

# **Major Slurry Tankers**

**Design Process** 

Each MAJOR tanker is custom manufactured using the highest quality components. Your MAJOR dealer will arrange a site visit to define your requirements. A customised slurry tanker is manufactured, on the basis of standardised components, for your specific operational specifications. MAJOR tankers are designed fully in 3D to ensure the client is completely satisfied before the tanker goes into production.

### **The Design Process**



Discuss your slurry handling requirements with your Major dealer.



Decide on your tanker specifications and pump capacity.



Tanker designed and drawn by the MAJOR tanker design team.



Tanker is manufactured using the using the highest quality components.









For many years farmers have understood and appreciated the value of liquid slurry as a natural fertilizer. Major Equipment has specialised in the correct handling and distribution of slurry since 1976.



Our tanker design team has a wealth of knowledge with thousands of custom designed slurry handling systems in operation for customers in a variety of geographical locations from Ireland to New Zealand.



Regular collaboration with world class component suppliers ensures the continued development of expertise and knowledge within Major Equipment. This guarantees customers can access the latest technologies and best practice within the industry.

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## **Alpine LGP Tanker**

**Contractor Specification** 

The MAJOR Alpine tanker design is based on the contractor LGP specification, but with a dropped axle to give a low centre of gravity. This results in less ground pressure than standard axle tankers and minimal ground damage even in wet conditions.

There are three sizes available: 2150, 2300 and 2670 gallons. As with all MAJOR tankers, the inside is baffled to prevent wave motions and improve operator safety.



Model	Tyreoptions	Capacity		OA Length	OA Width	OA Height	Wheel	Weigh	Weight (Kg)	
		Gallon	Litres	(Hitch to coupling ball)	(Depends on tyre)	Hitch @ 450mm	Recess	Empty	Full	
2150ALP - LGP	28.1 R26	2,144	9,747	6.5m	2.6m	3.2m	Yes	3,856	13,603	
	29.5/75 R25	2,144	9,747	6.5m	2.6m	3.2m	Yes	3,856	13,603	
	30.5 R32	2,144	9,747	6.5m	2.6m	3.2m	Yes	3,856	13,603	
	800/60/R34	2,144	9,747	6.5m	2.7m	3.2m	Yes	3,856	13,603	
	28.1 R26	2,340	10,640	6.8m	2.6m	3.2m	Yes	4,130	14,770	
2300ALP - LGP	29.5/75 R25	2,340	10,640	6.8m	2.6m	3.2m	Yes	4,130	14,770	
	30.5 R32	2,340	10,640	6.8m	2.6m	3.2m	Yes	4,130	14,770	
	800/60/R34	2,340	10,640	6.8m	2.7m	3.2m	Yes	4,130	14,770	
2670ALP - LGP	29.5/75 R25	2,670	12,150	7.4m	2.6m	3.2m	Yes	4,300	16,450	
	30.5 R32	2,670	12,150	7.4m	2.7m	3.2m	Yes	4,350	16,500	
	800/60/R34	2,670	12,150	7.4m	2.7m	3.2m	Yes	4,350	16,500	



Hydraulic brakes as standard ensuring compliance with the regulations for this model of tanker



The joints on the tank are welded to ensure a high-quality and visually perfect weld seam.



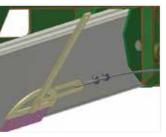
Internal baffle plates improve operator driver safety by preventing wave motions during transport.



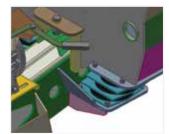
Choice of painted or galvanised finish



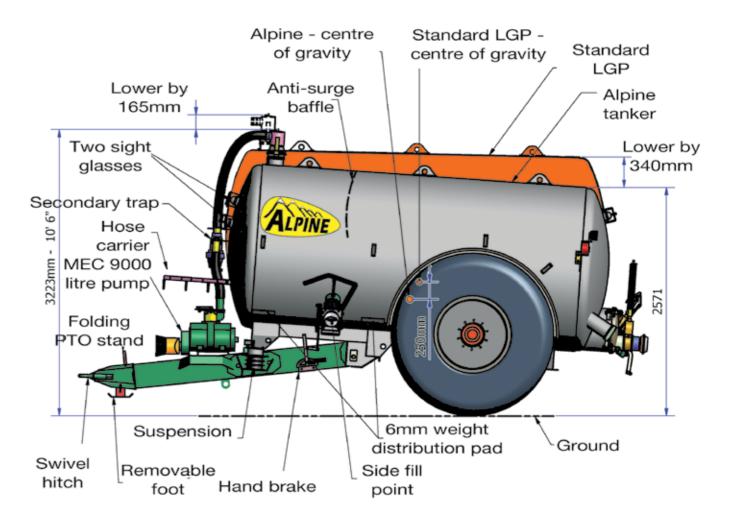
Heavy duty dropped commercial specification axle



Fitted with safety breakaway cable for safer use on public highways.



