Rugged dependability

DeLaval manure pumps

Clearing manure from barns is vital for animal health, but time consuming. Now you can transport solid, semi-solid and slurry manure automatically, ensuring a better environment for your herd.

Hydraulic pumps
DeLaval hydraulic pump (SP480) transfers manure over a distance. Strong and reliable, it has the hydraulic power to steadily and relatively quietly pump manure over hundreds of metres. The versatility of DeLaval hydraulic pump gives you a full selection of outlet and pipe options so the system can be fully tailored to your requirements and your buildings.

Electric pumps
DeLaval slurry pumps are designed for mixing and pumping liquid manure in all kinds of applications. These include use in a mixing pit, transferring to a main store, recirculation and loading slurry spreaders. Reliable, easy to operate and service, you have a choice of lengths and electric motor power options, so that these pumps can be set to your exact requirements. Options include: different mixer heads, various installations including a pump pit; underground connections to a pipe system and much more.

<table>
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<tr>
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<th>EP300-500</th>
<th>SP480</th>
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**DeLaval propeller agitator**
This propeller agitator provides fast and effective agitation of slurries. It is used before and during pumping to chop and homogenise the manure, this may be in below ground liquid manure reception pits with vertical walls, lagoons or above ground storage tanks.

The propeller is recommended for use with the SP480 and SLP180 piston pumps, and may also be used beneficially with the EP300, 400 and EP500 electric pumps to prevent blockage of the pump inlets. The agitator may be used with sand laden manure but rapid wear is to be expected.

**Components**
- Available lengths range from 1.8 - 5.0m pit depth
- 5.5kW, 7.5kW or 11kW motor
- 50cm three blade propeller
- heavy duty gearbox
- oil reservoir
- replaceable cutter knives
- foot pedal to unlock unit for rotation

The propeller agitator may be used with covered pits, or in storage lagoons and above ground storage tanks where a safety platform and/or safety fencing must be installed.
**General features**
The SP480 manure pump transfers manure, of a slurry consistency, from a reception pit to the storage site. The manure is transferred through a PVC pipe, the diameter of which depends on the distance the manure is to be pumped. Distances of up to 350m are possible, using a relatively small motor of 5.5kW. The capacity is less than a centrifugal pump but it can steadily and relatively quietly transport manure longer distances. However, manure must be in a homogenous state which may require the use of a propeller agitator.

**Principle of operation**
The pump operates on a piston system whereby the hydraulic cylinder motion fills and empties the pumping tube through the use of flapper doors that prevent back flow occurring.

**Components**
- **Transfer pump** - transfers manure from barn to storage
- **Hydraulic intake cleaner** - this is a slow moving agitator powered by a hydraulic motor. It cleans the intake of the pumping tube to prevent long straw bedding, hardened manure or other debris from blocking the inlet.
- **Hydraulic power pack** - this pack produces the required pressure for the press to operate.
- **Underground valve** - these valves are required on all pipes connected to the storage pit to prevent manure discharge in the event of a break in the line.
- **Air flush riser kit** - the air flush is used to flush the manure line with air and one should be installed every 60m of pipe.

**Features**
- cylinder size - 101.6mm x 1,219mm
- maximum flow - 510 litres/min
- output pressure - 4.3bar
- max distance 15cm pipe - 73m
- max distance 20cm pipe - 350m

**Manure consistency**
It is important to understand the significance of manure consistency. The SP480 is designed for use with liquid manure.

**Layout**
It is recommended to use an octagonal or round reception pit of 3m depth, which is the maximum suction depth for the transfer pump.
**Fast and effective**

If you have a large volume of manure in a vertical walled pit and need to transport it to the main storage or fill up a manure tank or spreader quickly, this is the pump you should choose. DeLaval electric pumps EP300, EP400 and EP500 agitate and pump out manure reception pits with minimum hassle. Their high capacity enables pits to be pumped out quickly and are ideal for loading a manure spreader, or used in other situations where speed is important. The pumps agitate from 13,800 litre per minute up to 9,400 litres per minute, depending on the motor size and manure consistency.

These high quality pumps are expertly engineered for rugged dependability and minimum maintenance. Reliable, easy to operate and service, you have a choice of lengths and electric motor power options, so these pumps can be set up to meet your exact needs.

Standard equipment includes agitation nozzles that rotate 270 degrees and a dependable triple-sealed, oil-filled lower bearing. A range of mounting options are available i.e. floor, wall or lift & tilt.

**Powerful and tough**

DeLaval electric pumps are high capacity vertical pumps built to tackle the toughest liquid manure in vertical walled pits. These tough, rugged pumps provide hard-working agitation of large dairy reception pits, with a heavy-duty impeller and a tubular-type drive shaft which does not require intermediate support bearings. The oil filled lower bearing assembly and triple greased seals provide for reliable pump operation in any conditions.

DeLaval also offers a selection of 15.24 to 20.32cm (6-8 inch) valves and fittings for building your complete manure transfer plumbing system.

**Features:**
- hard wearing design
- oil filled lower bearing assembly
- hydraulic or manual control
- 1.8 - 4.0 metres long

EP300
300mm impeller  
Motors: 5.5kW, 11kW, 15kW, or 18.5kW

EP400
406mm impeller  
Motors: 15kW, 25kW or 30kW

EP500
508mm impeller  
Motors: 37kW or 55kW
You sure don’t want your manure system breaking down – ever. Regular preventative maintenance by DeLaval technicians is a reliable way to maintain your manure system’s profitability, performance and reliability.

**Profitable manure handling**
The DeLaval system approach to manure handling ensures that every part of the complete system contributes to the profitable running of your farm: from planning to hard-working products to service by qualified DeLaval technicians.

**InService™ for manure**
Sign a DeLaval InService™ contract to keep your manure handling equipment working smoothly, including emergency service 24/7. You get professional support and original parts in time – whenever you need them.
DeLaval has solutions to
protect the environment and
support profitability, the welfare
of animals and the well-being
of the people involved.

**Doing more with less**
As a dairy farmer, you’re very aware of your environment. You need to be, because your farm depends on it each year. And you know the environment depends on you to protect it: by the way you farm now and in the future.

Manure handling is a critical area for sustainable dairy farming. For example, regarding the environment, there are major concerns about the amount of greenhouse gases generated by the dairy industry.

DeLaval aims to reduce dairy farming’s environmental footprint through proper manure handling and other means.