



Capacities from 6 Tonne to 16 Tonne



Cross Agricultural Machinery – It's the Obvious Choice



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The Cross Muck Spreader range is built to the highest standards by a team of dedicated engineers using quality materials and manufactured in the latest high-tech manufacturing facilities. Our Muck Spreaders can deliver class leading levels of performance and reliability to exceed the expectations of the most demanding users.

#### **Range Of Muck Spreaders**

The Cross range of Rear Discharge Manure Spreaders are designed for farmer and contractor use. The heavy-duty spreaders use twin vertical beaters to shred and spread a range of agricultural and industrial type manures including chicken manure.

We manufacture machines in capacities from 6-16 tonnes. We offer a wide range of useful and popular options, so you can be sure that there is a model to suit your specific requirements.

Cross Rear Discharge Manure Spreaders are the obvious choice for spreading of agricultural and industrial manures. They guarantee efficiency with high throughput, accuracy and reliability in the field.

The Cross range of Rear Discharge Manure Spreaders are designed and manufactured to cope with the most demanding of conditions. The machines have been well tested in demanding Irish conditions. Cross Rear Discharge Manure Spreaders are the obvious choice as they provide simplicity, durability and ultimate reliability.

The standard design features include a heavy duty chassis. The twin vertical beaters operate through a direct drive rotor gearbox that is rated to 185hp. The gearbox is fitted with shear bolt and features a shear

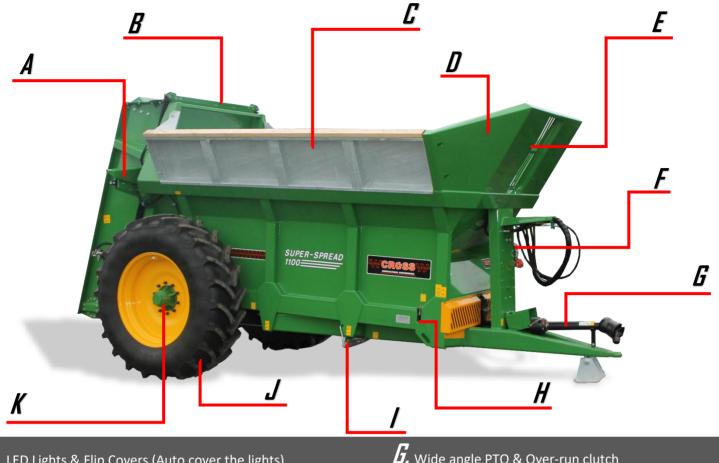
An optional automatic torque overload clutch is available. The beaters are reinforced and interlocking to withstand damage from foreign objects. There are four paddles at the base of each rotor to ensure that the manure is spread finely and evenly over a working width from 9 to 12 metres.

The floor of the machine uses four high tensile steel chains to allow the toughest loads to be handled with ease. The floor tensioning system can be easily adjusted in order to be kept at its optimum setting.

The drive to the floor chains can be steplessly controlled to ensure an accurate application rate. This section is fitted with a reverse facility as standard. All machines receive a two-pack, two coat paint protection to protect against corrosion.

At Cross Agricultural Engineering we fit large wheels which provide good flotation and traction in adverse conditions. The machines are provided with a front hose arm to provide convenient stowage and protection of pipes when not in use. The rear light clusters have automatic fold away for protection when spreading.





A. LED Lights & Flip Covers (Auto cover the lights)

 $m{\mathcal{G}}$  Wide angle PTO & Over-run clutch

**B.** Slurry Door. Seals the liquid manure from running

**K** External Grease pipes. Easy to grease machine.

 $\emph{\emph{L}}_{\star}$  Various Side extensions: Galvanized Steel or Wood

. Hand-brake

**1.** 2 Pack paint & Etch Primer

Flotation Tyres. (Various sizes available)

E Box iron front board & HD Centre Mesh

K. Commercial Axle. 420 x 180 Brake shoes. Quick adjust

**F.** Hydraulic Brake Away

#### **Spreader Build**

Our quality Muck Spreader range is manufactured in capacities from 6 tonnes to 16 tonnes to cover a wide range of farming needs. We can also build a Muck Spreader to suit your specific specifications giving you the benefits of our flexible manufacturing process.

