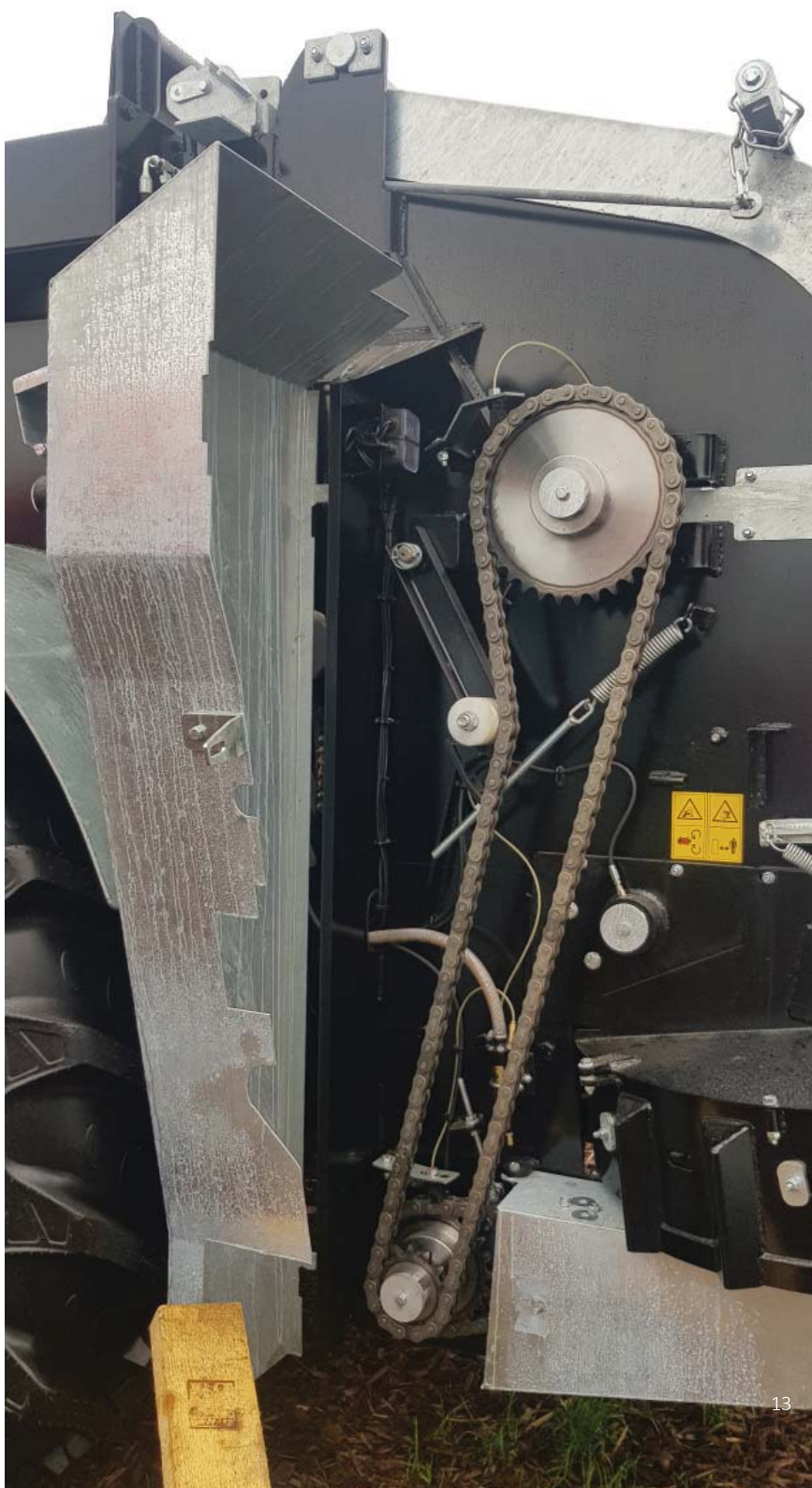
Driveline

The Xcel rotor is chain driven to eliminate additional gearboxes and power take-offs. The input from the tractor is carried all the way to the rear gearbox which is then used to drive the rotor. A simple chain and sprocket setup on the left side turns the rotor. An automatic chain oiler provides constant lubrication to the drive chain.

A simple tensioner ensures the chain is always kept tight and a galvanised cover protects from rotating parts. Maintenance is easy with an external grease bank for bearings.

Drawbar Hitch

The Xcel is fitted with a bolt on swivel ring hitch as standard. This allows a spoon hitch to be fitted in future. A spoon hitch will provide greater comfort and reduce wear as shunting will be eliminated.

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Weight and Control

The Xcel can be fitted with standard weighcells to display live weight. The Digistar GT400 display is mounted on the front of the spreader for easy viewing. As the spreader is emptying the display will correspond the live weight to the operator.

