

## Cable Dredges

Submersible Dredging Pumps | Remote Controlled Dredges  
Cable Dredges | Amphibious Dredges

**DRAGFLOW**



### DRH: Easy to handle and versatile cable dredges

Our Cable dredges (DRH) are successfully used in all those applications where it is necessary to have tools that are manageable and able to work even at great depths.

The small size and modular design allow these dredges to be transported even in remote and difficult to reach locations. Assembly and installation are simple and take only a few hours. These features help to reduce project start-up times and costs. Our DRH dredges are simple to use: thanks to intuitive controls, they can be managed by a single operator on board. Available in different versions (with the possibility of hydraulic or electrical power supply), they can be equipped with a wide range of pumps and accessories to perform even in the most difficult situations. The largest model can provide a flow rate of up to 4000 m<sup>3</sup>/h.

The limited draft and the possibility of rapidly obtaining naval certifications are additional points of strength because they allow DRH to operate in very varied contexts, from artificial ponds to ports, from dams to mining basins.



### Main features

- Easy to use
- High productivity
- Possibility of working at high depth with a small hull
- Maximum flexibility: each dredge can be equipped with different pump models and numerous accessories
- Limited draft
- Fast delivery times
- Speed and cost-effectiveness of transport thanks to the modular design
- Extremely fast assembly and start-up times

### Main applications

- Clearing of canals and rivers
- Dredging of ports and marinas
- De-silting of industrial artificial lakes
- Dredging of dam reservoirs
- Emptying of mineral tailing ponds
- Filling of geotubes
- Cleaning of reservoirs in the food industry
- Removal of sludge from industrial or mining processes

# Cable Dredges

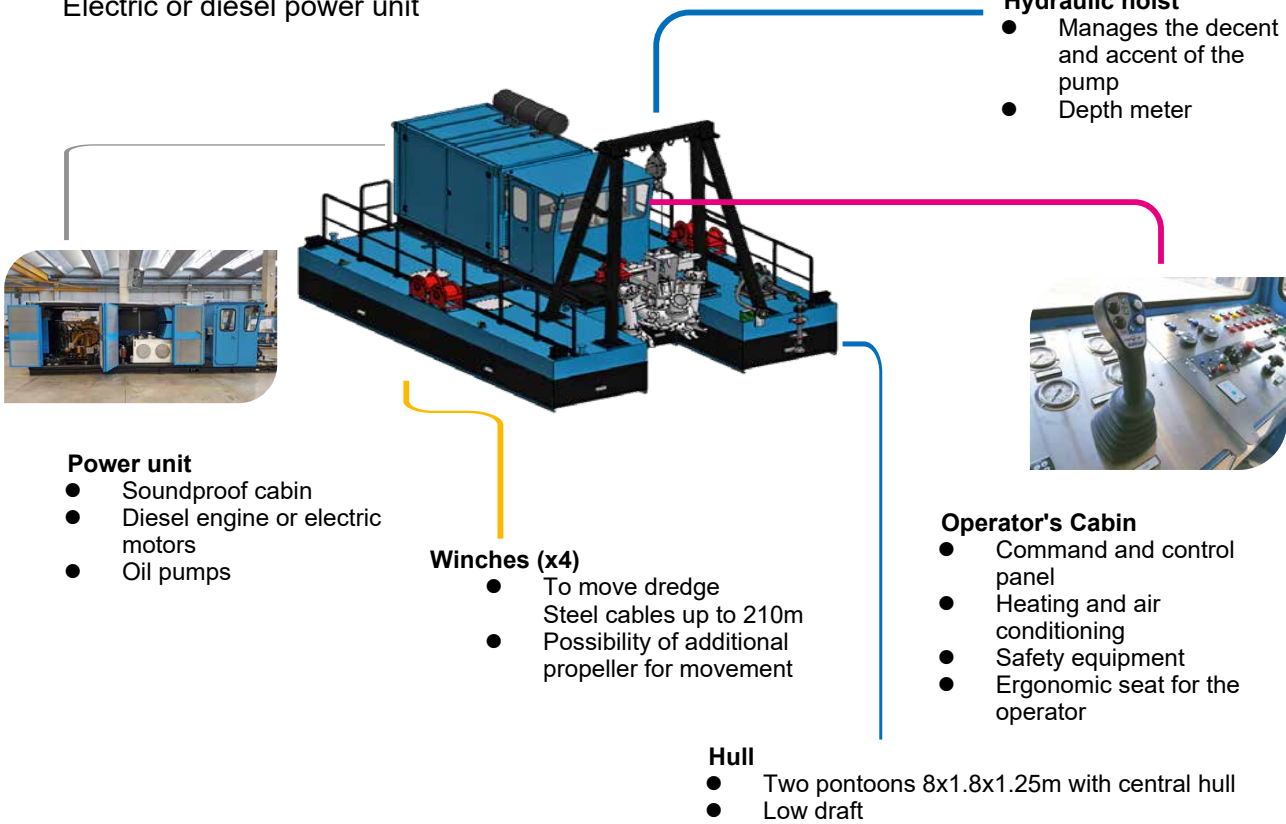
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## DRH85 | DRH85/160

