

## SPECIFICATIONS

For

LWT Pit Hog "Dredge"

Model BCV-4

Remotely-Controlled Dredge(s)

### Physical:

Working depth, Feet	20'	Operational Draft	26 1/2"
Flotation – Two (2) Steel pontoons {42" W x 46" D x 40'-0" O.A.L x 10 gauge steel.}		Length, Overall	50'-9"
Weight (est.) – 36,450 Lbs.		Transport Width*	11'-10"
		Height	10'-11 1/2"

\*Transport Width with Dredging Head Removed – Overall Width with Dredging Head in Place; 13'-8 1/4"

### Power:

230/460 VAC, 3 Phase, 60 Hz Electrical Power  
Rototiller Motor Drives & Traverse Winch - 100 HP  
Slurry Pump Drive, Boom Hoist & Head -Tilt Cylinder - 60 HP

Oil Cooler Re-circulating Pump – 7-1/2 HP

### Controls & Readouts:

Power Disconnect Switch on Electrical Enclosure On-board - Power On/Off.  
Functions Remotely Controlled from Shore\* or On-board Dredge: Power Unit(s) 1& 2 On/Off; Hydraulic Cooling Pump On/Off; Slurry Pump On/Off & Speed; Rototiller (Auger) Fwd/Off/Rev & Speed; Travel, Fwd/Rev & Speed; Boom Hoist, Up/Off/Down, 30° Dredging Head (Auger) Tilt; Extend/Off/Retract  
Other Measuring or Sensing Devices: Flow Meter Read-out (Slurry Pump Output), Bottom Sense (Dredging Head Float), Speed Sensors & Readouts (Rototiller, Traverse Winch & Slurry Pump), Hydraulic System(s) Pressure Readouts and Fluid Flow Rate Indicators and HPU Hour Meter.

\*Note: Manual/Auto Switch and Dredge/Shore Switch must be positioned on-board dredge to select mode and location of operation. Auto mode(s) include an operator interface on-shore or a laptop computer on-board the dredge.

### Slurry Pump:

Gorman-Rupp Model T3A60-B, Self-Priming Centrifugal Pump.  
Materials of Construction: Pump Casing – Cast Iron  
Mechanical Seal – Silicon carbide rotary & stationary faces  
Suction & Discharge Diameters – 3-inches  
Semi-open Impeller Diameter, inches – 8.75 "  
Sphere size, inches (max) 2 1/2"

Typical Head-Capacity @ 1750 RPM:  
250 GPM @ 70 ft. TDH (water)

### Dredging Head:

Hood Assembly - Welded 6061 Marine Grade Aluminum Alloy; Ski (AR360 Steel) @ each end; OAL = 9'-6 1/8"  
Rototiller – 9" Dia. – 1/2" thick wall x 8'-0" lg. with 40 Ditch Witch Teeth (20 RH & 20 LH)  
Drive – 45 HP Hydraulic Motor coupled to 17-4 PH SS shaft w/ Sprocket & Chain power transfer to Rototiller.  
Speed variable from 0 to 200 RPM.

### Lateral Move System & Propulsion:

Automated System w/ Shore-based Winches Strategically Located Around Basin.  
Treble Sheave Hydraulic Winch w/ 3/8" Diameter 7 x 19, Galvanized Wire Rope (Traverse Cable) w/ Proximity Switches & Stops at ends.  
Winch Drive - Hydraulic Motor with Planetary Gear Reducer Drive - Traverse Speed Variable from 0 to 130 FPM

**Hydraulics:**

**Two Circuits:** Power Unit 1(100 HP) – Rototiller Motors & Traverse Winch

Hydraulic Pump Output @1,775 RPM – 65.3 GPM

Flow Control – Three-Bank, Proportional, Directional Control Valve for Variable Flow Rates

Hydraulic Relief Pressure – 2,500 PSI

Power Unit 2 (60 HP) – Slurry Pump Drive, Boom Hoist Winch & Head-Tilt

Hydraulic Pump Output @1,775 RPM – 46.1 GPM

Flow Controls – Three-Bank Proportional, Directional Control Valve for Variable Flow Rates

Hydraulic Relief Pressure - 2,500 PSI

Oil Cooler Pump (7.5 HP) – Oil Re-circulation (Closed Loop)

Hydraulic Pump Output @1,760 RPM - Up to 49.9 GPM

Reservoir -- 225 Gallon Capacity with 10 Micron Filter Element, Level Sight Gauge & Oil Temperature/Level Shutdown

Control Panel w/ Motor Starters and Power Disconnect Switch Installed On-board Dredge – Manual Controls on Cab Dash Panel(s) for Rototiller, Traverse Winch, Slurry Pump, Boom Hoist and Dredging Head-Tilt Cylinder.

