

# Payload Sand and Slurry Pump

Electric Dredge Pumps



DAEPUMPS.COM  
info@daepumps.com  
(760) 821-8112

The **DAE Pumps Electric Sand and Slurry Pump** is the industry's most robust dredge pump. Move more material per minute than traditional dredging and accomplish more in a day's work than ever before. Capable of moving 8800 GPM of material with 30% solids, this heavy-duty dredge pump allows you to complete projects ahead of schedule and save you money. The Payload series pump provides the versatility you need for your next dredging project.

Heavy-duty dredging requires a heavy-duty dredge pump. The Payload series pump's rugged and durable design processes a wide range of slurries and abrasive particles in submersible applications. The Payload series pump operates by a hydraulic driven pump with impeller and two hydraulic driven agitator heads mounted on the sides with excavator grade teeth. The agitation heads breakup clay, rocks, and other sediments. Made from high chrome alloy, this durable pump is abrasion resistant to handle the hardest elements.

The dual connection Payload series dredge pumps provides exceptional versatility in dredging capabilities. Connect to the boom on an excavator or hang by cables from a crane, these are the industry's most flexible dredge pump. The Payload series pump operational reach is limited to the length of the excavator's boom. Use on a floating dredge, this versatile dredger processes the underwater sediments that cannot be reached from shore. As a cable deployed attachment, the Payload series pump is remotely controlled for full operational management.

The heavy-duty excavator agitator heads enable the pump to unearth very compact material, ensuring the continuous feeding of the suction pump. The agitator and optional knife inside the pump chop all types of organic material like kelp, grass, and other aquatic weeds to ensure maximum suction power.



up to  
**8800 GPM**  
& **30% SOLIDS**



**3-INCH to**  
**16-INCH**  
**PUMPS**



**pH VALUES**  
from **3 to 4**



**SOLIDS**  
handling up  
to **2.3" in.**



# Excavator Dredge Pump Attachment



# Cable Deployed Dredge Pump



## Heavy-Duty Pumps

### Features:

- Multiple Size Pumps Options: 3", 4", 6", 8", 10", & 12", 14", and 16"
- Up to 8800 GPM / 2000 Cubic Meter Per Hour
- Pumps up to 30% Solids
- Depth up to 250m
- Connects to Cables and Excavators
- Handles pH levels of 3 to 14
- Large Solids Handling Capability Up To 2.3-Inches
- Highly Durable and Abrasion Resistant in Difficult Operating Environments
- Superior Corrosive Wear Life
- Robust Motor for Strong Torque and Long Life
- Interchangeable Hard Tooth Agitator Heads
- Enclosed Impeller for Higher Efficiency

## Industrial Strength Agitator Heads

### Features:

- 2-Agitator Heads for Breaking-up Material
- Multiple Power Options: 4 kW, 5.5 kW, 7.5 kW, 11 kW, and 15 kW
- Built from High Chrome Alloy
- Excavator Style Teeth for Agitating & Loosening Sediment

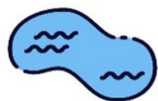


## Dredging Applications



### **Dredge Mining:**

The type of excavation where natural resources from a river, man-made ponds, or near the shorelines are pumped directly into mining separation plants for processing. Dredge mining is also used for cleaning out sedimentation and aquatic vegetation.



### **Lakes and Rivers Dredging:**

Clean energy and clean drinking water require the dredging of lakes and rivers to ensure better, cleaner hydropower and the removal of sediments and aquatic vegetation for cleaner drinking water.



### **Coastal and Environmental Protection Dredging:**

Dredging ensures the safety and protection of the coastline and environment. Tending to the erosion and flooding of land and cleaning up pollutants and contaminants without harming the environment is essential.



### **Maintenance Dredging:**

The continuous natural buildup of sediment and silt in delta ways, ports, marinas, and other waterways require maintenance dredging to ensure water level safety and access.



### **Ports and Marina Dredging:**

The increase in global trade requires the construction of more ports, yards, terminals, channels, and expansions of the existing waterways. And the expansion of the global population leads to greater marina dredging.



### **Sand and Gravel Dredging:**

The increasing demand for sand and gravel for the construction industry plays a major role in dredging sand, gravel, and other marine aggregates from offshore areas.

