

Abbey Machinery Slurry Equipment



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**Abbey Machinery
Slurry Tankers**



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& Agitation
Systems**



ABBEY
MACHINERY
since 1947

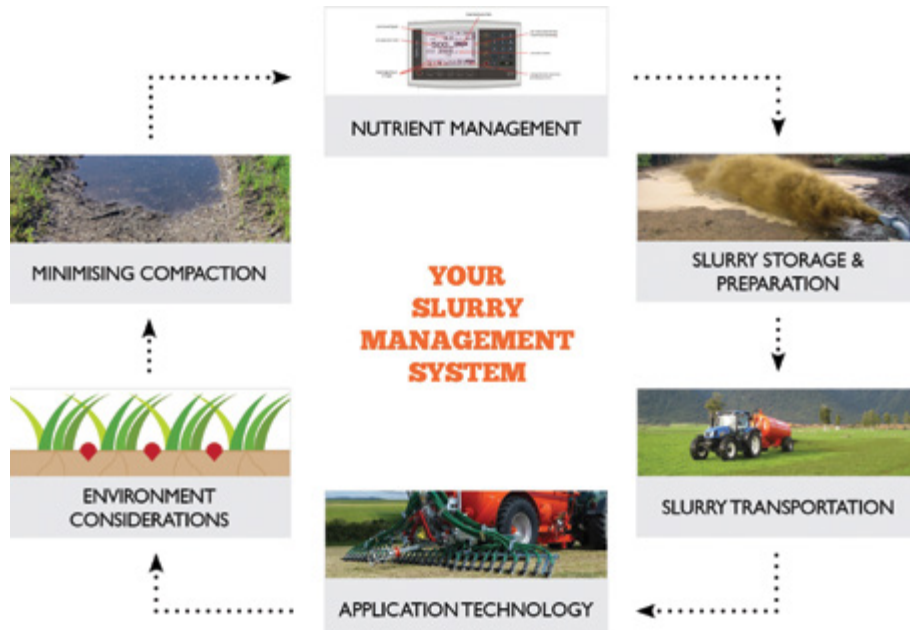
OUR BACKGROUND

Abbey Machinery is one of Ireland's largest, oldest and most respected manufacturers of agricultural equipment. Established in 1947, by the Cavanagh family, a family with a long tradition in agricultural engineering, that dates back to the 19th century.

SLURRY MANAGEMENT SYSTEM

Mature cows typically produce 1.5-2 tons of organic matter per month. The value of this organic matter is often overlooked. Attention to detail in the timing of slurry application, weather factors during spreading, soil type, soil fertility, field aspect, proximity to water courses, the quality of the slurry and the method of application are all important. Getting the most from slurry involves adopting the appropriate management and application strategies to optimise its nutritional value and minimise any harmful effects to the environment.

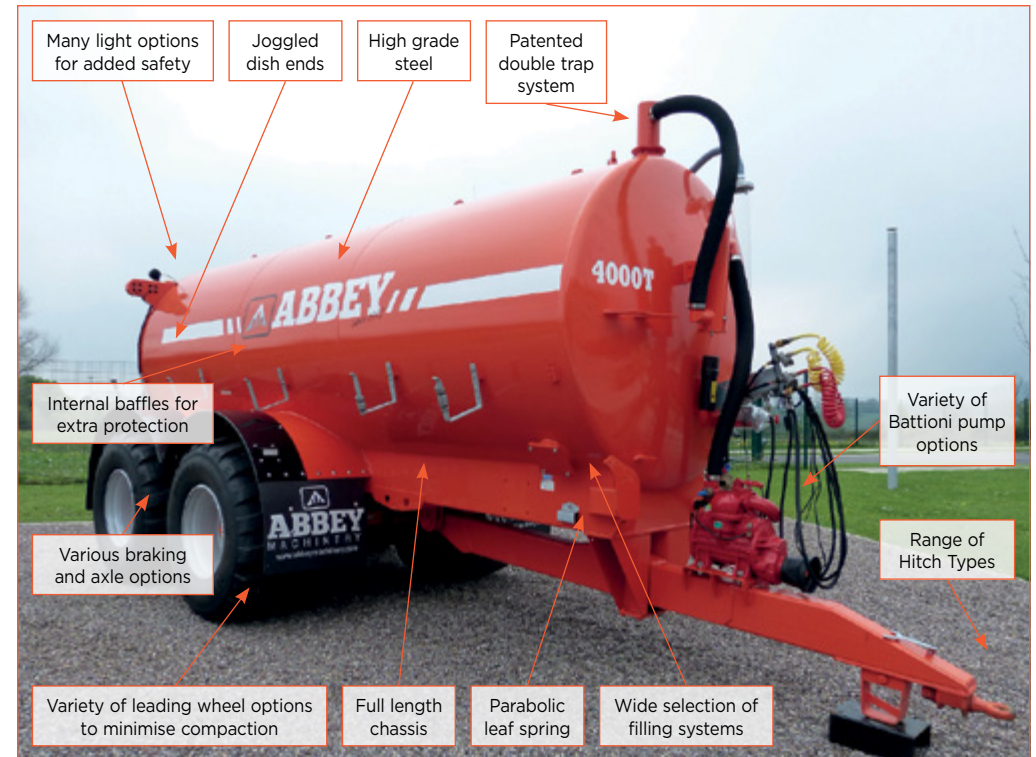
Abbey Machinery have developed their own unique **Slurry Management System**. This includes a six-step model that centres on slurry preparation, transportation, environmentally conscious application, minimal soil compaction, nutrient sensing and precision application. All designed to help farmers get the most from slurry and reduce fertiliser bills.



END-TO-END TECHNOLOGIES

Our machines are renowned for longevity, all with minimal maintenance while engineered to maximise user experience. Abbey Machinery have added a collection of smart technology to their equipment, including Multi-Stage Rapid Filling Arm, Application Flow Control and NIR Live Sensing of the nutrient value in the Slurry.

Our machines cater for the 'Total Cow' from one end to the other; Precision Diet Feeders, Grassland Toppers, Fertiliser Shakers support the front end of the cow. Environmentally friendly Slurry Application Technologies, Slurry Pumps and Farmyard Manure Spreaders support the rear end of the cow.



