Electric Pumps

High performance centrifugal pumps to transfer liquid manure

GEA Farm Equipment | Houle

engineering for a better world  

GEA Farm Technologies
The electric pumps of the Houle product line are offered since the 70's. Originally, the electric pumps included only hog manure pumps, but with the introduction of the 4” Dairy Manure Pump in the 90's, the company was able to meet the needs of the dairy farmer. Thereafter, a series of more powerful, higher flow rate pumps are developed for responding to the needs of farmers looking to clean their barns with a flush manure system or to evacuate liquid manure over longer distances. Many of these pumps are available on pontoon for use in a lagoon.

GEA Farm Technologies focuses its daily efforts on offering innovative, efficient and durable products. Its expertise is always challenged by the continuous improvement of its products. GEA Farm Technologies is proud to offer a wide selection of electric pumps, the Houle product line with the most world wide sales.

GEA Farm Technologies cares about the quality of the environment and continuously works to implement effective environmental management systems applicable in all facets of the business.
**Electric Pump Specifications**

The diversity of applications for a transfer pump are as varied as the factors to be considered in order to maximize its use. GEA Farm Technologies developed a complete and diversified range of pumps that will provide you with maximum performance and efficiency. Our line of electric pumps are designed to fit all budgets. We offer equipment with various pressures and flow rates that work effectively according to your needs. Consult our dealers: their expertise will help you choose the most suitable pump.

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>Description</th>
<th>Water</th>
<th>1/8&quot;</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
<th>1/2&quot;</th>
<th>High Flow</th>
<th>High Pressure</th>
<th>Agitation</th>
<th>Economical</th>
<th>Compact</th>
<th>Available on pontoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot; Flush Pump</td>
<td>Low RPM pump offering a high flow rate and remarkable performance to feed a flush system.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>4&quot; Agl-Pompe</td>
<td>Stands out from the other pumps because of its ability to provide both high performance pumping and high efficiency agitation.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>4&quot; High Pressure Pump</td>
<td>Reaches its full potential when responding to high head pressures or when used to transfer relatively long distances.</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>4&quot; Dairy Manure Pump</td>
<td>The perfect balance between pressure, flow rate and agitation quality for efficient and optimal results.</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>4&quot; Hog Manure Pump</td>
<td>An ideal pump to transfer low consistency liquid when high flow rate and high pressure are needed.</td>
<td>✓</td>
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</tr>
<tr>
<td>3&quot; High Pressure Pump</td>
<td>The most powerful of the 3&quot; pumps, it will respond to high head pressures while remaining economical.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>3&quot; Pump</td>
<td>Offers sufficient power and flow rate to transfer hog manure or dairy waste water.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>3&quot; Compact Pump</td>
<td>As reliable as the 3&quot; Pump, this compact version offers performance and efficiency where space is limited.</td>
<td>✓</td>
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</tbody>
</table>

**Key Features of All Pumps**
- Available in lengths from 6 to 16 feet (1.8 to 4.8 m) in 2 feet (1.8 m) increments.
8" Flush Pump

Low revolution pump offering a high flow rate and remarkable performance to feed a flush system.

**Flush Liquid**
- Maximum consistency
- 1/8" (3 mm)

**Typical Application**
The 8" Flush Pump is used when feeding a flush flume system, or to feed flush valves to clean flush alleys or to flush a holding area.

**Key Features**
- Belt driven pump;
- A check valve on the pump discharge keeps the liquid in the flush line between flushes;
- Fixed pump support (sliding & tilting support in option - see page 11).

**Impeller and Housing**
- 16" (406 mm) impeller with 4 curved blades made of ductile cast iron;
- 9½" (241 mm) intake with one fixed knife.

