

Cable Dredges

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



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 4 000 m³/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

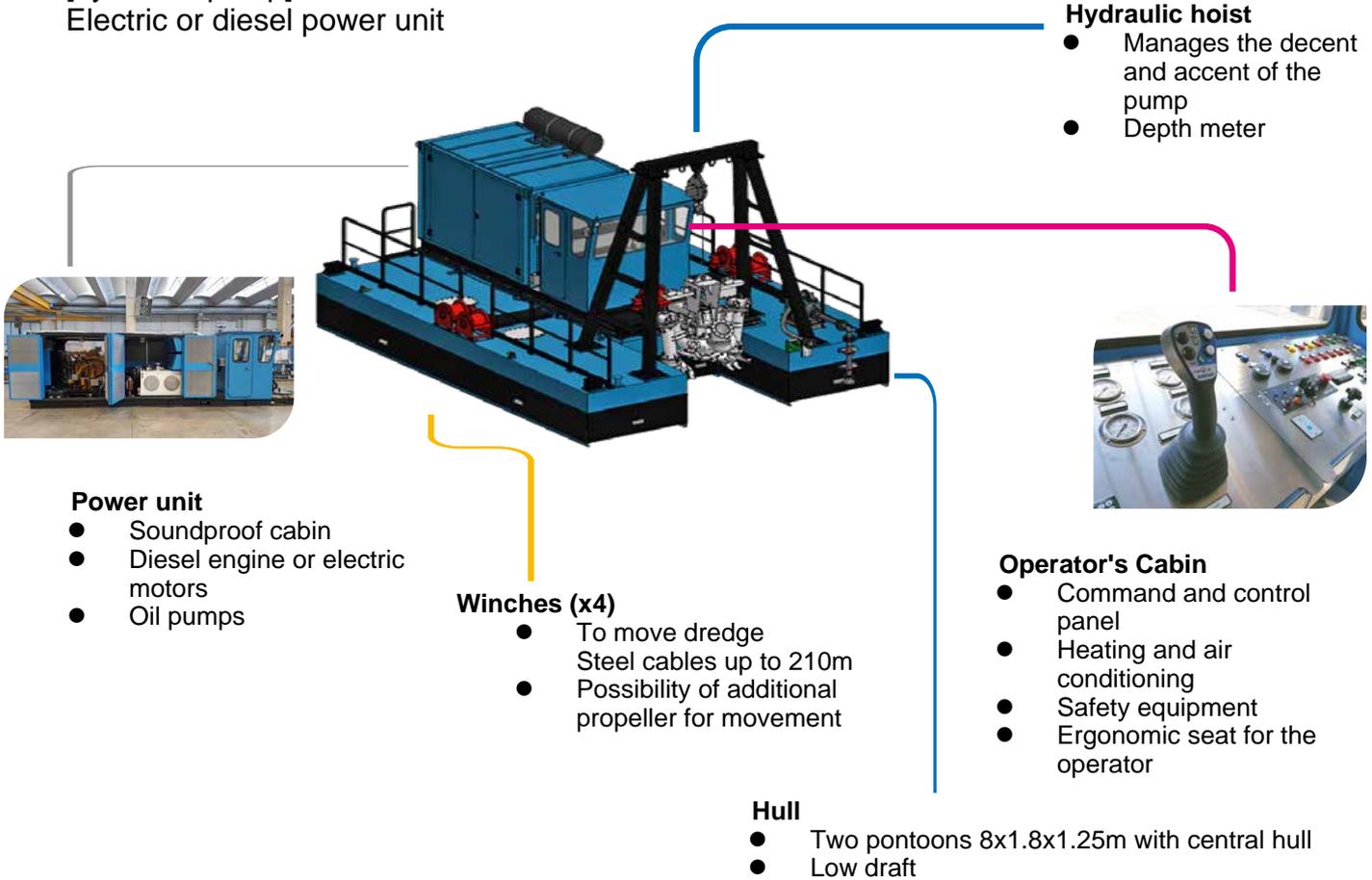
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DRH85 | DRH85/160

[hydraulic pump]