Cross Muck Spreaders are manufactured using high quality steel and are built on a Box Iron chassis instead of a folded steel alternative. This leaves the machines much stronger and more durable. To provide a high level of corrosion resistance all Cross Muck Spreaders are given two coats of priming paint followed by two finish of high gloss two pack paint. Muck Spreaders are also oven backed after painting giving long lasting durability.

All Cross Muck spreaders are fitted with high quality components. This includes; 4 High grade floor chains, LED lights, Slurry Door, Wide angle PTO, Over Run Clutch Etc.

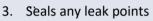


All Cross Muck Spreaders are built on a chassis design. All Chassis steel, uprights and draw bar are manufactured from heavy wall Box section. Other manufacturers use folded steel where Cross use Box Iron. The advantage of the Box Iron is its strength. It guarantees a strong base for everything else to be mounted onto.

All box section is also fully seem welded to the main frame of the machine. Most manufactures just stitch weld the frame on. Cross Agricultural Engineering Seam weld the machine for 3 reasons:

1. Makes the machine more rigid and stronger.

2. Seals the machine fully to stop rust occurring.







Cross Agricultural Engineering only use the best of components in their muck spreader range. The Rogelberg spinner gearbox is one example of this. No matter what size of muck spreader supplied by Cross Agricultural Engineering, the heavy-duty gearbox is fitted to all models. Cross do not use any light duty gearboxes, even in the smaller models. This is due to the thinking that same product is always passing through the beaters so why make it lighter?

This gearbox is PTO driven by means of an under-machine drive shaft. This shaft is shear-pin protected by means of a shear-pin on the gearbox and on the PTO shaft itself.

If any foreign material gets stuck in the spinners, the PTO is fitted with a shear pin and over-run clutch to stop the gear box being damaged in any way.





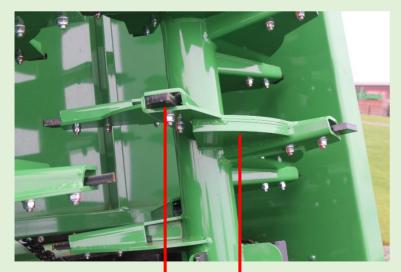
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#### **Balanced Beaters**

All Cross Muck Spreaders are built with a laser cut, fully balanced beater section. There are numerous advantages in this:

- 1. Each Tooth is in its own housing. Therefore it breaks up the dung more as it acts like an arm passing through the muck. Most other manufacturers simply bolt a tooth onto an auger.
- 2. The teeth are reversible. They only wear one side. The auger type machines will wear the inside and outside of the tooth.
- 3. The liquid spinners on the bottom allow the spreading of liquid slurry and stones.
- 4. The spinners on a Cross muck spreader are fully balanced before fitting. This means no vibration is passed back through the machine and into the gear box. This balancing takes place in Cross Engineering's state of the art 3D-Animation facility
- 5. If the bolt shears or falls out the tooth still works as it is in its own box housing and the second bolt holds it in place. Other makes of muck spreaders swing the teeth back in if one bolt breaks making the tooth un un-usable





**Teeth Housing** 

**Ballance Weights** 

#### **Beaters Housing**

The spinners on a Cross Muck spreader are unique to any other make. They come as part of a tooth and housing system. Each Tooth is in its own housing. Therefore, it breaks up the dung more as it acts like an arm passing through the muck. Most other manufacturers simply bolt a tooth onto an auger.

The 4 Dog legs on the bottom disk stops the spreader letting out large lumps between the rotors.