ABBEY TANKER RANGE



LIFE-LONG BENEFITS

Abbey Machinery has been at the forefront of slurry management systems for decades. Their machines use the latest Battioni pumps known for their high performance and reliability, deep chassis support, collared dish ends, double trap pump protection systems, top quality axles, brand leading tyres including BKT and Alliance with a variety of fast filling and emptying options.

Quality is at the centre of Abbey Machinery production. Machines can be custom built to support your exact farm requirements. Machines are built in a new state of the art manufacturing facility in Toomevara, Nenagh, County Tipperary, Ireland.

CHOOSING THE CORRECT TANKER MODEL AND APPLICATION SYSTEM

- 1 The total annual volume of slurry to be applied.
- 2 The Horse Power of the tractors available.
- 3 Distance of the slurry storage area to the fields.
- 4 Soil aspect - hilly or flat.
- 5 Soil type - clay, loam, sandy, heavy/light, etc.
- 6 Standard, Recess, Tandem or Tri-Axle models.
- 7 Crop to be fertilised and timing of application (stage of crop growth).
- 8 Country legislation compliance.

Abbey Machinery make a range of 37 Slurry Tanker models: Standard, Open Top, Recess Premium and Premium Plus, Tandem and Tridem tankers from 4,000 L (900 gal) to 27,000 L (6000 gal).

Machines are built for the most challenging tasks. Engineered for longevity they require low maintenance and are intuitive to use.

CUSTOMISATION

STANDARD TANKER RANGE

Standard Tankers range from 4,000L (900 gal) to 9,000L (2000 gal). Produced to the highest standards, Tankers include heavy duty barrels, collared dish ends (for improved barrel strength and support), Battioni Pagani pumps, heavy duty axles and patented double trap pump protection system. Tankers are completed with a variety of pump options, hydraulic brakes, LED lights, 50cm (20 inch) rear service door, hydraulically operated heavy-duty outlet, inverted spreading plate, complete 15cm (6 inch) fill point, 4.5m (15 ft) suction hose, two blanked-off fill points and one blanked-off with 5cm (2 inch) wash tap. There are a wide variety of optional extras to customise your Tanker available.



SUPER SD TANKER RANGE

Tankers range from 7,200L (1600 gal) to 9,000L (2000 gal) with all of the benefits of the Standard Tanker range combined with a unique parabolic weight sensing multi leaf spring for unrivalled comfort when towing the tanker on the road or in the field. Providing much smoother travel and reducing the transfer of stress and shock on both the tractor and tanker.



OPEN TOP TANKER RANGE

Abbey Machinery's Open Top Tanker range is a popular choice among many users. It is a non-pressurised tank which is filled through a hopper shaped opening at the top of the tanker. The machine delivers slurry via a PTO driven impeller through a swan neck and splash plate to distribute it evenly across the ground. Sizes range from 5,000L (1,100 gal) to 11,250L (2,500 gal).

RECESS TANKER PREMIUM RANGE

These machines accomplish the most challenging tasks, are engineered for a long life and are easy to use. From 7,200L (1600 gal) to 9,000L (2000 gal) these tankers provide class leading technologies, which include full length chassis construction, weight sensing sprung drawbar and anti-movement internal baffles (for improved barrel strength and reduced surging of liquids in the tanker during transport).

The Recess Tanker Premium comes on 28.1 x 26 wheels and includes lights on front mud guards and DM Band Spreader ready.



Model number refers to approximate capacity of cylinder before recessing. Some tanks, especially larger models and those with attachments may exceed the permitted axle weight by law in your local jurisdiction. You are strongly advised to check with your local licensing authority.

RECESS TANKER PREMIUM PLUS RANGE

The Abbey Premium Plus Recessed Tanker range is engineered using class leading specifications. Recessed with 28.1R26 or 30.5R32 wheels, depending on model, full length chassis support, parabolic weight sensing multi-leaf sprung drawbar, patented double trap system and collared dish ends - which give additional support to the cylinder for a longer Tanker working life. This market leading Recess Tanker is recognised as one of the best-balanced Tankers on the market due to extremely low ground pressure, excellent turning ability, low diesel consumption and requires surprisingly low horsepower for towing. The combination of multi leaf spring suspension, full chassis support, integrated axle and internal tank baffles fortify Abbey Machinery's position as the leading Tanker manufacturer.

Complete with a variety of pump options, hydraulic 420 x 180 brakes, LED lights, 60cm (24 inch) rear door, hydraulically operated heavy-duty outlet, inverted spreading plate, complete 15cm (6 inch) fill point, 4.5m (15 ft) to 6m (20 ft) suction hose (depending on the model size), one blanked off fill point, one 5 cm wash tap, 2 x quick attachments, lights on front mud guards and DM Band Spreader ready. There are a wide variety of optional extras available.

TANDEM TANKER RANGE

Abbey Machinery offer two different Tandem Tanker ranges, which include Tandem and Tandem Recess Tankers. The Tandem Tankers range consists of six models with sizes ranging from 2250 gal to 4500 gal and the Tandem Recess Ranger consists of four models with sizes running from 3000 gal to 4500 gal.

The Tandem Tanker range are built standard with a self-steer Bogie system, Parabolic Weight Sensing Sprung Drawbar, MEC 11,000 Pump, Hydraulic 420 X 180 Brakes with 120 sq. Axle, LED Lights, Side Amber Lights, Power Brake System, Rear Hydraulically Operated and include Heavy Duty Outlet Valve, Inverted Spreading Plate, One Blank Fill Point with 2" Wash Trap, Two complete Quick Attach Fill Points, 24" Rear Door & Mudguards, One Front Blank fill Point, 20ft of 6" Suction House and a DM Band Spreader Bracketry. Excluding the 2250T & 2500T which come with non-steering bogie as standard and 2250T which has a rigid drawbar.



