IMS Model 7012 HP Versi-Dredge®



OPERATING DIMENSIONS

Length 51 ft. 5 in. (15.7 m) Width 12 ft. (3.66 m)

Height 10 ft. 8 in. (3.25 m) w/muffler removed

Weight (less fuel) 47,700 lbs. (21,600 kg)

INTERNATIONAL SHIPPING DIMENSIONS

Length Option 49 ft. 2 in. (15 m) - STARWHEEL®s removed

Width 12 ft. (3.66 m)

Height 10 ft. 8 in.(3.25 m) w/ muffler removed

Weight (less fuel) 47,000 lbs. (21,319 kg)

Shipping Method Break bulk, 20' ocean container required for

all shipments

FLOTATION

Dimensions Two (2) pontoons, 45 in. x 43 in. x 468 in.

(1,150 mm x 1,090 mm x 11,900 mm); 10 ga. Steel sides, bottom and 1/4" plate tops, internal bulkheads and stiffeners, and painted w/ a marine grade

epoxy paint

Displacement 63,300 lbs. (28,700 kg)

Draft 35 in. (890 mm)

WORKING CAPACITY

Cut 135 in. (3,430 mm) wide x 26 in. (660 mm) deep

Working Depth 30 ft. (9.1 m)

Depth Extension None available

ENGINE

Type John Deere Diesel Model 6135 AFM85; 6 cylinder 13.5

L, 500 HP (373 kW) @ 2,000 rpm

Fuel Capacity 400 gal. (1,510 liters)

HYDRAULIC SYSTEMS

Circuit #1 Slurry Pump

14.4 in³/rev.

115 gpm (7.3 liter/sec.) @ 5000 psi (34.5 MPa)

Circuit #2 Cutterhead, Boom, Winches and STARWHEELS®

8.5 in 3 /rev. loadsense

82 gpm (5.2 liter/sec) @ 2,500 psi (17.2 MPa)

Reservoir 120 gal. (454 liters)

Filtration 1 reservoir mouinted return filter with a 10-micron (min.) rating with an indicator and cab warning light.

Slurry pump circuit remote charge filter 6-micron (min.) rating with an indicator and cab warning light. Filter with

 $water {\it removal capability are optional.}$

CUTTERHEAD

Cutterbar Diameter 26 in. (660 mm)

Cutterbar Length 135 in. (3,430 mm)

Drive Recessed dual hydraulic motor; direct drive with no

gear reduction

Speed (variable) 0 to 60 rpm @ 2,500 psi

Cutterhead Torque 23,885 in.-lbs. (2,969 N-m) @ 2,500 psi (peak)

Cutterhead Tip Force 1,837 lbs. (8,171 N)

Cutterhead Teeth Replaceable carbide steel teeth

DREDGE PUMP

Type GIW

Discharge Diameter 10 in. (254 mm)
Suction Diameter 12 in. (304 mm)
Sphere Passage 5.0 (127 mm)

Pump Performance 5,000 gpm (315 liter/sec.) (a) 125 ft. (38.1 m)

TDH (slurry s.g.1.25) @ 760 rpm w/ 2,000 ft.

(610 m) discharge length.

Speed (variable) 0 to 790 rpm

PROPULSION

Propulsion STARWHEEL® Drive Self-Propulsion system; cable

drive infrastructure in place (cables & anchor plates sold

separately)

Speed (variable) 0 to 31 rpm @ surface

0 to 7 rpm @ underwater 0 to 55 fpm (cable drive)

ELECTRICAL SYSTEM

Voltage 24 volt, negative ground

Alternator Output 200 Amp

SAFETY FEATURES

Includes 2 fire extinguishers, hand rail system, dual folding cabin doors, dual

warning horns, 1 life ring, 2 life jackets, locking power unit

ANTI-CORROSION FEATURES

Includes

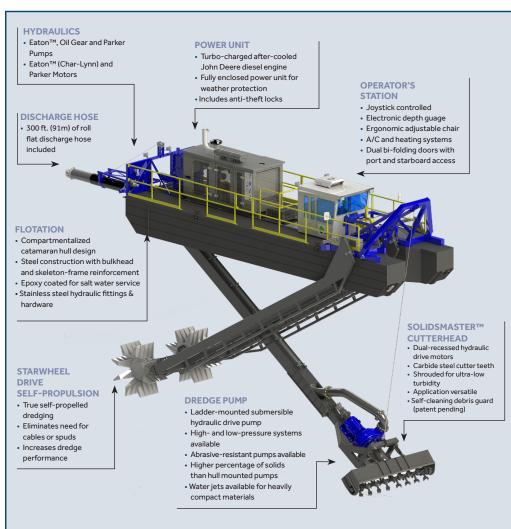
Hull below deck is painted with a marine-grade epoxy, above hull deck painted with polyurethane epoxy, and remaining components are coated with heavy duty powder coating all suitable for salt water service. Also includes stainless steel hydraulic lines, fittings, and all suitable hardware