[hydraulic pump]

Electric or diesel power unit



### Power unit

- Soundproof cabin
- Diesel engine or electric motors
- Oil pumps

### Winches (x4)

- To move dredge
- Steel cables up to 210m
- Possibility of additional propeller for movement

### Hydraulic hoist

- Manages the decent and ascent of the pump
- Depth meter

### Operator's Cabin

- Command and control panel
- Heating and air conditioning
- Safety equipment
- Ergonomic seat for the operator

### Hull

- Two pontoons 8x1.8x1.25m with central hull
- Low draft

### DIMENSIONS

Length.....8 m  
 Width.....6 m  
 Height.....5 m  
 Weight.....30 ton



### TRANSPORT

Transportable in 4 containers 40'



### MODULAR DESIGN

**Dimensions:**  
 2 Pontoons  
 8x1.8x1.25m  
**Draft:** 60 cm



## Range of dredging pumps

### HY85

**MAX FLOW RATE [m³/h]:** 500  
**MAX PUMPING DISTANCE [m]:** 800  
**DISCHARGE DIAMETER:** DN150  
**MAX SOLID PASSAGE:** 60 mm

### HY85HC

**MAX FLOW RATE [m³/h]:** 1000  
**MAX PUMPING DISTANCE [m]:** 500  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 90 mm

### HY85/160

**MAX FLOW RATE [m³/h]:** 600  
**MAX PUMPING DISTANCE [m]:** 1500  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 60 mm

### HY85/160HC

**MAX FLOW RATE [m³/h]:** 1000  
**MAX PUMPING DISTANCE [m]:** 700  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 90 mm

# Cable Dredges

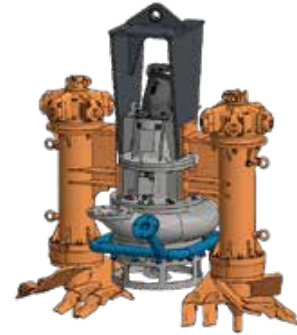
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## Accessories

### Excavators

- Motor power: 14.5 kW
- Replaceable teeth
- Hydraulic motor with radial pistons
- Oil flow rate: 35 l/min each
- Weight : 500 kg
- Speed: 50 r.p.m.
- Torque: 2.6 kNm
- Rotation in both directions



### Integrated jet ring system

- Thanks to the high-pressure water jets, it allows to disintegrate the material and have a higher concentration of solids in the mixture
- Flow rate: 60–200 m³/h
- Pressure: 6–7 bar
- Power supply: high pressure horizontal pump