TRIDEM TANKER RANGE

The Tri-Axle Tanker range is ideal for high output haulage well suited for the contractor and large-scale farmer market. The range consists of 6 models with sizes ranging from 15,750L (3500 gal) to 27,000L (6000 gal). This tanker range is provided as standard with steering axles front and rear and can have optional forced or self-steering systems. As with the Tandem range the Tri-Axle range has class leading qualities which include, full length chassis construction, weight sensing sprung drawbar and anti-movement internal baffles. All Tri-Axle Tankers are constructed with the barrel mounted onto a full length independent folded chassis design providing additional strength to the machines.

Comes complete with a variety of pump options, air/hydraulic 406 x 180 brakes (with load sensing included on air only), LED lights, 60cm (24 inch) rear service door, hydraulically operated heavy-duty outlet, inverted spreading plate, power breakaway system, side-amber lights, complete 15cm (6 inch) fill point, 6m (20 ft) suction hose, one blanked off fill point, one 5 cm wash tap, 2 x quick attachments, lights on front mud guards and DM Band Spreader ready. There are a wide variety of optional extras available.



RANGE OF SPECIFICATIONS

PUMP SYSTEMS

A wide choice of vacuum pumps is available depending on the tanker size, material to be spread and working conditions. Abbey Machinery source their pumps from Battioni Pagani, a global leader in pump design and manufacturing since 1953.

ROTARY BLADE VACUUM PUMPS - 9,000L, 11,000L, 13,500L

These come complete with long life blades, crash protection system, forced lubrication, external oil level indicator, side outlets, exhaust elbow, 4-ways valve and check valve.

BALLAST PUMPS

The Ballast Pump is a heavy-duty pump available for all Garda and Garda EVO pumps. It has increased structural resistance, reduced weight and size, newly designed high-performance air injection cooling system which enables continuous operation at low temperatures and at 70% range of vacuum. This allows longer running times at maximum vacuum (95%) as well. A 'Crash Protection System' is a sliding flange protection mechanism that prevents the housing or rotor breaking. The pump can easily be repaired cost effectively in the field.

SPEED OF OPERATION

CENTIVAC PUMPS

MEC 9,000L, MEC 11,000L, MEC 13,500L Centivac Garda 75 pump systems are available. Centivac pumps can be used to discharge slurry a distance away from the Tanker via the rain gun or when linked to an umbilical system.

TURBO EVO PUMPS

Garda Turbo Evo pump reduces filling time by 25%, spreading times by 45% and increases spread widths by 50% using high pressure spreading techniques. Not only does it fill the tank faster, but its unique impeller chops the slurry as it fills the tanker and also chops the slurry as it goes to the distributor or spread plate at the rear of the Tanker. Tanker filling time is significantly reduced, while also getting a higher fill level. Enables more loads to be filled and emptied, so the operator maximises their time and reduces load turnaround times.

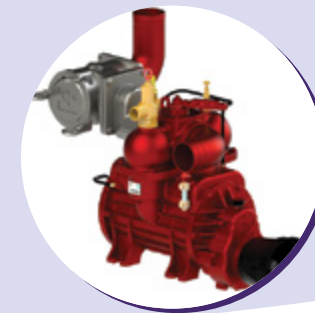
PUMP SILENCERS

There are two systems available.

- **Dust Filter** which primarily reduces the airborne dust particles from entering the vacuum pump to extend the life of the vacuum pump in dusty environments.
- **Noise Reduction Silencer** which is primarily positioned to reduce and remove noise from the vacuum pump area of operation.

HITCHES

The hitch is the connection point between the tanker and the tractor. It is a key safety area. Abbey Machinery offer an array of hitch options: **Ring Hitch**, **Swivel Ring Hitch** and **Spoon Hitch**.



LOW LABOUR OPTIONS

FILLING SYSTEMS



TANKER FILL POINTS

There are 4 fill point possibilities direct with suction hose to the Abbey Tanker. A new trend is 2 x 6" (150mm) fill points side by side which results in very rapid filling.



HYDRAULIC CHANGE OVER

Hydraulic change over eliminates the need to exit the cab to engage the pump.



6" (150MM) & 8" (200MM) SELF FILL ARMS

150mm (6 inch) & 200mm (8 inch) loading arms that fold down and fill through a hopper, with the suction hose going from the hopper into the slurry.

It allows for filling without having to leave the cab of the tractor, allowing more loads to be spread per day.

BI-DIRECTIONAL ARM

Ultimate versatility, in that the filling arm can lower to the left or right which means you can fill through an auto fill hopper at either side of the Tanker.



TURBO FILLERS

Tanker filling time is significantly reduced, while also getting a higher fill level in the tanker. Enables more loads to be filled and emptied so the operator maximises their time and reduces load turnaround times. Improves filling times by as much as 35%.



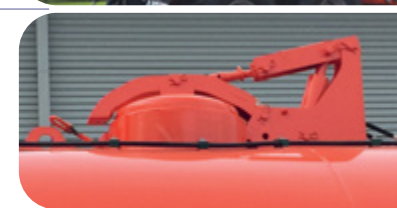
OVER HEDGE BOOM ARM WITH HOPPER

Ideal for loading field tankers with Top Fill Hatches. Rotates 270° allowing it to unload at both sides of the tanker.



TOP FILLING HATCHES

These hatches enables the Tanker to be filled through the top opening from an independent pump filling system. Options include **Manual Top Hatch**, **Hydraulic Top Hatch** and **Sliding Top Hatch**.



MULTI STAGE ARM

200mm (8 inch) filling arm sits neatly at the front of the slurry tanker, with 90% reduction in manual handling of heavy hoses. Its unique modular assembly makes it extremely versatile with various options available.

- Robust construction.
- It has a two-stage operation.
- Very easy to manoeuvre to the correct filling locations.
- Filling versatility - Abbey hoppers; high or low transport tanker hoppers; open slurry pits and underground storage areas.

- Hydraulic Turbo Fill options.
- Transport features include locking pin.
- Grouped functions includes gate valve, pump, change over and vent valve.