- Oil gauge
- Remote grease lines
- Oil tank
- Available motors: 7.5, 10, 15, 20, 25, 30, 40 or 50 HP (5.5, 7.5, 11, 15, 18.5, 22, 30 or 37 kW)
- 8" (200 mm) discharge
- Drive shaft with an antivibration bearing
- Pump bracket for the optional pump support that allows the pump to slide and tilt out of the manure for maintenance
- Optional 6" (150 mm) nozzle with cast iron valve to recirculate the manure in the pit
- Double bearing housing protected by our 3 seal system
8" Flush Pump on Pontoon

Typical Application

Used to pump the surface liquid of a reservoir or lagoon when feeding a flush flume system or to feed flush valves to clean manure alleys or a holding area.

Key Features

- The impeller housing can be adjusted to pump only the surface liquid;
- Low profile design for maximum stability;
- No seals or bearings submerged in the liquid.

Float overall dimensions:

Width: 7'-8" (2.3 m)
Length: 12' or 16' (3.7 or 4.9 m)
4" Agi-Pompe

Stands out from the other pumps because of its ability to provide both high performance pumping and high efficiency agitation.

<table>
<thead>
<tr>
<th>Dairy Manure</th>
<th>Flush Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum consistency</td>
<td>1/2&quot; (13 mm)</td>
</tr>
</tbody>
</table>

Typical Application

The 4" Agi-Pompe is used to agitate and transfer manure from a reception pit. It can also be used to feed manure separators.

Key Features

- Belt driven pump;
- Controls are easily accessed from the top of the pump;
- The efficient design of the directional valve maximizes the pumping capacity;
- Fixed pump support (sliding & tilting support in option - see page 11).

**Impeller and Housing**

- 16" (406 mm) impeller with 4 curved blades made of ductile cast iron;
- 8" (203 mm) intake reversible knives.

**6" discharge (150 mm)**

- Handle to operate the agitation nozzle vertically
- Control lever to operate the directional valve
- Oil gauge
- Remote grease lines
- Oil tank
- Drive shaft with an antivibration bearing

**Optional 4" (100 mm) submerged discharge for an underground transfer line**

**Optional 215° rotating agitation nozzle with up and down articulation**

**Drain**

16", 18", 20" or 24" (406, 457, 508 or 610 mm) propeller, depending on manure type

**Propeller knife to cut fibrous material**

**Conical receptacles offer a strong and stable anchoring point for the pump**

Available motors: 15, 20, 25, 30, 40 or 50 HP (11, 15, 18.5, 22, 30 or 37 kW)
Working Range

4" Agi-Pompe with 60 Hz Motor

4" Agi-Pompe with 50 Hz Motor

4" Horizontal Agi-Pompe on Pontoon

Typical Application

Used to agitate and transfer the rejected liquid from manure separators.

Float overall dimensions:
Width: 7'-8" (2.3 m)
Length: 16' (4.9 m)

A winch is provided to lower the pump and to direct the propeller toward the bottom sediments

Railings

Available motors: 15, 20, 25, 30, 40 or 50 HP (11, 15, 18.5, 22, 30 or 37 kW)

Extended anti-slip galvanized deck to reach the pump and the propeller

Anti-slip galvanized steel deck

UV resistant foam filled, polyethylene float

6" (150 mm) discharge

Propeller with knife to cut fibrous material

16" (406 mm) impeller
4" High Pressure Pump

Reaches its full potential when responding to high head pressures or when used to transfer relatively long distances.

<table>
<thead>
<tr>
<th>Hog Manure</th>
<th>Dairy Waste Water</th>
<th>Flush Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum consistency</td>
<td>1/4&quot; (6 mm)</td>
<td></td>
</tr>
</tbody>
</table>

Typical Application
Used to transfer hog manure and dairy waste water from the reception pit to the main storage or to fill flush tanks. Efficient when high head pressure is present. It can pump relatively long distances.

Key Features
- Belt driven pump;
- Controls are easily accessed from the top of the pump;
- Delivers high pumping head with low HP (kW);
- The efficient design of the directional valve maximizes the pumping capacity;
- Fixed pump support (sliding & tilting support in option - see page 11).

Impeller and Housing
- 14½" (368 mm) impeller with 3 curved blades made of ductile iron;
- 6½" (165 mm) intake with fixed knives.

