



## VORTEX 3-inch Dredge Kit



### Applications:

- Designed specifically for use on ROV systems with minimal auxiliary hydraulic flow, the Vortex 3-inch is particularly suited for use on electric ROV's such as the Comanche where an effective dredge unit has previously been unavailable.
- Work class ROV construction and drill support.
- Salvage and marine science operations.
- Relocation of drill cutting, mud, silt, sand, rocks.
- ROV and diver operated.

### Operational Features:

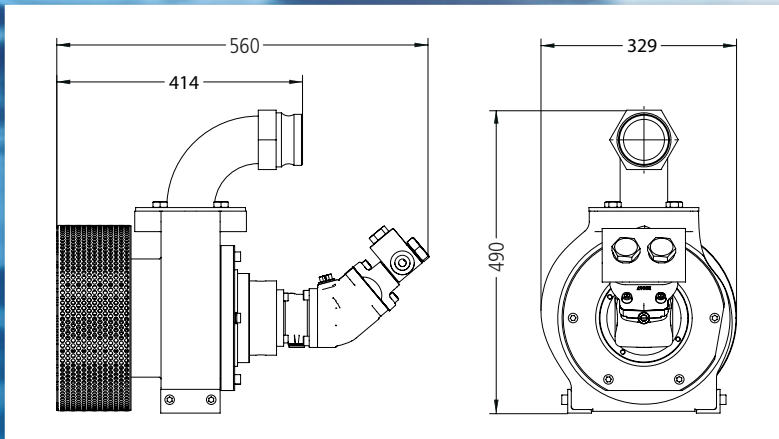
- A completely modular system with many installation options for a variety of ROV's.
- A very comprehensive list of components and spares in one kit dramatically lessens mobilisation time and cost.
- True 3-inch performance with minimum 74 mm internal diameter over entire Venturi dramatically reduces blockages.
- Able to operate on very low hydraulic flow supplies.

The VORTEX 3-inch carries the same patent pending technology as our 4-inch range of dredges making this the most powerful 3-inch ROV and diver dredge in the world.

We have included the option of a jetting head kit, after extensive development to ensure there is no reduction in water flow to the dredge unit which can reduce available working vacuum.

Our low hydraulic consumption leaves enough hydraulic supply on most ROV's to utilize a purpose built high pressure jetter unit if the task requires one. Operator safety has been considered with use of large, yellow name tags on all high pressure fittings and minimal component weight and comprehensive manuals. Our environmental concerns are addressed through high efficiency, low energy demand hydraulic system negating the need for external compensator's.

Our client's have been considered with the most complete dredge system available on the market today.



## Specifications:

- \* Removal rates based on actual material moved during testing using Magnetite black iron sand and rocks weighing 2.375 kg per litre

### Work Class ROV Dredge

- \* 25 ton / hr - using 38 lpm (10 gpm) and 206 Bar (3000 psi)
  - \* 10.5 cubic meter / hr - using 38 lpm (10gpm) and 206 bar (3000 psi)
  - \* 10% solids by volume
- Suction capabilities: 94 kpa (28 in/hg) using 46 lpm (12 gpm) and 206 bar (3000 psi)

### Low Hydraulic Flow ROV Dredge

- \* 7.3 ton / hr - using 20 lpm (5.3 gpm) and 206 bar (3000 psi)
  - \* 3.0 cubic meter / hr - using 20 lpm (5.3 gpm) and 206 bar (3000 psi)
  - \* 6% solids by volume
- Suction capabilities: 61 kpa (18 in/hg) using 20 lpm (5.3 gpm) and 206 bar (3000 psi)

- Hydraulic supply required = 38 lpm (10 gpm) and 206 bar (3000 psi)
- Hydraulic hoses supplied:  
pressure and return = 3 mtr long, 4250 psi (293 bar) rated. -8 jic female swivel ends  
case drain = 3 mtr long, 1000 psi (68 bar), -6 jic female swivel ends
- Complete kit in box = 260 kg, 930 mm high x 1000 mm wide x 1600 mm long
- Water pump weight in air = 40 kg
- Water pump weight in water = 38 kg
- Suction hose diameter = 75 mm
- Actual internal dredge diameter = 74 mm
- Potential debris diameter = 73 to 74 mm
- Weight of optional aluminium pump frame = 9 kg, 600 mm high x 420 mm wide x 700 mm long

**Your safety is your responsibility: If you don't know, please ask.**

### Joe Goodin - Managing Director

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