### Propeller

- To move and rotate the dredge
- Hydraulic driven
- Maneuverable from the cabin

ACCESSORIES	STANDARD	FULL OPTIONAL	HIGH DEPTH
Winches	✓	✓	✓
Hoist	✓	✓	✓
Operator's cabin	✓	✓	✓
Control panel	✓	✓	✓
Depth meter	✓	✓	✓
GPS		✓	✓
Propeller		✓	✓
Hose reel		✓	✓
Bathymetry system		✓	✓
Pressure compensator			✓

# Cable Dredges

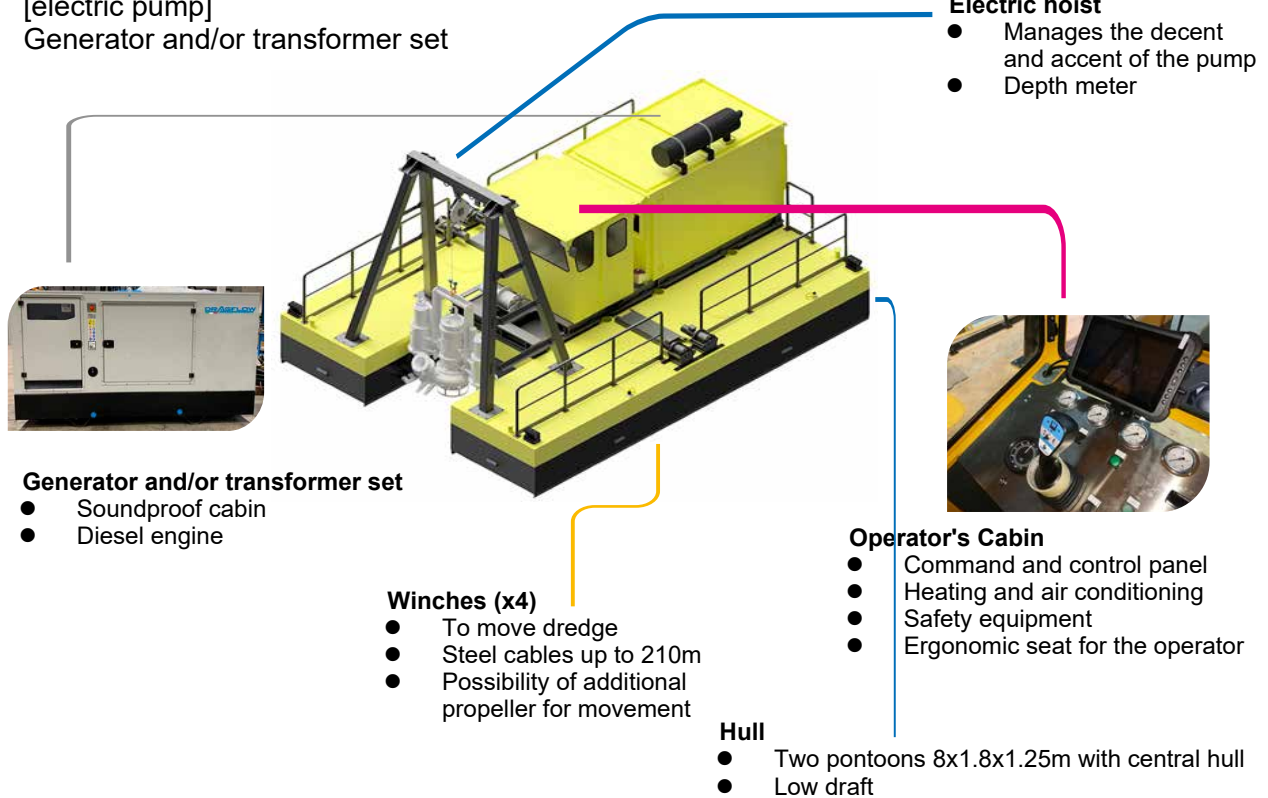
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## DRH85e | DRH85/160

[electric pump]

Generator and/or transformer set



### Electric hoist

- Manages the decent and ascent of the pump
- Depth meter

### Generator and/or transformer set

- Soundproof cabin
- Diesel engine

### Winches (x4)

- To move dredge
- Steel cables up to 210m
- Possibility of additional propeller for movement