Electric or diesel power unit



Hydraulic hoist

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

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

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

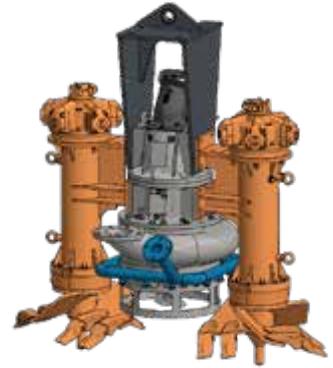
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Accessories

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

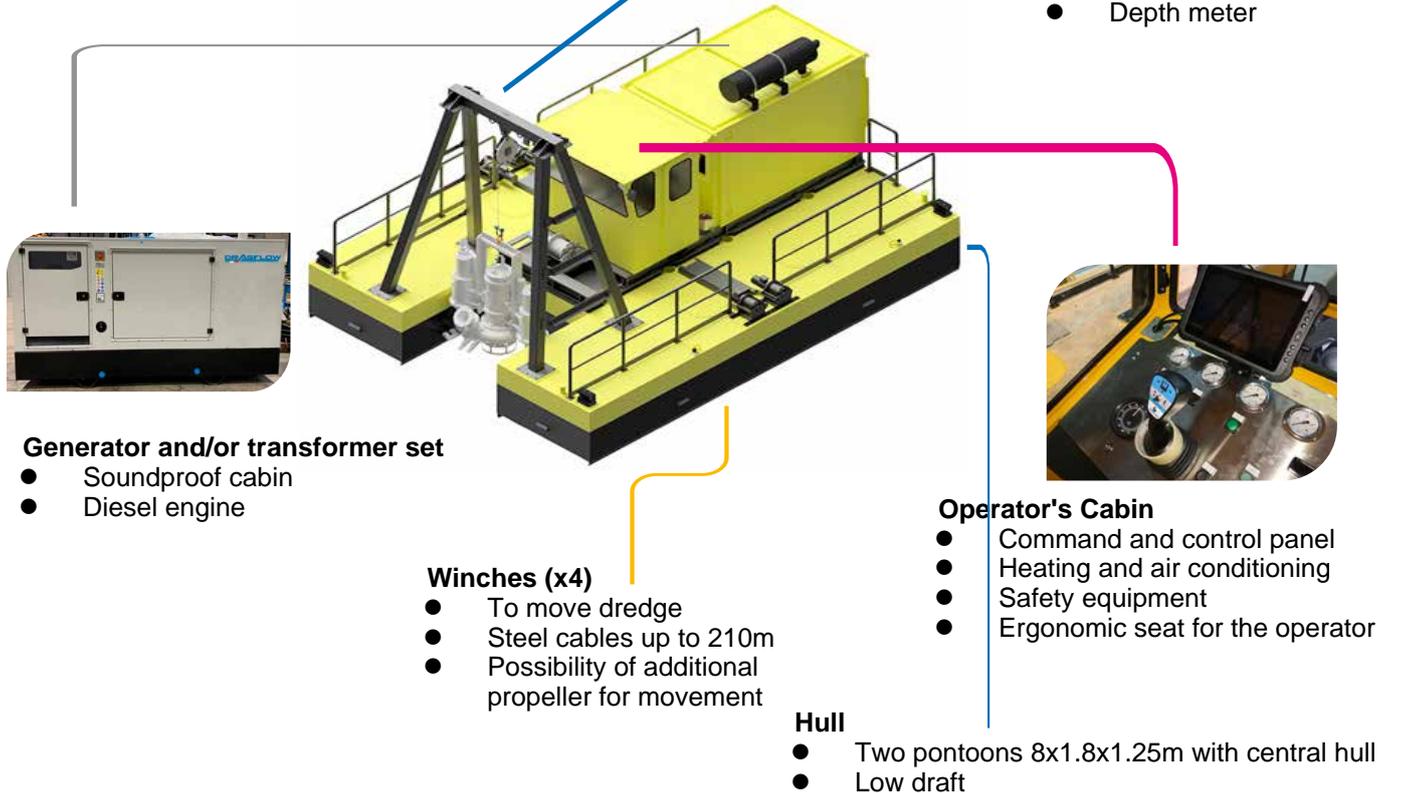
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DRH85e | DRH85/160

[electric pump]

Generator and/or transformer set



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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Cable Dredges | Amphibious Dredges



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 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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DRH300 | DRH400 | DRH600