Reach	2.6m
Max Reach Vertical Suction	1.75m
Max Overall Reach	3.3m
Max Suction Depth	3m
Max Transport Height	3.8m
Gross Weight	558kg

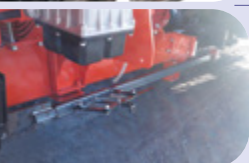




LIGHTS - Visibility is key to safety. It is very important that local road laws in terms of lighting are adhered to - **Side Lights, Rear Lights, Flashing LED Beacons** and **Work Lights** are available.



BRAKING SYSTEMS & AXLES - The brakes are activated by air or hydraulic pressure. Air hydraulic brakes auto load sensing is available as an option.



FORCED STEERING - This independent forced steering system links the Tanker steering system to the tractor, allowing steering in forward and reverse travel directions.

HYDRAULIC LOAD SENSING - On specific hydraulic systems, hydraulic load sensing (or power beyond) makes sure oil flow is provided as needed. This is a more power and fuel-efficient hydraulic system, providing oil on demand.



WHEELS - Wheel choice is critical for the safe use of the Tanker in the field and on the road. Choice of wheel is impacted by tanker size and type, quantity of road to field work to be carried out, field type, soil type and crop type. The wheels carry the weight of the load, so always abide by the appropriate manufacturers tyre pressure.



TANDEM TANKER SUSPENSION - Fitted with a robust self-steering multi-leaf spring bogey. It provides optimum weight distribution, stability and comfort and also enhances the tanker maneuverability. Spring sets are also available. There is the choice of forced steering systems which impact maneuverability, wear and tear and safety.



SPECIALIST TANKERS



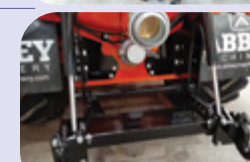
LAND MANAGEMENT SYSTEM - When emptying a Tanker on hill-side locations, emptying the Tanker fully can sometimes be a challenge. Abbey Machinery's land management system has a unique pipework configuration in the front of the Tanker allowing the Tanker to fully empty when going downhill.

HEAVY DUTY LINKAGE - When adding heavier applicators to the rear of the Tanker, Abbey Machinery has an option to upgrade to the chassis for additional support along with heavy duty linkage.



INTERNAL WHISK - Internal paddle whisk that agitates slurry while in transport, with a hydraulic drive to keep the product liquid, in suspension and prevents materials sedimenting at the base of the tanker. All the slurry is stirred and the dry matter remains in suspension in the Tanker. This allows the Tanker to be completely emptied when spreading.

REAR HYDRAULIC LINKAGE - The linkage allows for the quick release and disconnection of the applicator from the linkage, leaving the rear mounted hydraulic linkage frame available to recouple to another Abbey applicator system when needed.



DUST SPRINKLER SYSTEM - Sprinkler system at the rear of the tanker. Ideal for dust suppression, road work and extending the volume of liquid spread from the tanker.

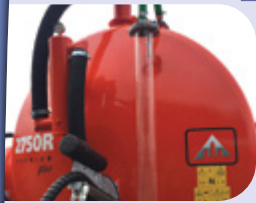
VOGELSANG INLET CHOPPER - Rota-Cut inlet chopper fitted with stone trap housing and quick attach 6" valve. Ideal to rapidly chop fibrous material as it enters the Tanker to better prepare the slurry for spreading through an Applicator.



WEIGHT TRANSFER SYSTEM - Abbey Machinery have developed a system with an internal partition that retains sufficient liquid in the front part of the tank. This weight transfer has a major effect on the hitch and increases the tractor traction, especially on hilly ground. The internal wall in the tank is positioned in order to spread enough weight to the front part of the Tanker. The slurry at the rear of the Tanker is forced to empty first and then the front compartment empties last. When the slurry reaches the level of the internal flap, the liquid in the front compartment flows into the rear compartment. When filling, both compartments of the Tanker are filled at the same time.

APPLICATOR MOUNTING BRACKETRY - Recess Tankers are DM Band Spreader Bracketry ready. Tri-App Trailing Shoe ready bracketry includes moving the rear access door to the side. Stone Trap with Bauer Coupling. Lower and upper mounting brackets. Top flange blanked-off. Vertical Trailing Shoe ready bracketry includes moving the rear access door to the side. Stone Trap with Bauer Coupling. Lower and upper mounting brackets. Top flange blanked-off.





LEVEL INDICATORS - Sight Glass to indicate the end of filling. 100mm Front Level Indicator to show the volume of slurry when the tanker is filling and emptying. 75mm and 100mm options available.



MUD FLAPS - Branded front and rear mud flaps options which provide additional tanker hygiene.



CENTRAL GREASING BLOCK - Now available on Tandem Tankers is a central greasing block. This helps to simplify maintenance, lengthen working life and make the Tanker more reliable.

TOOL BOX - Keeping all your support materials for spreading in one place, helps give great peace of mind. Plastic or metal tool box options available.



WASH TAP - Wash tank and tap for hand hygiene on the go.

STONE TRAP - Stone trap with bauer coupling. Located at the base of the Tanker at the rear below the barrel of the Tanker to catch any unwanted stones and other debris.



DOOR OPTIONS - To facilitate internal maintenance, Abbey Machinery equip their tankers with large doors assembled on hinges. There is also the option of a fully opening rear door on some tanker sizes.



TANKER ELECTRICS



DIVERTER - Provides a simple solution to reduce the number of tractor hydraulic services needed to power multiple functions on a tanker.

TOGGLE SWITCH CONTROLLER - An electrically operated control system for tanker hydraulic functions via a non load sensing valve bank and simple switch box.



FULL ELECTRICS - An electronically controlled multi-screen system for tanker hydraulic functions, powered via a filtered, load sensing hydraulic system. Automated features like head land U-turns are available on request.

FLOW CONTROL - Accurate application control, precision spreading and significantly improved use of the slurry. Options include:

- Flow monitoring to monitor slurry flow (in cab monitoring of the m³/ha discharge rates).
- Flow metre to control slurry flow (in cab control of the m³/ha application rate using target rate. Manual control also available).
- Flow monitor to monitor slurry flow (displays application rate), in cab monitoring of the m³/ha application rate, allowing forward speed matching.



