



Amphibious Dredge Specifications

DREDGE CAPABILITIES

Mechanical Dredging (400l excavator bucket)

Hydraulic Dredging (Cutter Suction Pump – Pump up to 900m without booster)

Weed Rake (Remove heavy weeds and roots)

PREPARED BY ANTO PRATTEN

Waterways Engineers – Dredging Maintenance

Yard: Lot 5 Burroway Rd, Homebush Bay NSW 2127

Post: PO Box 96 Pyrmont NSW 2009-08-28

Email: antopratten@dredgingsystems.co.au

Ph: 02 9648 3989 Mob: 0419419478

Web: www.dredgingsystems.com.au

Web: www.stormwater.com.au





Dredging Systems amphibious dredge



Transporting dredge to site

Suction dredging tool Cutter Pump

Cutter pump is the general suction dredging tool for silt, sand, mud and sludge. The dredging pump's output is 500 m³/h (water) against 3 bar head. Total weight 960 kg

- Hydraulically driven cutter Ø 600 mm
- Submersible dredging pump 1 piece
- Biggest grain size 50 mm



Pumping Coal - cutter suction pump



Cutter suction pump

Backhoe dredging tool

400 l bucket

- 400 l bucket is the general tool for backhoe dredging
- Bucket weight 330 kg
- Bucket lip is with teeth



Excavator Bucket

Backhoe dredging tool Rake

The rake is for removing reed, roots and other vegetation. It is also useful for cleaning the bottom from trash excavated solid content remains very high, because free water flows away through the net

- Width 2750 mm
- Height 900 mm
- Weight 250 kg



Weed Rake

Technical specification

Dredging Systems self-propelled dredger

Built 2010

- Caterpillar C7 diesel engine, 168 kW
- Hydraulic propulsion system
- Tilting rear stabilizers – 5,0 m
- Front stabilizers with detachable floats 3,6 m
- Mast, signal lights for navigation and dredging
- Electric fuel pump

Service crane

Side pontoons

Spray pipe

Central pressure greasing

Cabin a/c unit

General

The dredge is a pontoon mounted, easy to transport dredge equipped with an excavator arm, versatile stabilizers, and a propulsion system. It can cruise at about 4 knots speed, and move on dry land by using its excavator arm and tilting back stabilizers.

Dimensions

- Transport length (without boom) 10,45 m
- Transport length (with boom) 15,00 m
- Transport width 3,25 m
- Transport height 3,05 m
- Transport weight c. 17 tons
- Max reach 7,45 m
- Max. Reach below water level (cutter pump) 5,3 m
- Max. Reach below water level (hoe bucket) 4.3 m

Engine

- Caterpillar C7, turbo charged, water cooled, 6-cylinder diesel engine
- Flywheel power 168 kW (225hp) at 2000 rpm
- Fuel tank capacity 1200 l
- Electric fuel pump
- Electric system 24 V
- Batteries 2 x 180 Ah

Hydraulics

- One axial piston pump for dredging and propeller maximum operating pressure 320 bar capacity 95 ccm /rev
- One axial piston pump for stabilizers maximum operating pressure 210 bar capacity 100 ccm / rev
- Oil level alarm

Excavator

- Swinging angle 180°
- Break-out force from bucket cylinder 77 kN
- Digging force from arm cylinder 40 kN
- Lifting capacity at max. Reach 16 kN
- Lifting capacity with power lift 19 kN

Stabilizers

- Front detachable floats, max depth 3,6 m
- Rear tilting spuds, max depth 5,0 m

Hull

- One piece hull divided in 7 watertight compartments
- Corrosion resistant painting outside and inside
- Protective sliding rails on bottom
- Slip-safe deck
- Handrails


Cabin

- Deluxe seat with full adjustability
- Three opening side windows
- Heating, ventilation
- Cabin a/c unit
- Complete gauging for hydraulics and engine
- Four working lights
- Radio receiver with CD player

Other equipment

- Service crane with lifting grab and rotator
- Side pontoons (1 x 1 x 4 m) 1 pair
- Spray pipe, length 5,8 m
- Mast, signal lights for navigation and dredging
- Hydraulic propulsion system
- Central pressure greasing

Yours sincerely



Anto Pratten
Dredging Systems Pty Ltd