Drawbar is fitted with rubber buffers to give a smoother, safer journey



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# Tanker Options/Accessories

We offer a full custom design and build programme for specialist contractor slurry tankers. Below is a small sample of the optional components that we offer. Please speak to your authorised MAJOR dealer for more specific advice.

## Filling



**Autofiller:** 6" or 8" hydraulic coupler. It is ideal for slurry pits that are difficult to access. It reduces your filling time by half. A galvanised tripod is supplied as standard.



**Top Fill:** The hydraulically controlled top fill is used to fill the tank from the top. This option allows for high flow rates and fills the tank to its optimal level.

## **Spreading/Emptying**



**Raingun:** Centre mounted or rear mounted in conjunction with a garda pump fitted with stone trap as standard.



Washdown Hose Assembly: Consists of a 2" gate valve and 2" quick hose connector



**Road Blaster Unit:** This unit is fitted beneath the tanker for high-pressure road washing. The angle of the nozzles can be adjusted for tough conditions



Water Spinner: This unit is for dust suppression on roads, building sites and waste disposal plants

## **Additional Equipment**



**Double LED Lights:** Double LED lights and LED side markers can be fitted for increased operator safety



**Fully Opening Rear Door:** These doors are mounted on hinges. They are locked by six threaded hooks.



**Full Length Sight Tubes:** To allow the operator to easily identify how much liquid remains in the tank.



**Toolboxes:** Two sizes available: 1230 (L) x 370 (W) x 370 (D) 760 (L) x320 (W) x 250 (D)



**Mud Flaps:** 6mm heavy duty rubber mud flaps



**Rear Linkages**: Linkages can be added to your tanker to allow slurry injector units to be fitted at a later stage.

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### **Pumps**

Туре	Code	Description	Suitable for	
	MEC900MLF			
OTA	MEC110MLF	Standard PTO driven vacuum pump	Traditional spreading, trailing shoe	
	MEC135MLF			
đ	GARDA9000		To distinguish and discounting our supplies of the second	
GARDA	GARDA11000	Combination vacuum pump/centrifugal pump, with change over	Traditional spreading, rain gun, trailing shoe, umbilical systems, jetting, blaster bar for road cleaning	
	GARDA13500		j	
Ö	MEC900HLF-S			
HYDRAULIC	MEC110HLF-S	Standard hydraulically driven vacuum pump	Traditional spreading, trailing shoe	
Ŧ	MEC135HLF-S			
BAUER	SX1000	Centrifugal Pump	Rain gun, trailing shoe, umbilical systems	
ELBA	ELBA 6500TR	Centrifugal Pump	Rain gun, trailing shoe, umbilical systems	
DODA	DODA A27CWBG	Centrifugal Pump	Rain gun, trailing shoe, umbilical systems	

## **Principle**

The vacuum system creates an atmospheric pressure difference in order to fill or empty the tanker. By creating a vacuum (depression) in the tank, slurry can be sucked. When spreading, the principle is reverse: the tank is pressurized by the pump, which allows it to expel the slurry.

### What pump capacity to choose from

An appropriate capacity is used to create the vacuum before starting to fill the tank or to pressurize it during the spreading phase. The pump then "merely" has to keep this vacuum or pressure.

Choosing too large a pump means wasting tractor power, with a risk of unnecessary wear and tear. The effective vacuum rate is always the same, whatever the chosen type of pump may be.

Once the capacity of the pump is selected, it is possible to choose given type of greasing and cooling system.

#### Vanes

Most pump systems supplied on MAJOR tankers have vanes. The air flow is directed by a deflecting valve in order to spread or suck slurry. All normal vacuum pumps create the same "vacuum"; only the air flow capacity of the pump matters. The range of vacuum pumps with vanes supplied by MAJOR are 9000,11000 and 13,500 I/min.



PTO Pump

Garda Pump





Hydraulic Pump

Bauer





Elba Pump

Doda Pump (with arm for umbilical systems)

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## **Trailing Shoe**

Retro-Fit Farmer Specification Slurry Application Unit

The MAJOR farmer specification Trailing Shoe sits close to the rear of the tanker for better weight distribution and is designed to fit any size tanker. This unit is easily mounted onto the back door without welding or fabricating, and can be used with the existing splashplate in place.

Slurry enters the Vogelsang ExaCut Macerator through the 4" bauer coupling and is distributed through the 40mm outlets. The macerator is fitted with an integrated foreign body separator to prevent debris from blocking the outlets. It also contains self sharpening and self adjusting blades meaning reduced maintenance times. A large capacity stone trap is located under

the macerator which collects debris. It can be cleaned out easily, without the use of tools.