HOURLY ESTIMATED OPERATING COSTS (\$USD)

| Estimated Hourly Operating Cost | \$126.30 |
|------------------------------------|----------|
| Hull Maintenance | 3.60 |
| Pump & Cutterhead Wear | 6.00 |
| Accrued Mechanical Overhaul | 4.00 |
| Maintenance (filters, seats, etc.) | 1.20 |
| Labor (2 men @ \$16/hr.) | 32.00 |
| Insurance | 2.00 |
| Fuel @ \$3.00/gallon | \$51.50 |

Prices subject to local economics

IMS Model 7012 HP Versi-Dredge®



| FEATURES | BENEFITS | |
|---|---|--|
| Superior Pump Design | 10 in. (254mm) x 12 in. (305mm) hi-chrome pump for continuous abrasive service. Ladder mounted for higher solids than the competition. Pump longer distances without a booster pump. 1,135m3/hr. (1,475 yds3/hr) nominal pump capacity & 284m3/hr. (371 yds3/hr.) total solids capacity. | |
| High Solids Pump | Standard pump passes 5 inch (127mm) spherical solids. | |
| Self-Propelled | Includes Patented Starwheel Drive self-propulsion system that allows for maximum maneuverability in lakes, canals, and rivers where setting anchors is not ideal. Patent pending Traction Master technology allows for higher speed paddling on surface that automatically switches to high torque mode when operating on the bottom of the water body for maximum traction control. | |
| Powerful Cutterhead | 23,885 in-lbs. torque with replaceable hard faced carbide steel trencher teeth. | |
| Fully Enclosed Power Unit | Power unit has locking security doors and full shroud to protect from the elements and potential vandalism. | |
| One Truck Transportable | Ships fully assembled and requires no installation of side tanks, spuds, or separate dredge ladder. | |
| Dredging Depth | 30 ft. (9.1m) standard dredging depth allows for greater project versatility. Deepest in its class. | |
| Modern Operator's Cab | Spacious, climate controlled operators cabin with electronic over hydraulic joystick controls , rear back up camera w/ color monitor, 360 degree spot light, digital depth gauge, CANbus system for easy trouble shooting with factory, oversized analog back-lit gauges, sound system, fan, horn, windshield wipers, and dual folding doors for easy access to port and starboard decks. | |
| Pump Defender (Patented) | Standard patented Pump Defender allows for cleaning of the pump inlet after every revolution of the cutterhead to greatly reduce down time in debris rich environments by up to 80%. | |
| Clean Dredge Deck | No obstructions on deck and clear pathways from front to back and port and starboard decks. All components are designed for easy access and maintenance. | |
| Complimentary Flexible Dishcarge Package | Includes 300 ft. (91m) of heavy duty flexible, roll-flat discharge hose and floats to give the dredge maximum maneuverability when connected to the hard discharge line. | |
| Service and Support | 12 month warranty with lifetime phone and e-mail support. Warranty site visits anywhere in the world if problem cannot be solved via phone. Largest field service staff in the transportable dredge industry backed by a dedicated Customer Project | |



A Model 7012 HP Versi-Dredge $^{\circ}$ mines sand from a river in Monrovia, Liberia.



All $Versi-Dredge^{\circ}$ models come standard with joystick controls and oversized gauges for ease of operation.

STANDARD EQUIPMENT:

300 ft. (91 m) flexible discharge hose
12 discharge hose/pipe floats
Climate Control (A/C & Heat)
Close-looped discharge line video monitor
U.S. hand tool kit and tool box
Self-cleaning debris guard (patent pending)
Night time operating lights
360 degree spotlight with toggle switch
Digital depth gauge
Marine Grade Sound System
USB Port

OPTIONAL EQUIPMENT:

12 in. (305 mm) discharge pipe/hose Bi-Directional Broadcaster Dredging GPS System Cable Drive set-up package Dredge navigation lights Spare Parts Booster Pumps w/ custom instruments Environmental Plus Cutterhead