The Xcel can also be fitted with an in cab floor control. The electric dial allows the operator to reduce or increase floor speed during spreading for greater control.

RDS Apollo

The RDS Apollo regulation system works by constantly monitoring the load cells and provides information on forward speed, spinner speed, area, weight spread and live weight at the spreader. The 'target rate' is entered into the system and the application rate is controlled by a hydraulic control valve which sets the floor speed according to the set rate.

The Apollo system provides optimisation of application ensuring an even application rate across field at a wide range of forward speed. The fast acting control loop eliminates driver fatigue due to the fully automated control of the spreader. Traceability of product and application data can also be recorded in line with environmental agency protocols. The RDS apollo system can be supplied with separate monitor or plugged directly into the tractor ISOBUS.


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Headland Limiter

The Xcel can be fitted with an optional Hardox headland limiter to the rear to contain spreading close to water courses or boundaries. Due to the aggressive spread of the Xcel it is recommended to stay clear of boundaries when spreading. The headland limiter can be hydraulically lowered to allow the Xcel to spread adjacent to boundaries in a safe manner. It is also possible to lower the input speed of the pto to reduce spreading width.

The headland limiter will spread manure approximately the width of the spreader so it allows a generous layer to be applied in one pass.


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Unique Options

The XCEL is particularly suited to spread any material back to the land in a precise and efficient manner. The rotor chains and spinning discs pulverise the manure to ensure rapid breakdown into the ground. Depending upon the material and application HiSpec have additional options to suit.

Greedy Boards

The 600mm greedy boards are suited to lighter materials where the overall laden weight will not be too great. The greedy boards are bolted on, and extend around the full perimeter of the spreader. The greedy boards increase volume by an additional 5m cubed.

Power Washer

A self contained power washer with 400 litres of clean water allows you to clean down your machine anywhere. The power hose is hydraulically powered via the tractor. A lance and hose reel are also supplied to allow you to clean entirely.

Simply top up with fresh water as required. The water tanks are located between the wall buttresses and connected underneath to empty evenly. The power washer is ideal for applications where the spreader will need to be cleaned before re-entering the public road.

Model	Standard Tyre
XCEL 1250	580/70 R38

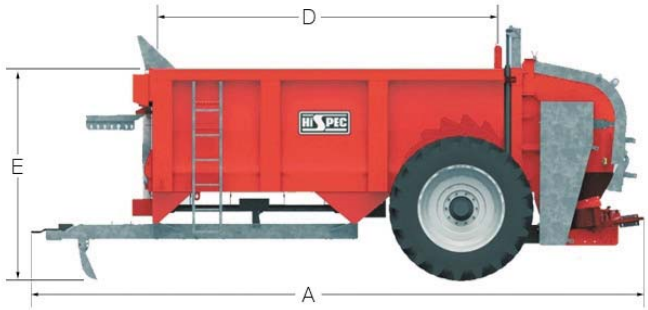
580/70 R38	650/75 R32	710/75 R32
575 (23") 1820 (72")	655 (26") 1790 (70")	716 (28") 1879 (74")
Load Index 180 A8 The high load index for the 580/70 R38 means a carrying capacity of 8,000kgs at 40kmph. The tractor grip provides excellent traction and promotes improved performance. Ideal tyre for standard spreading applications.	Load Index 172 A8 650/75 R32 are designed where flotation and reduced soil compaction are extremely important. The tyre design coupled with the large footprint guarantees heavy load carrying capacity at low pressure. The 650/75 R32 offers exceptional stability, handling and ride comfort.	Load Index 183 A8 The 710/75 R32 tyre ensures maximum flotation and low ground pressure. The high load rating is particularly suited to the spreader to allow large weights to be carried. Overall width is increased considerably so you will need to be mindful of this on public roads.

TECHNICAL

XCEL 1250 Spreader

Standard Specification includes:

50mm bolt-on swivel ring hitch, wide angle PTO, marine floor chains (x2), manual floor tensioning, gearbox floor drive, manual floor speed control, 22 marine beater chains c/w Hardox flail heads, enclosed Hardox hood, spinning discs (x2), 4 Hardox plated vanes, slurry door c/w height indicator, central greasing, commercial axle c/w hydraulic brakes, weighcell ready, 580/70 R38 tyres, automatic chain oiler, galvanised mudguards c/w LED road-light covers, red paint finish.



Model	Standard Tyre	HP		Floor mm	Wall mm	Rotor rpm		Length A	Width B	Height C	Body D	Loading E	Spread metres	Capacity tonne	Unladen kg
XCEL 1250	580/70 R38	180 HP		5	4	230		7750	3060	3085	4505	2250	24	12.5	6800

GET IN TOUCH

HiSpec is always striving to improve our products and we would love to hear your comments and receive your photographs of products in action through our social media pages.

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