**Coating System:**

All surfaces (except the dredging heads) have been sand blasted, primed and coated per customer specifications including the color scheme. Electric motors, hydraulic components etc. are installed as received with coatings applied by the original equipment manufacturer.

**Liquid Waste Technology is an innovative leader in the design and manufacture of sludge handling equipment including Auger Dredges, Lagoon Pumpers, Submersible Chopper Pumps, Prop Agitators and Subsurface Land disposal Systems. Call 1-800-243-1406, 715-247-5464, e-mail at [Info@lwtpithog.com](mailto:Info@lwtpithog.com) or for more information and assistance or write to LWT, Inc., PO Box 250, Somerset, WI 54025.**

**Orange County**

**BCV-5, 6 & 7**

**9/30/03**

## SPECIFICATIONS

For

**LWT Pit Hog "Dredge"**

**Model BCV-5, -6 & -7**

**Remotely-Controlled Dredge(s)**

### Physical:

Working depth, Feet 20'  
Flotation – Two (2) Steel pontoons  
{42" W x 46" D x 40'-0" O.A.L x 10 gauge steel.}  
Weight (est.) -- 35,500 Lbs.

Operational Draft 26"  
Length, Overall 50'-9"  
Transport Width 11'-10"  
Height 10'-11 1/2"

### Power:

230/460 VAC, 3 Phase, 60 Hz Electrical Power  
Rototiller Motor Drive & Traverse Winch - 75 HP  
Slurry Pump Drive, Boom Hoist & Head-Tilt Cylinder - 60 HP

Oil Cooler Re-circulating Pump -- 7-1/2 HP

### Controls & Readouts:

Power Disconnect Switch on Electrical Enclosure On-board - Power On/Off.  
Functions Remotely Controlled from Shore\* or On-board Dredge: Power Unit(s) 1 & 2 On/Off; Hydraulic Cooling Pump On/Off; Slurry Pump On/Off & Speed; Rototiller (Auger) Fwd/Off/Rev & Speed; Travel, Fwd/Rev & Speed; Boom Hoist, Up/Off/Down, 30° Dredging Head (Auger) Tilt; Extend/Off/Retract  
Other Measuring or Sensing Devices: Flow Meter Read-out (Slurry Pump Output), Bottom Sense (Dredging Head Float), Speed Sensors & Readouts (Rototiller, Traverse Winch & Slurry Pump), Hydraulic System(s) Pressure Readouts and Fluid Flow Rate Indicators and HPU Hour Meter.

\*Note: Manual/Auto Switch and Dredge/Shore Switch must be positioned **on-board dredge** to select mode and location of operation. Auto mode(s) include an operator interface on-shore or a laptop computer on-board the dredge.

### Slurry Pump:

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Materials of Construction: Pump Casing – Cast Iron  
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Suction & Discharge Diameters -- 3-inches  
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Typical Head-Capacity @ 1750 RPM:  
250 GPM @ 70 ft. TDH (water)

### Dredging Head:

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Drive – 45 HP Hydraulic Motor coupled to 17-4 PH SS shaft w/ Sprocket & Chain power transfer to Rototiller.  
Speed variable from 0 to 200 RPM.

### Lateral Move System & Propulsion:

Automated System w/ Shore-based Winches Strategically Located Around Basin.  
Trebble Sheave Hydraulic Winch w/ 3/8" Diameter 7 x 19, Galvanized Wire Rope (Traverse Cable) w/ Proximity Switches & Stops at ends.  
Winch Drive - Hydraulic Motor with Planetary Gear Reducer Drive - Traverse Speed Variable from 0 to 130 FPM

## Hydraulics:

**Two Circuits: Power Unit 1 (75 HP) – Rototiller Motor & Traverse Winch**

Hydraulic Pump Output @1,775 RPM – 46.1 GPM

Flow Controls – Two-Bank Proportional, Directional Control Valve for Variable Flow Rates

Hydraulic Relief Pressure – 2,500 PSI

**Power Unit 2 (60 HP) – Slurry Pump, Boom Hoist Winch & Head-Tilt**

Hydraulic Pump Output @1,775 RPM – 46.1 GPM

Flow Controls – Three-Bank Proportional, Directional Control Valve for Variable Flow Rates

Hydraulic Relief Pressure – 2,500 PSI

**Oil Cooler Pump (7.5 HP) – Oil Recirculation (Closed Loop)**

Hydraulic Pump Output @1,750 RPM – Up to 49.9 GPM

**Reservoir – 225 Gallon Capacity with 10 Micron Filter Element, Level Sight Gauge & Oil Temperature/Level Shutdown**

**Control Panel w/ Motor Starters and Power Disconnect Switch Installed On-board Dredge – Manual Controls on Cab Dash Panel(s) for Rototiller, Traverse Winch, Slurry Pump, Boom Hoist and Dredging Head-Tilt Cylinder.**

## Coating System:

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