### Operator's Cabin

- Command and control panel
- Heating and air conditioning
- Safety equipment
- Ergonomic seat for the operator

### Hull

- Two pontoons 8x1.8x1.25m with central hull
- Low draft

## Range of dredging pumps

### EL60\*

**MAX FLOW RATE [m³/h]:** 500  
**MAX PUMPING DISTANCE [m]:** 500  
**DISCHARGE DIAMETER:** DN150  
**MAX SOLID PASSAGE:** 60 mm

### EL60HC

**MAX FLOW RATE [m³/h]:** 700  
**MAX PUMPING DISTANCE [m]:** 300  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 90 mm

### EL1204\*

**MAX FLOW RATE [m³/h]:** 600  
**MAX PUMPING DISTANCE [m]:** 1000  
**DISCHARGE DIAMETER:** DN150  
**MAX SOLID PASSAGE:** 60 mm

### EL1204HC\*

**MAX FLOW RATE [m³/h]:** 1000  
**MAX PUMPING DISTANCE [m]:** 500  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 90 mm

**THE SAME HULL OF THE MODELS DRH85 AND DRH85/160 CAN BE EQUIPPED WITH ELECTRIC GENSET AND ELECTRIC PUMPS**

**ZERO-EMISSION DREDGE:**  
 WHEN ELECTRICITY IS SUPPLIED FROM A LOCAL RENEWABLE SOURCE



# Cable Dredges

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## Accessories

### Excavators

- Motor power: 9 kW
- Replaceable teeth
- Electric motor
- Weight : 800 kg
- Speed: 25 r.p.m.
- Torque: 3.2 kNm
- Rotation in both directions



### Integrated jet ring system

- Thanks to the high-pressure water jets, it allows to disintegrate the material and have a higher concentration of solids in the mixture
- Flow rate: 60–200 m<sup>3</sup>/h
- Pressure: 6–7 bar
- Power supply: high pressure horizontal pump

### Propeller

- To move and rotate the dredge
- Hydraulic driven
- Maneuverable from the cabin

ACCESSORIES	STANDARD	FULL OPTIONAL	HIGH DEPTH
Winches	✓	✓	✓
Hoist	✓	✓	✓
Operator's cabin	✓	✓	✓
Control panel	✓	✓	✓
Depth meter	✓	✓	✓
GPS		✓	✓
Propeller		✓	✓
Hose reel		✓	✓
Bathymetry system		✓	✓
Pressure compensator			✓

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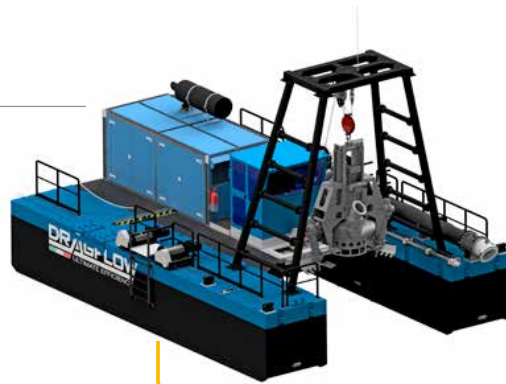
## DRH300 | DRH400 | DRH600

[hydraulic pump]  
 powerpack with diesel or electric motor



### Power Unit

- Soundproof cabin
- Diesel or electric motors
- Oil pumps



### Winches (x4)

- To move dredge
- Steel cables up to 210m
- Possibility of additional propeller for movement

### Electric hoist

- Manages the decent and ascent of the pump
- Depth meter



### Operator's Cabin

- Command and control panel
- Heating and air conditioning
- Safety equipment
- Ergonomic seat for the operator

### Hull

- Two pontoons 11.5x1.8x1.8m with central frame
- Low draft

## Range of dredging pumps

**HY300** MAX FLOW RATE [m<sup>3</sup>/h]: 2000  
 MAX PUMPING DISTANCE [m]: 1000  
 DISCHARGE DIAMETER: DN250  
 MAX SOLID PASSAGE: 120 mm