Drive shaft with an antivibration bearing

Optional 4" (100 mm) submerged discharge for an underground transfer line

Optional 2½" rotating agitation nozzle with up and down articulation

Double bearing housing protected by our 3 seal system

Centrifugal pump with progressive housing to deliver high pumping head
Working Range

4" High Pressure Pump with 60 Hz Motor

4" High Pressure Pump with 50 Hz Motor

4" High Pressure Pump on Pontoon

Typical Application

Used to pump the surface liquid of a lagoon or a pit to a flush tank or to feed low pressure centre-pivot irrigation systems.

Key Features

- The impeller housing can be adjusted to pump only the surface liquid;
- Low profile design for maximum stability;
- No seals or bearings submerged in the liquid.

Float overall dimensions:
Width: 7'-8" (2.3 m)
Length: 12’ or 16' (3.7 or 4.9 m)

Pump can be winched up for maintenance

Railings

Available motors: 20, 25, 30 or 40 HP (5.5, 18.5, 22 or 30 kW)

Anti-slip galvanized steel deck

UV resistant foam filled, polyethylene float

6" (150 mm) discharge
4" Dairy Manure Pump

The perfect balance between pressure, flow rate and agitation quality for efficient and optimal results.

**Dairy Manure**

<table>
<thead>
<tr>
<th>Maximum consistency</th>
</tr>
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<tbody>
<tr>
<td>1/2&quot; (13 mm)</td>
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</table>

**Typical Application**

Used to transfer dairy manure from the reception pit to the main storage.

**Key Features**

- Belt driven pump;
- Controls are easily accessed from the top of the pump;
- The efficient design of the directional valve maximizes the pumping capacity.

**Impeller and Housing**

- 12" or 16" (305 or 406 mm) impeller with 4 curved blades made of ductile cast iron;
- 6" or 8" (152 or 203 mm) intake with reversible knives.

215° rotating agitation nozzle on stainless steel pivot with up and down articulation

Bottom nozzle to break the build-up around the pump housing

<table>
<thead>
<tr>
<th>Directional valve control lever for bottom agitation nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handle to operate the agitation nozzle vertically</td>
</tr>
<tr>
<td>Remote grease lines</td>
</tr>
<tr>
<td>Drive shaft with an antivibration bearing</td>
</tr>
<tr>
<td>4&quot; (100 mm) submerged discharge for an underground transfer line</td>
</tr>
<tr>
<td>Double bearing housing protected by our 3 seal system</td>
</tr>
<tr>
<td>Oil tank</td>
</tr>
</tbody>
</table>

Available motors: 10, 15, 20, 25, 30 or 40 HP (7.5, 11, 15, 18.5, 22 or 30 kW)
Working Range

4" Dairy Manure Pump with 60 Hz Motor

4" Dairy Manure Pump with 50 Hz Motor

Standard Equipment

- Sliding and Tilting Support to slide and tilt the pump out of the manure.

Optional winch operated by a ½" (12.7 mm) drill.
4" Hog Manure Pump

An ideal pump to transfer low consistency liquid when a high flow rate and high pressure are needed.

<table>
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<tr>
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<th>Dairy Waste Water</th>
</tr>
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<tbody>
<tr>
<td>Maximum consistency</td>
<td>3/8&quot; (10 mm)</td>
</tr>
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</table>

Typical Application

Used to agitate and transfer manure from a reception pit to the main storage.

Key Features

- Belt driven pump;
- Controls are easily accessed from the top of the pump;
- Stainless steel threaded shaft to prevent rust and corrosion;
- The nozzle is easily removed for maintenance while leaving pump in place;
- Fixed pump support.