**Specifications:**

Pump sizes range in maximum flow, maximum head, maximum speeds, powers, and solids handling sizes. There are over 60 variations available. Please contact DAE Pumps for a custom pump curve to identify the right pump for your application need.

The following are the ranges of each pump size's capabilities.

Pump Size	Range	Max Flow	Max Head	Max Speed	Power	Solids Handling
3" (75 mm)	Min Max	110 GPM (25 m3/h) 308 GPM (70 m3/h)	65' (20 m) 131' (40 m)	1400 RPM	11 kW 15 kW	.5" (13 mm)
4" (100 mm)	Min Max	264 GPM (60 m3/h) 660 GPM (150 m3/h)	68' (21 m) 85' (26 m)	1400 RPM	11 kW	.5" (13 mm) .8 (21 mm)
6" (150 mm)	Min Max	264 GPM (60 m3/h) 1100 GPM (250 m3/h)	39' (12 m) 196' (60 m)	1000 RPM	18.5 kW 75 kW	.8" (21 mm) 1.75" (45 mm)
8" (200 mm)	Min Max	440 GPM (100 m3/h) 2640 GPM (600 m3/h)	49' (15 m) 196' (60 m)	1000 RPM	30 kW 160 kW	1" (25 mm) 1.1" (28 mm)
10" (250 mm)	Min Max	2200 GPM (500 m3/h) 2640 GPM (600 m3/h)	49' (15 m)	1000 RPM	45 kW 55 kW	1.75" (46 mm)
12" (300 mm)	Min Max	3520 GPM (800 m3/h) 4400 GPM (1000 m3/h)	72' (22 m) 180' (55 m)	1000 RPM	132 kW 160 kW	1.5" (38 mm) 2" (50 mm)
14" (350 mm)	Min Max	5500 GPM (1250 m3/h) 7700 GPM (1750 m3/h)	98' (30 m) 114' (35 m)	1000 RPM	220 kW 250 kW	1.75" (45 mm) 2.15" (55 mm)
16" (400 mm)	Min Max	8800 GPM (2000 m3/h)	114' (35 m)	1000 RPM	315 kW	2.3" (60 mm)

**Ajtator Heads Options:**

Hydraulic ajtator heads operation power

- **4 kW**
- **5.5 kW**
- **7.5 kW**
- **11 kW**
- **15 kW**

**Additional Attachments:**

- Cutter Blade
- Jet Ring System

**Materials:**

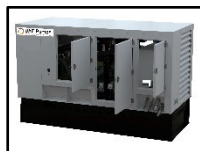
<b>Impeller</b>	Chrome Iron
<b>Volute Liners</b>	Chrome Iron
<b>Volute Casing</b>	Ductile Iron
<b>Shaft</b>	4140 Steel
<b>Shaft Sleeve</b>	420 Stainless Steel
<b>Mechanical Seal</b>	Tungsten Carbide/Silicon Carbide (stationary)
<b>Bearing Housing</b>	Ductile Iron
<b>Bearing Frame</b>	Nitrile
<b>O-Ring</b>	Natural Rubber
<b>Flange Gasket</b>	Chrome Iron
<b>Expeller</b>	Chrome Iron

**Accessories:****Slurry Hose**

DAE Pumps slurry hoses provide the safe and efficient transferring of sludge, slurry, abrasive solids, and corrosive material. These reliable hoses operate at pressures of up to 150 PSI at ideal working temperature is between -20°C to 50°C.

**HDPE Hose Floats**

Made from lightweight, high-density materials, DAE Pumps floats providing great flexibility along with excellent impact resistance, making them ideal for a variety of pumps and dredging applications.

**Hydraulic Power Units (HPU)**

HPUs are the driving force behind the Growler 1000 hydraulic dredge pumps systems. DAE Pumps HPUs operate up to 5000 PSI with a high-pressure filtration and remote operation.

**Flow Meters**

The ultrasonic flow meter is suitable for monitoring sewage, mud, sludge, and a variety of abrasive solids. The clamp-on, non-intrusive transducers work well to monitor slurry in DAE Pumps slurry hoses.