The high tensile springs use the high carbon steel coulters to split the grass – allowing the slurry to run on the ground. The spring steel bars on the frame allow the outlets to follow the ground contours.

#### **Features**

- √ Fully galvanised body
- √ Vogelsang ExaCut macerator distributes slurry precisely and constantly
- ✓ Can be used with the existing splashplate in place
- ✓ Simple height adjustment allows the unit to be set according to tanker height making it adaptable to any tanker make or model.
- ✓ Full lighting board is fitted as standard

	MJ81-750
Working Width	7.5m (24′ 7″)
Transport Width	2.4m (8')
Wing pivot	100°
Height	2.9m (9′ 6″)
No. of outlets	30
Weight	690KG *including back door
Macerator	Vogelsang ExaCut 30/40
Spools required	3
Back door size	30"
Rear fill	Yes
Note	Can be self retro fitted



# **Trailing Shoe**

**Contractor Specification Slurry Application Unit** 

The MAJOR MJTS6430 Slurry Applicator covers an area of 6.4m with 30 outlets. Slurry enters the Vogelsang macerator through the 4" bauer coupling and is distributed through the 40mm outlets. A large capacity sump is located under the macerator which collects debris. It can be cleaned out easily, without the use of tools.

The 40mm distribution pipes are finished off with couplings to allow simple maintenanceof the rubber nozzles. The high tensile springs use the high carbon steel coulters to split the grass allowing the slurry to run on the ground. Pneumatic wheels are fitted as standard letting the frame follow the ground contours.

	MJTS6430
Working Width	6.4m (20' 11")
Transport Width	2.7m (8′ 4″)
No. of Outlets	24
Outlet Width	40mm
Hydraulic Requirement	50 - 70 litre/min @ 230 bar max

The ExaCut Macerator is fitted with an integrated foreign body separator to prevent debris from blocking the outlets. It also contains self sharpening and self adjusting blades meaning reduced maintenance times.



#### **Features**

- ✓ Fully galvanised body
- ✓ Mechanical suspension
- ✓ Integrated spreader unit
- ✓ Automatic mechanical shut-off

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- ✓ Vogelsang ExaCut macerator
- ✓ Full road lighting kit.

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## **Dribble Bar**

Retro-Fit Universal Tanker Mounted Dribble Bar

The MAJOR Dribble Bar slurry applicator is designed to apply slurry to the soil surface as accurately as possible, while minimising grass contamination and ammonia emissions. This unit has 30 outlets spaced 260mm apart for even and precise distribution of liquid material in long and short grass.

A high-strength steel is used in the manufacture of the MAJOR Dribble Bar and is hot dipped galvanised to increase durability and lifespan.

#### **Features**

- ✓ Easily mounted onto the back door without welding or fabricating for simple retro-fitting
- √ Vogelsang ExaCut macerator distributes slurry precisely and consistently
- ✓ Can be used with the existing splashplate in place
- ✓ Simple height adjustment allows the unit to be set according to tanker height making it adaptable to any tanker make or model.
- ✓ Full lighting board is fitted as standard
- ✓ Double self-aligning pivot hinge with easy access grease point on each wing





	MJ91-750
Working Width	7.5m (24′ 7″)
Transport Width	2.2m (7'2")
Wing pivot	100°
Height	2.8m (9' 2")
No. of outlets	30
Weight	450KG *including back door
Macerator	Vogelsang ExaCut 30/40
Spools required	2 double acting hydraulic spools
Back door size	20" + 30"
Rear fill	Yes
Note	Can be self retro fitted



## **Disc Injector**

**Slurry Application Unit** 

The MAJOR 5.2m Disc Injector is a combined soil fertilising and furrowing machine with a working depth from 20mm (3/4") to 60mm (21/2"). A powerful Vogelsang macerator delivers slurry evenly through 40mm pipes. The slurry is inserted into slits created by the spring steel self sharpening cutting discs. The unit folds hydraulically giving a 2.4m transport width.

The MAJOR Disc Injector operates best in grass/stubble of a height between 60-100mm (21/4 - 4"). When working, the spring loaded discs create slits of 20-60mm deep which are completely filled with slurry.

The slurry is only visible as narrow strips between the grass. The distance between the slits is 200mm (8").





#### **Features**

- √ 300mm self sharpening solid cutting discs spaced at 200mm (8") intervals
- ✓ Automatic mechanical shoe shut off to prevent spillage
- ✓ Mechanical suspension on individual discs Individual disc steerage
- ✓ Depth regulated by hydraulic linkage.
  (Hydraulic requirement: 50 70 litre/min
  @ 230 bar max)

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