Flexible discharge hose with 4½" I.D. (114 mm) to connect to a 4" (100 mm) pipe

Oil gauge

Nozzle rotation control lock

Directional valve lock

Handle to operate the agitation nozzle and also used as a rotation indicator

Nozzle height adjustment lock

Available motors: 5, 7.5 or 10 HP (3.7, 5.5 or 7.5 kW)

Drive shaft with an antivibration bearing

Optional 235° rotating agitation nozzle with up and down articulation

Directional valve

Double bearing housing protected by our 3 seal system

Impeller and Housing

- Large impeller with 4 curved blades made of ductile cast iron;
- 5" (127 mm) intake.
Working Range

4" Hog Manure Pump with 60 Hz Motor

4" Hog Manure Pump with 50 Hz Motor
3" High Pressure Pump

The most powerful of the 3" pumps, it will respond to high head pressures while remaining economical.

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<tr>
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<th>Dairy Waste Water</th>
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<tr>
<td>Maximum consistency</td>
<td>1/8&quot; (3 mm)</td>
</tr>
</tbody>
</table>

Typical Application

Used to transfer hog manure from the reception pit to the main storage when high head pressure is present. It can transfer liquid on relatively long distances.

Key Features

- Controls are easily accessed from the top of the pump;
- Stainless steel threaded shaft to prevent rust and corrosion;
- Delivers high pumping head;
- Adjustable pump support;
- Belt driven pump for regions on 50 Hz power.

Impeller and Housing

- Impeller with 3 curved blades made of ductile cast iron;
- 4 1/2" (114 mm) intake.
Working Range

3" High Pressure Pump - Direct Driven Motor for 60 Hz

3" High Pressure Pump - Belt Driven Motor for 50 Hz

3" High Pressure Pump on Pontoon

Typical Application
Reliable pump used to refill flush tanks with the surface liquid of a lagoon or a pit.

Key Features
- The impeller housing can be adjusted to pump only the surface liquid;
- Low profile design for maximum stability;
- No seals or bearings submerged in the liquid.

Float overall dimensions:
- Width: 7' 3" (2.2 m)
- Length: 8' 4" (2.5 m)

Railings

Available with 5, 7.5 or 10 HP motors

Direct drive with jaw coupling

Anti-slip galvanized steel deck

UV resistant foam filled, polyethylene float

4" (100 mm) discharge
3" Pump*

Offers sufficient power and flow rate to transfer hog manure or dairy waste water.

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<tr>
<td>Maximum consistency</td>
<td>1/4&quot; (6 mm)</td>
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</table>

Typical Application

Used to transfer hog manure or dairy waste water from a reception pit to the main storage.

Key Features

- Stainless steel threaded shaft to prevent rust and corrosion;
- Adjustable pump support.

*Not available for 50 Hz electric motor
Working Range

3" Pump with 60 Hz Motor

Optional Equipment

- Rigid Agitation Nozzle for 285° horizontal rotation;

- Vertical Articulation for 285° horizontal rotation with up and down adjustment on the nozzle.
3" Compact Pump*

As reliable as the 3" Pump, this compact version offers performance and efficiency where space is limited.

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</table>

Typical Application

Used to transfer hog manure or dairy waste water from a reception pit to the main storage.

Key Features

- The pump can be installed in a hole as small as 16" (406 mm) in diameter;
- Stainless steel threaded shaft to prevent rust and corrosion;
- Adjustable pump support.

* Not available for 50 Hz electric motor

• Impeller and Housing
  - Impeller with 2 straight blades and sharp edges;
  - Compact housing that fits in a small pit opening;
  - 4" (102 mm) intake.

• Drive shaft with an antivibration bearing
  Also available on bronze bushings without oil bath

• Flexible discharge hose with 3½" I.D. (89 mm) to connect to a 3" (75 mm) pipe

• Oil gauge

• Available motors: 3 or 5 HP

• Direct drive with jaw coupling

• Upper bearing

• Remote grease line

• Double bearing housing protected by our 3 seal system
Working Range

3'' Compact Pump with 60 Hz Motor

[Graph showing flow rate vs. pumping head for 3'' compact pump with 60 Hz motor, with lines for 3 HP and 5 HP motors.]
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Excellence • Passion • Integrity • Responsibility • GEA-versity

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