NIR SENSING - Abbey Machinery's latest technological development uses near-infrared (NIR) technology. A light beam within the NIR sensor is directed into the slurry pipe. Some of the light is absorbed by the liquid, while the reflected part is captured by the sensor. Thousands of readings are taken each second are relayed to a processor computer to determine the live N, P, K and DM content of the slurry.

One benefit of Abbey Machinery's NIR sensor is to allow farmers to know exactly how many kilogrammes of nitrogen, potassium or phosphate have been applied to their land (site-specific when combined with a GPS system), which helps to reduce artificial fertiliser inputs. Its precision technology at its best.



LOW EMISSION SLURRY SPREADING TECHNOLOGY

Liquid manure is a natural source of nitrogen, potassium, phosphorus, organic matter and minerals. Achieving even slurry application regardless of weather conditions, crop type and date are critical. Distributing the slurry below the crop canopy instead of on the crop foliage has significant benefits including 91% reduction in smell and up to 90% improvement in nitrogen retention.

LOW EMISSION SLURRY SPREADING (APPLICATOR) BENEFITS

- Reduce purchased fertilizer costs.
- Shorter grazing cycle between slurry application and grazing.
- Reduced nutrient loss from the slurry to the atmosphere.
- Reduced gaseous emission (ammonia) to the atmosphere.
- Evenness of slurry application.
- Reduced smell during application.
- Better use of the slurry
- More precise application of the slurry.



TEAGASC TRIAL ON VARIOUS APPLICATION TECHNIQUES

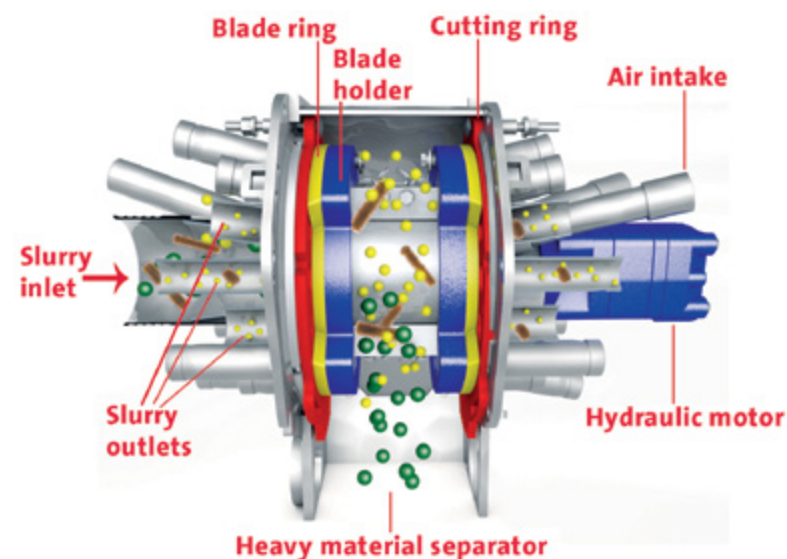
In April 2019, Teagasc (Irish Agricultural National Research and Advisory Body) carried out trials on various Application technologies and their impact on pasture growth. Grassland was fertilised using Abbey Application Technologies with 33m³ per hectare of slurry via inverted splash plate, Abbey Vertical Trailing Shoe and Abbey Dribble Bar.

- 7 days later the field was analysed and the splash plate applied area still had foliar contamination of slurry, whereas the other two application methods had no foliar contamination (with the Abbey Vertical Trailing Shoe being the best).
- 30 days later the yield was measured: splash plate area 1200kg DM/ha; Dribble Bar area 2100kg DM/ha; Vertical Trailing Shoe area 2285kg DM/ha. There was 90% retention of nitrogen in the Vertical Trailing Shoe area and this resulted in 90% more grass than the Splash Plate area. This is a win-win situation for the farmer and the environment.

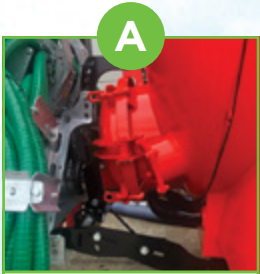
	Grass	Cereals	Stubble	Vegetables
DM Band Spreader	Yes	Yes	Yes	Yes
Tri-App Applicator	Yes	Yes	Yes	Yes
Vertical Trailing Shoe	Yes			
Shallow Disc Injector	Yes			
Cereal Applicator	Yes	Yes		

VOGELSANG EXACUT DISTRIBUTOR

Vogelsang are renown globally for their precision distribution systems used for both agricultural and industrial applications. The rotation of the sharp blades against the steel plates accurately cuts and spreads the materials out through the ports to the distribution pipes giving very even application. Its unique design ensures the liquid manure is reliably applied to the field quickly and precisely. The counter-weight provides extremely smooth operation, it has superior cutting and distribution performance, it is wear-resistant, has low power requirement and the eccentric adjuster ensures optimal contact pressure for efficient cutting performance.



DM BAND SPREADERS



A
Extensive brackets to support the applicator on the tanker



B
Rear lights for added safety



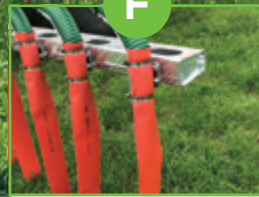
C
Vertically folding booms for safe transport on the road



D
Exact distributor to chop & evenly distribute slurry



E
30 x 40mm unrestricted pipes to aid in prevention of blockages



F
Lay flat hosing



Many farmers would like to apply slurry with an applicator but are limited with the absence of bracketry on the Tanker. Abbey Machinery's Door Mounted (DM) Band Spreader overcomes this challenge with an extra strong bracket on the rear door of Tankers with 50cm (20 inch) and 60cm (24 inch) doors. In addition, there are brackets on the base connected to the chassis to extend working life. At just over 600kg it is strong without adding surplus weight to the Tanker.

KEY FEATURES

- Strong build and fully galvanized for longer working life.
- Applicator is mounted close to the Tanker for maximum weight transfer to the tractor hitch.
- Connected to the rear door of the Tanker, with additional supports to the chassis.
- Lay flat hosing.
- Vogelsang ExaCut distributor to prepare and present the slurry evenly to each pipe.
- Unrestricted 30 x 40mm pipes.
- 7.5m booms.
- Vertically folding booms.
- Rear lights for improved visibility.