**HY600** MAX FLOW RATE [m<sup>3</sup>/h]: 2500  
 MAX PUMPING DISTANCE [m]: 3000  
 DISCHARGE DIAMETER: DN350-400  
 MAX SOLID PASSAGE: 120 mm

**HY400** MAX FLOW RATE [m<sup>3</sup>/h]: 2000  
 MAX PUMPING DISTANCE [m]: 2000  
 DISCHARGE DIAMETER: DN300-350  
 MAX SOLID PASSAGE: 120 mm

**HY600HC** MAX FLOW RATE [m<sup>3</sup>/h]: 4000  
 MAX PUMPING DISTANCE [m]: 1000  
 DISCHARGE DIAMETER: DN250  
 MAX SOLID PASSAGE: 120 mm

**HY400HC** MAX FLOW RATE [m<sup>3</sup>/h]: 3000  
 MAX PUMPING DISTANCE [m]: 1000  
 DISCHARGE DIAMETER: DN450  
 MAX SOLID PASSAGE: 120 mm

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## DRH300 | DRH400 | DRH600

### DIMENSIONS



Length.....11.5 m  
 Width.....8 m  
 Height.....7.5 m  
 Weight.....40/60 ton



### TRANSPORT

Transportable in 5 containers 40'

### MODULAR DESIGN

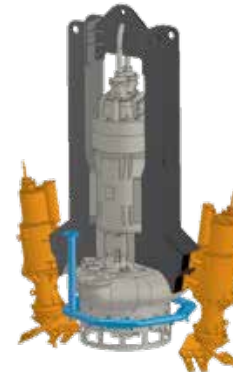


**Dimensions:**  
 2 Pontoons  
 11.5x1.8x1.8m and  
 central frame  
**Draft:** 80-90 cm

### Accessories

#### Excavators

- Motor power: 25 kW
- Replaceable teeth
- Hydraulic motor with radial pistons
- Oil flow rate: 60 l/min each
- Weight : 600 kg
- Speed: 50 r.p.m.
- Torque: 4.5 kNm
- Rotation in both directions



#### Integrated jet ring system

- Thanks to the high-pressure water jets, it allows to disintegrate the material and have a higher concentration of solids in the mixture
- Flow rate: 100–200 m³/h
- Pressure: 6–7 bar
- Power supply: high pressure horizontal pump

#### Propeller

- To move and rotate the dredge
- Hydraulic driven
- Maneuverable from the cabin

ACCESSORIES	STANDARD	FULL OPTIONAL	HIGH DEPTH
Winches	✓	✓	✓
Hoist	✓	✓	✓
Operator's cabin	✓	✓	✓
Control panel	✓	✓	✓
Depth meter	✓	✓	✓
GPS		✓	✓
Propeller		✓	✓
Hose reel		✓	✓
Bathymetry system		✓	✓
Pressure compensator			✓