#### **Floor Chains**

Cross Agricultural Engineering use 4 floor chains on all Muck Spreaders. There are a few advantages of this over 2 chains:

- 1. Easier to move a heavy load of manure
- 2. Less chance of bending a cross slat. If you use 2 floor chains the length of the cross slats is too great and when moving a heavy load of dung they bend. This in turn pulls the chain off the drive sprockets. This is why Cross uses 4 floor chains and short cross slats.







#### **LED Lights**

Cross Agricultural Engineering fit LED lights to the full range of Muck Spreaders. These lights are placed inside sealed spreader guards. This means that when spreading no muck or stone can fly up and hit or dirty the lights.

When spreading the spreader guards cover the lights by means of a mechanism fitted to the slurry door. When the door is closed to travel on the road, the lights are exposed again to the view of the traffic behind you.

The lights will never get dirty or damaged.

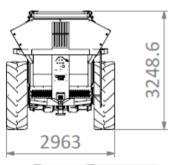




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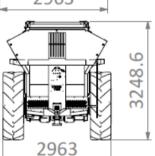
### <u>Cross Agricultural Engineering – Muck Spreader – Specifications:</u>

| Model                  | 600       | 900                 | 1000           | 1100                | 1200           | 1400           |
|------------------------|-----------|---------------------|----------------|---------------------|----------------|----------------|
| Capacity               | 6,000 Kg  | 9,000 Kg            | 10,000 Kg      | 11,000 Kg           | 12,000 Kg      | 14,000 Kg      |
| Volume Level<br>Load   | $4.4 m^3$ | $6.9 \ m^3$         | $8.5  m^3$     | 8.6 $m^3$           | 10.5 $m^3$     | 11.5 $m^3$     |
| Volume Level<br>Heaped | $7.9 m^3$ | 11.6 m <sup>3</sup> | 13.3 $m^3$     | 14.3 m <sup>3</sup> | 16.3 $m^3$     | 17.9 $m^3$     |
| Axle Size (mm)         | 100 x 100 | 100 x 100           | 100 x 100      | 100 x 100           | 100 x 100      | 100 x 100      |
| Brake Size (mm)        | 420 x 180 | 420 x 180           | 420 x 180      | 420 x 180           | 420 x 180      | 420 x 180      |
| Standard Wheels        | 21.3 – 24 | 465 – 85 – R34      | 520 – 85 – R38 | 520 – 85 – R38      | 520 – 85 – R38 | 520 – 85 – R38 |
| HP Required            | 75        | 90                  | 100            | 110                 | 120            | 130            |
| No. floor chains       | 4         | 4                   | 4              | 4                   | 4              | 4              |



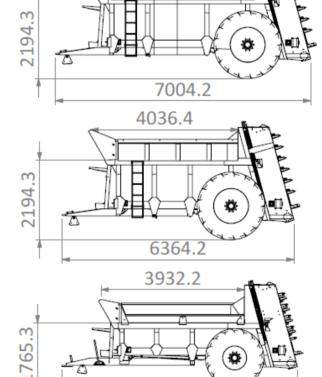
### **Super Spread 1400**

Weight: 5,250 Kg

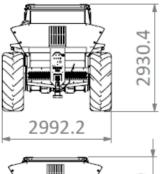


### **Super Spread 1100**

Weight: 4,600 Kg



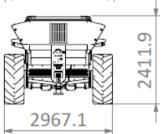
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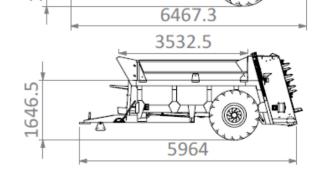


### Super Spread 900

Weight: 4,000 Kg













## "It's the Obvious Choice"

Cross Agricultural Engineering is the result of 5 generations of metalworking skills within the Cross Family. This heritage has provided a solid foundation for manufacturing.

This literature is designed for worldwide circulation. Due to continuing policy of product improvement, we reserve the right to alter specifications and constructions without notice. As machines are exported to many different countries, general information, pictures and descriptions are provided; these should be taken as approximate and may include optional equipment that is not part of the standard specification. Please consult your local dealer/distributor for further information.



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