KEY BENEFITS

- Distributes the slurry below the canopy of the crop.
- Reduced ammonia losses and reduced odour during application.
- Less smearing of grass, so shorter rotation length.
- Longer spreading window.
- Lower disease transfer.

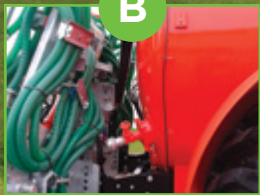


Size	Hp Required	Minimum Working Height	Gross Weight	Maximum Transport Width	Maximum Height Rigid Mounted	Maximum Height if Mast Mounted	Exacut Distributor
7.5m	75Hp	150mm	615kg	2.62m	3.35m	3.65m	Standard

TRI-APP TRAILING SHOE APPLICATORS



A
Hydraulic mast to allow easier lowering while in the field and easier to detach Tri-App from the tanker



B
Heavy Duty linkage from chassis of tanker for extra support



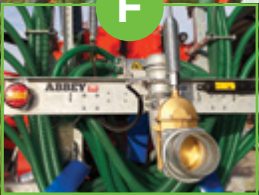
C
Auto-reverse fitted as standard - distributor automatically reverses to prevent blockages



D
Applicator ready brackets includes moving the rear access door to the side of tanker and stone trap



E
Trailing boots and bolt on steel tips for soil engagement



F
Splash plate assembly



G
Stone trap to easily remove any foreign objects from the Distributor



H
Vogelsang Exacut effortlessly chops and distributes evenly through all 30 pipes



I
125mm (5") pipe at a 35 degree bend for rapid emptying of the tank



N
Lights for added visibility



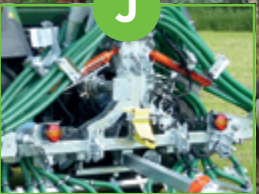
M
Hinging points for optimum flotation and protection



L
Manual change over to optimise working life of the blades



K
Booms fold up close to the tanker for optimum drawbar weight, minimising tail spin



J
Linkage for Umbilical arm (A-Frame) is an optional extra



The Tri-App Trailing Shoe System is a revolution in slurry application technology, combining Dribble Bar, Trailing Shoe and Umbilical ready into one machine. It can be linked to a tanker via fixed mounting or with a Hydraulic Mast (complete height adjustment, easy detachment from the tanker and easy height adjustment in the field). It also is possible for it to be mounted directly on the back of a tractor to run with an umbilical system.

The Tri-App Trailing Shoe System offers lightweight construction with robust design to ensure maximum durability and working life. The Tanker mounting has been optimised to reduce the overhang and minimise the weight of the applicator on the back of a Tanker, ensuring optimum hitch weight for traction.

Fitted with 30 x 40mm heavy duty durable hose, the system is uniquely designed with no internal hose restrictions at hose joints ensuring that there are no slurry restrictions to the flow from the Vogelsang Exacut macerator to the ground. The double pivot, three section boom allows the outlets to follow the ground contours individually, when travelling forward, protecting the frame from uneven ground.

7.5M APPLICATOR

- Individual floating sections.
- 40mm hosing.
- Forward folding boom, individual folding rams.
- Capacity to carry a rear mounted 600m reel.
- Machine rigidly mounted.
- Galvanised for longer life.
- Vogelsang Exacut distributor with Auto Reverse and manual change-over.
- Rear mounted splash plate.
- Light weight construction.
- LED lights.
- Splash plate.

OPTIONAL EQUIPMENT

- Umbilical Arm.
- Trailing shoe points.
- Mast mounted machine.
- Electric Hydraulic Controls.

TANKER MOUNTING

Both the mast and the fixed mounting option offer greater overall balance, due to the close coupling of the Tri-App to the Tanker. Optional hydraulic mast allows greater flexibility for de-mounting the Tri-App from the Tanker and also to raise and lower the Tri-App Trailing Shoe when in use in the field.



Size	Hp Required	Min. Working Height	Gross Weight	Max. Transport Width	Max. Height Rigid Mounted	Max. Height Mast Mounted	Exacut Distributor	Umbilical Arm	Auto Reverse Valve	Replaceable Trailing Points
7.5m	73Hp	100mm	800kg	2.65m	3.66m	3.97m	Standard	Optional	Standard	Optional

VERTICAL TRAILING SHOES

The ultimate in precision application technology. The heavy-duty frame is completely galvanised and has been engineered for maximum working life. Unique 6-point-linkage for optimum flotation on the ground. These include two outer rams and a central ram, with an accumulator.

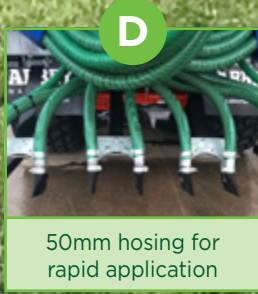
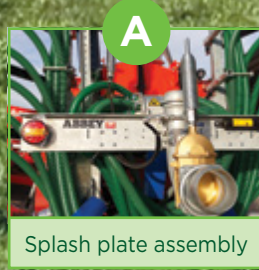
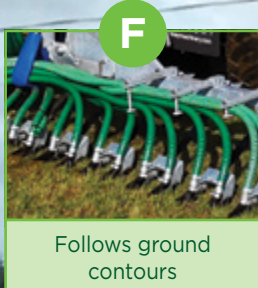
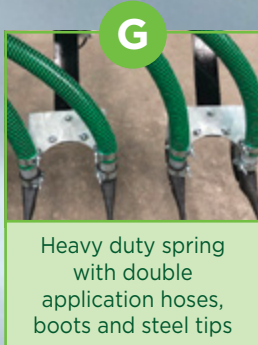
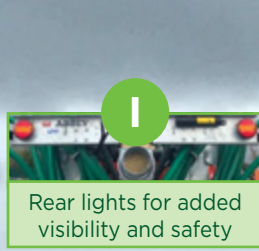
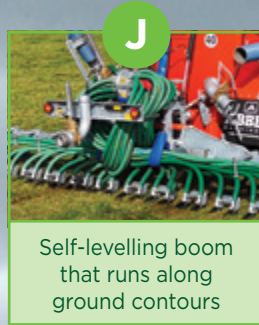
50mm hosing has high silicone content for extended durability. World renown direct porting pulsating Vogelsang Exacut Distributor. Trailing Shoes are standard with auto reverse and manual change over.