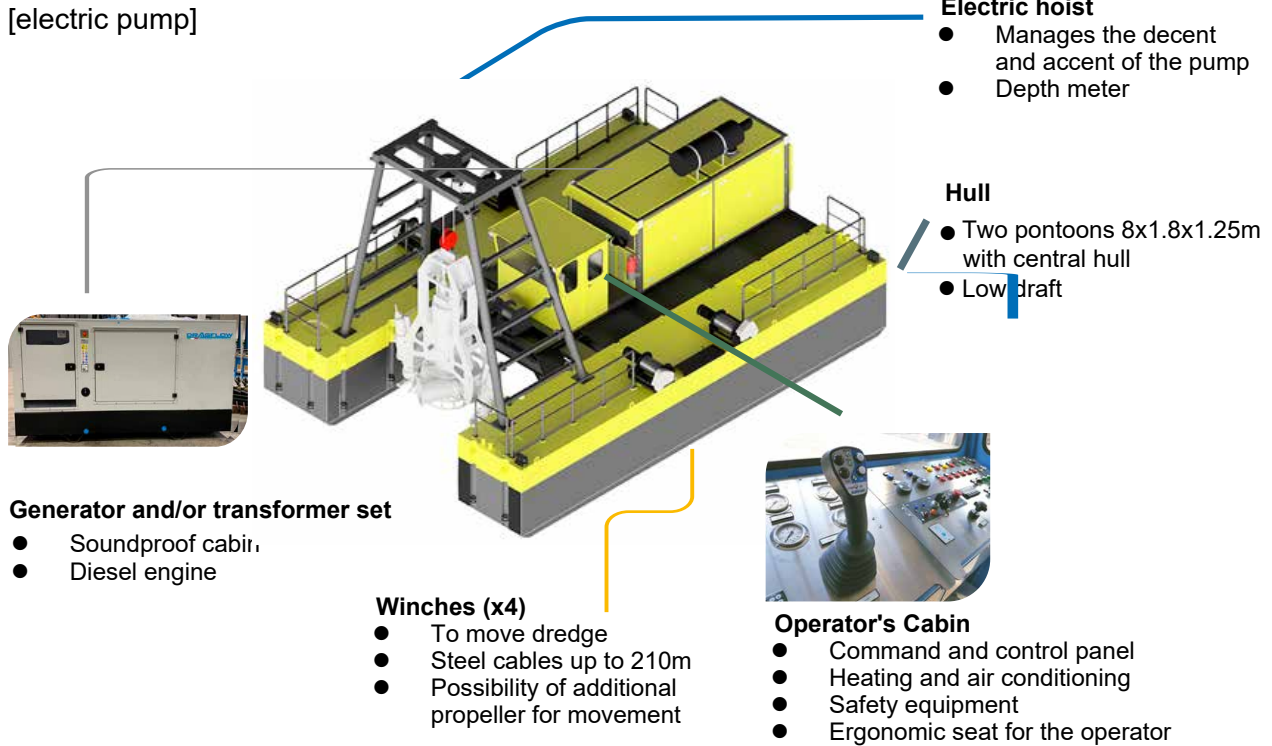
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## DRH300e

[electric pump]



### Range of dredging pumps

**EL110\***    **MAX FLOW RATE [m³/h]:** 600  
**MAX PUMPING DISTANCE [m]:** 1000  
**DISCHARGE DIAMETER:** DN200  
**MAX SOLID PASSAGE:** 60 mm

**EL300\***    **MAX FLOW RATE [m³/h]:** 2000  
**MAX PUMPING DISTANCE [m]:** 1000  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 120 mm

**EL150\***    **MAX FLOW RATE [m³/h]:** 1700  
**MAX PUMPING DISTANCE [m]:** 600  
**DISCHARGE DIAMETER:** DN250  
**MAX SOLID PASSAGE:** 120 mm

**EL300HC**    **MAX FLOW RATE [m³/h]:** 3000  
**MAX PUMPING DISTANCE [m]:** 700  
**DISCHARGE DIAMETER:** DN450  
**MAX SOLID PASSAGE:** 120 mm

**EL180\***    **MAX FLOW RATE [m³/h]:** 1000  
**MAX PUMPING DISTANCE [m]:** 900  
**DISCHARGE DIAMETER:** DN200-250  
**MAX SOLID PASSAGE:** 120 mm

\*=can mount side excavators



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## DRH300e

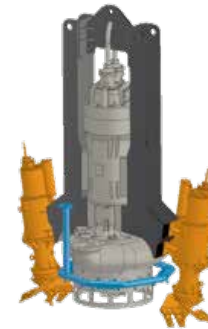
### Accessories

#### Excavators

- Motor power: 9 kW
- Replaceable teeth
- Electric motor
- Weight : 800 kg
- Speed: 25 r.p.m.
- Torque: 3.2 kNm
- Rotation in both directions

#### Integrated jet ring system


- Thanks to the high-pressure water jets, it allows to disintegrate the material and have a higher concentration of solids in the mixture
- Flow rate: 60–200 m<sup>3</sup>/h
- Pressure: 6–7 bar
- Power supply: high pressure horizontal pump




#### Propeller

- To move and rotate the dredge
- Hydraulic driven
- Maneuverable from the cabin

ACCESSORIES	STANDARD	FULL OPTIONAL	HIGH DEPTH
Winches	✓	✓	✓
Hoist	✓	✓	✓
Operator's cabin	✓	✓	✓
Control panel	✓	✓	✓
Depth meter	✓	✓	✓
GPS		✓	✓
Propeller		✓	✓
Hose reel		✓	✓
Bathymetry system		✓	✓
Pressure compensator			✓



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## Dragflow monitoring system

Dragflow has developed a monitoring system for the full range of dredges that allows operators and project managers to keep track of key indicators of a project such as placement, area coverage, and more. The information is collected by a series of sensors on board and saved on a cloud-based system accessible to operators on the dredges and offsite project managers. This telemetry package also allows remote diagnosis and downtime prevention that greatly increases efficiency of the overall dredging operation.

The Dragflow monitoring system is customized for each application and can include following accessories

### Positioning and Bathymetry

- GPS System: precise mapping and positioning within the dredging area for effective coverage and better planning. The system can be combined with sensors such as Encoder pulley, flow meter, densimeter and more for data crossing.
- Echosounder: the serial interface can connect to the GPS system via RS232 communication, and elaborate georeferenced maps, useful to make the work more easy and accurate.

### Work parameters

- Flowmeter: the electromagnetic flow meter provides flow measurements in real time for the operator. In combination with the densimeter, it is possible to quantify the volume of material actually removed.
- Density meter: provides real-time density measurements in the discharge pipe for all types of solids. The meter uses ultrasonic technology to measure density and it is specifically designed for dredging and mineral applications.

### Working depth meter

- In order to determine the location of the dredging pump during operations, depending on the application Dragflow dredges can be equipped with encoder pulleys or piezoresistive transducers to provide real-time information to the operator.



**FLOWMETER**



**GPS-SYSTEM**



**ECHOSOUNDER DEVICES**



**DENSITY METER**



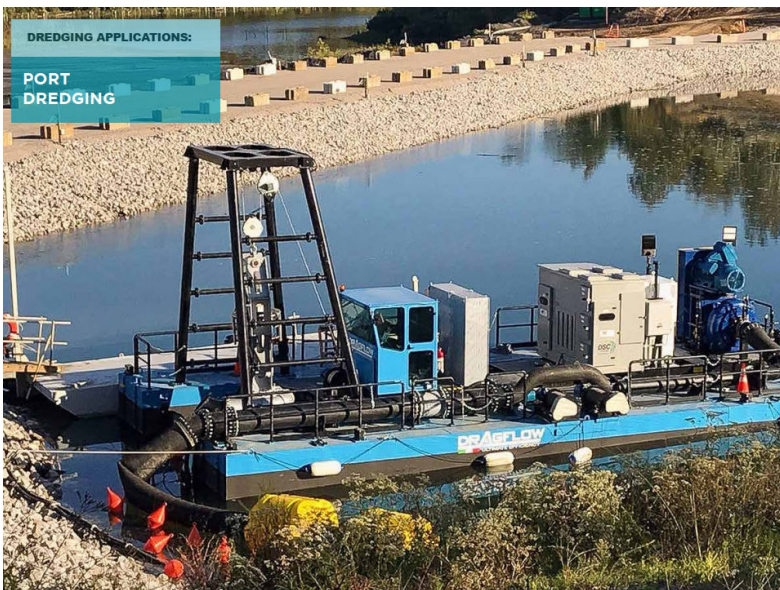
**WORKING DEPTH MESUREMENT**



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**DRAGFLOW**



Dredging at any scale - Talk to us about your project needs.  
We have customised solutions to suit your requirements.  
Sales / Hire / Rent-to-buy