Heavy duty springs double mounted with rubber boot and steel coulter. Their design leaves the slurry in discrete lines on the soil, below the crop canopy. Self-levelling boom that adjust to the ground contours.

Size	Overall Working Width	Overall Transport Width	Shoe Spacing
6m & 7m	6m & 7m	2.6m	0.25m

Application ready includes Heavy Duty Brackets, supports to the Chassis, door moved to the side and stone trap.

- 6m and 7m options.
- 24/28 x 50mm Outlets.
- 50mm hosing.
- Vogelsang ExaCut Distributor
- Auto reverse function in macerator.
- Sprung Legs.



SHALLOW DISC INJECTORS



A
Self-levelling boom to adjust to ground contours



E
Auto-reverse fitted as standard - distributor automatically reverses to prevent blockages



B
Heavy duty discs are ideal for grassland applications



C
Discs on heavy duty chassis



D
Slurry delivered into the ground in lines

Ideal applicator to spread slurry on pasture ground to capture even more of the nitrogen in the slurry. The shallow discs create discrete lines in the soil for the slurry to flow more rapidly into the soil. Fully galvanised unit that is built using a heavy-duty frame.

STANDARD EQUIPMENT

- Fully galvanised.
- 50mm piping.
- Direct porting pulsating macerator including auto reverse and sequencing valves.
- Discs on independent axes.
- Self levelling boom to adjust to the ground contours using 4-point linkage.
- Road lights.

ADVANTAGES

- Even application across the width of spread.
- Reduced odour.
- Reduced N loss.
- Reduced smearing of grass.
- Extended application season.
- Tanker or tractor mounted.
- Improved fertiliser value.

SPECIFICATION

	4m	5m	6m
Overall Working Width	4m (13' 1.5")	5m (16' 4.5")	6m (19' 8")
Overall Transport Width	2.6m (8' 7")	2.6m (8' 7")	2.6m (8' 7")
Boot Spacing Distance	0.25m (10")	0.25m (10")	0.25m (10")



CEREAL APPLICATORS

Range of Applicators from 12-36m. Ideal for cereal and other crop applications. Have all the benefits of low emission slurry spreading.

Ask your local Dealer or your Abbey Representative for more Information.

BENEFITS OF AGITATING SLURRY

Abbey Machinery's engineering team have developed a fleet of slurry agitation pumps designed to operate under the toughest conditions. Mixing slurry into a homogenous mix (liquids and solids) helps to develop the very most from the nutrients in the slurry as N, P and K settles in the tank. It is only through the agitation process that these nutrients are blended into the homogenous mix.

TORNADO PUMPS

- Quick attach linkage.
- Hydraulic positioning.
- No need to remove PTO points between slurry pits.
- Locking device on top fill models for better mixing.
- Increased manoeuvrability for easy manhole access.
- Impeller design facilitates rapid mixing.
- Facilitation for PTO attachments.
- Bolt-on options easily attached.
- Easy access to gearbox and driveline.
- Wide angle rotation and uninterrupted performance of the jetter nozzle, maximising under surface agitation and mixing.

FEATURES

- Fully galvanised to extend working life.
- Shear bolt protection on all models.
- Heavy duty gear box for toughest working conditions.
- Self-lubricating cylindrical rubber bearing supports impeller.
- High quality steel shafts used.
- Tornado 5000 and Rapid models have high output impellers.

SLURRY SAFETY

The first 30 minutes tend to be the most high-risk period when agitating slurry. Agitation is best carried out on a windy day to better disperse slurry gasses. Agitation points should be outside the building, all doors should be open, and animals and children should be kept away.

MACHINE SAFETY

- Robust platform with rough surface to significantly reduce slippage.
- Body protection frame and handles are standard on all models.
- Safety grid.



RAPID PRO PLUS

- High output impeller.
- 150mm (6") feed to Jetter Nozzle.
- Fast lower link hitching (no stand legs to set).
- Tilt ram lock with check valve for extra stability.
- Telescopic height adjustment.
- Finger-tip flap adjustment possible at full pump output.
- High speed optional gear box available with HD shaft.
- Rugged body design to extend life.
- Increased durability on hinged points.
- Increased flexibility with left side operation.
- Large drive lines to cope with increased demands.
- Increased access to lower housing.



PUMP SPECIFICATIONS

	HP Requirements	Quick Attach Bar	Hydraulic Top Link	Linkage	Overall Depth	Large Base High Output	Number of Hydraulic Rams
Tornado 3000	75+	✓	✓	3-Point Linkage	2.24m		1
Tornado 4000	100+	✓	✓	3-Point Linkage	2.24m		1
Tornado 5000	120+	✓	✓	3-Point Linkage	2.24m	✓	1
Rapid Plus	150+	✓		2-Point Linkage	2.24m	✓	2

OPTIONAL EXTRAS

- 9ft models available
- 5" and 6" top fill valves
- 5" and 6" bends with jetting nozzles
- Hydraulic flaps
- 125mm (5 inch) and 150mm (6 inch) 90-degree bends
- Hydraulic Height adjustments on Tornado models



ABBEY MACHINERY TANKERS DATA SHEET

Model	Approx Capacity m ³	Approx Capacity gl	Dished End Size inch	Barrel length m	Overall Width mm	Overall Width imperial	Approx. Overall Height mm (18" hook)	Overall Length mm	Pump Capacity L/min	Standard Hose Length m	Sprung Drawbar	Back Door Size inch	Turning Circle m	Unladen Weight kg	Wheel Size STD	Alternative Wheel Options Overall Width mm		
STANDARD RANGE																		
900	4086	900	54	2.5	2230	87.8"	2480	5100	9000	4.58	N/A	20	3.580	1500	400R22.5			
1100	4994	1100	54	3	2230	87.8"	2500	5400	9000	4.58	N/A	20	3.970	1600	400R22.5			
1300	5902	1300	60	3	2500	87.8"	2810	5400	9000	4.58	N/A	20	3.970	2100	550/60x22.5			
1600	7264	1600	60	3.66	2530	99.6"	2870	6200	9000	4.58	Optional	20	4.500	2400	550/60x22.5			
2000	9080	2000	68	3.66	2530	99.6"	3130	6200	9000	4.58	Optional	24	4.500	2600	550/60x22.5			
PREMIUM RECESSED RANGE																		
1600	7264	1600	60	3.66	2540	100"	2940	6800	9000	4.58	Standard	20	4.352	2610	28.1 x 26			
2000	9080	2000	68	3.66	2540	100"	3240	6830	9000	4.58	Standard	20	4.352	3240	28.1 x 26			
PREMIUM PLUS RECESSED RANGE																		
1600R	7264	1600	60	3.66	2540	100"	2980	6875	9000	4.58	Standard	20	4.590	2810	28.1 x 26	30.5(800)	900/60	2610 NA
2000R	9080	2000	68	3.66	2540	100"	3200	6965	9000	4.58	Standard	24	4.590	3440	28.1 x 26	2610 NA		
2250R	10215	2250	68	4	2540	100"	3200	7320	11000	6.10	Standard	24	4.940	3700	28.1 x 26	2610 2700		
2500R	11350	2500	72	4	2610	102.75"	3300	7320	11000	6.10	Standard	24	4.940	4000	30.5R32	2610 2700		
2750R	12485	2750	72	4.5	2610	102.75"	3300	7795	11000	6.10	Standard	24	5.020	4580	30.5R32	2610 2700		
3000R	13620	3000	72	4.83	2610	102.75"	3300	8125	11000	6.10	Standard	24	5.180	4680	800/65R32	2610 2700		
OPEN TOP RANGE																		
1100	4994	1100	54	2.5	2230	87.8"	2527	5000	N/A	N/A	N/A	N/A	3.640	1500	400R22.5			
1300	5902	1300	60	3	2490	98"	2650	5000	N/A	N/A	N/A	N/A	3.700	2000	550/60x22.5			
1600	7264	1600	60	3	2530	99.6"	2650	5600	N/A	N/A	N/A	N/A	4.300	2300	550/60x22.5			
2000	9080	2000	68	3.66	2530	99.6"	2870	5600	N/A	N/A	N/A	N/A	4.300	2500	550/60x22.5			
2250R	10215	2250	68	4	2490	98"	3150	6000	N/A	N/A	Standard	N/A	4.450	3700	28.1 x 26			
2500R	11350	2500	72	4	2580	102"	3300	6660	N/A	N/A	Standard	N/A	4.940	4000	30.5R32			
TANDEM RANGE																		
2250T	10215	2250	72	4	2650	108.3"	3405	7485	11000	6.10	N/A	24	4.500	4100	550/60x22.5	710/50	650/55	550/60
2500T	11350	2500	72	4.5	2650	108.3"	3405	7885	11000	6.10	Standard	24	4.500	4800	550/60x22.5	NA	NA	2750
3000T	13620	3000	72	4.83	2650	104.3"	3405	8200	11000	6.10	Standard	24	4.500	5000	550/60x22.5	2910	2850	2650
3500T	15890	3500	78	5	2650	104.3"	3560	8325	11000	6.10	Standard	24	4.500	5400	550/60x22.5	2910	2850	2650
4000T	18160	4000	78	5.66	2660	104.7"	3560	8975	11000	6.10	Standard	24	5.050	5700	560/60R22.5	2910	2850	NA
4500T	20430	4500	78	6.25	2850	112.2"	3615	9660	11000	6.10	Standard	24	5.050	6500	650/55R26.5	2910	2850	NA
TANDEM RECESSED RANGE																		
3000RT	12700	2800	72	4.83	2660	104.7"	3385	8190	11000	6.10	Standard	24	4.500	6500	650/55R26.5	800/45R	710/50	650/55
3500RT	15000	3300	78	4.83	2660	104.7"	3550	8320	11000	6.10	Standard	24	4.500	7600	650/55R26.5	2940	2760	2660
4000RT	17250	3800	78	5.66	2660	104.7"	3550	8970	11000	6.10	Standard	24	5.050	7500	650/55R26.5	2940	2760	2660
4500RT	19500	4300	78	6.25	2660	104.7"	3550	9660	11000	6.10	Standard	24	5.050	8900	650/55R26.5	2940	2760	2660
Large Wheel RT																		
3500RT	15890	3500	72	5.66	2900	114.2"	3520	9010	11000	6.10	Standard	24	4.235	7600	750/60R30.5			
4000RT	17250	3800	78	5.83	2900	114.2"	3620	9138	11000	6.10	Standard	24	4.800	7800	750/60R30.5			
4500RT	19500	4300	78	6.33	2900	114.2"	3620	9645	11000	6.10	Standard	24	5.365	8000	750/60R30.5			
TRIDEM RANGE																		
3500TRI	15890	3500	72	5.66	2660	104.7"	3400	8700	13500	6.10	Standard	24	4.500	7430	560/60R22.5	710/50	650/55	
4000TRI	17250	3800	72	6.66	2660	104.7"	3400	9200	13500	6.10	Standard	24	5.050	9600	560/60R22.5	2910	2850	
4500TRI	20400	4500	78	6.33	2680	105.5"	3500	9200	13500	6.10	Standard	24	5.050	10300	580/65R22.5	2910	2850	
000TRI	22700	5000	78	7.32	2680	105.5"	3600	10200	13500	6.10	Standard	24	5.505	10760	580/65R22.5	2910	2850	
5500TRI	24970	5000	78	7.8	2680	105.5"	3600	10400	13500	6.10	Standard	24	5.505	11260	580/65R22.5	2910	2850	
6000TRI	27240	6000	78	8.2	2680	105.5"	3750	10896	13500	6.10	Standard	24	5.505	11760	580/65R22.5	2910	2850	

WHEEL PATTERN GUIDE



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