[hydraulic pump]
powerpack with diesel or electric motor

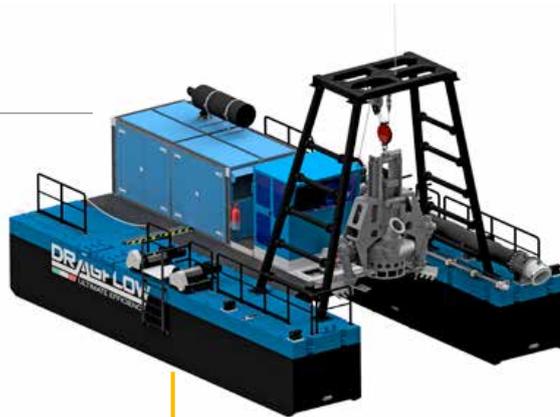
Electric hoist

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



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



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 [m³/h]: 2000
MAX PUMPING DISTANCE [m]: 1000
DISCHARGE DIAMETER: DN250
MAX SOLID PASSAGE: 120 mm

HY600 MAX FLOW RATE [m³/h]: 2500
MAX PUMPING DISTANCE [m]: 3000
DISCHARGE DIAMETER: DN350-400
MAX SOLID PASSAGE: 120 mm

HY400 MAX FLOW RATE [m³/h]: 2000
MAX PUMPING DISTANCE [m]: 2000
DISCHARGE DIAMETER: DN300-350
MAX SOLID PASSAGE: 120 mm

HY600HC MAX FLOW RATE [m³/h]: 4000
MAX PUMPING DISTANCE [m]: 1000
DISCHARGE DIAMETER: DN250
MAX SOLID PASSAGE: 120 mm

HY400HC MAX FLOW RATE [m³/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

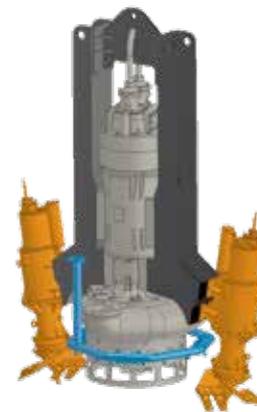
- Motor power: 25 kW
- Replaceable teeth
- Hydraulic motor with radial pistons
- Oil flow rate: 60 l/min each
- Weight : 600 kg
- Speed: 50 r.p.m.
- Torque: 4.5 kNm
- Rotation in both directions

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



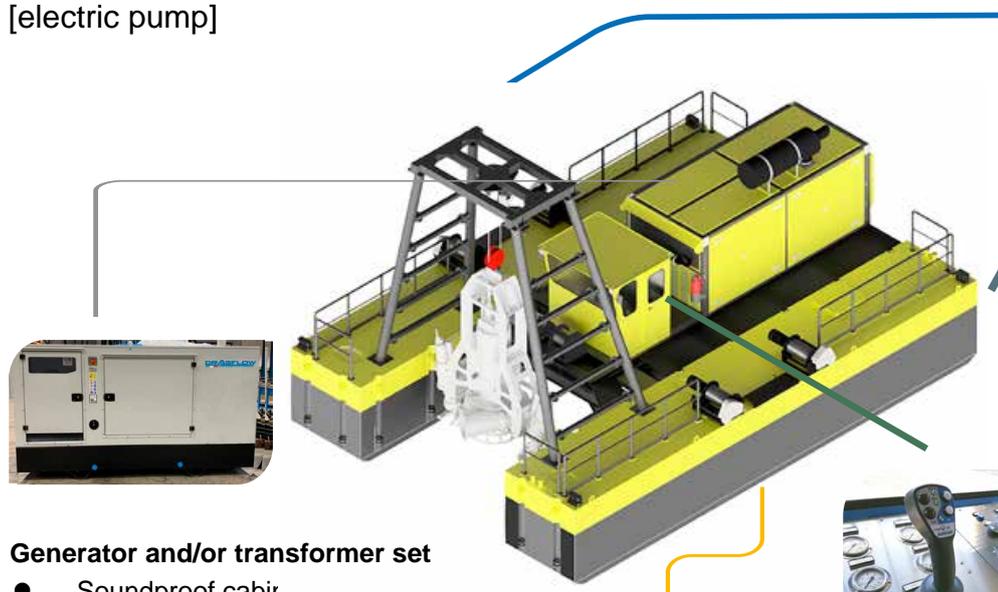
ACCESSORIES	STANDARD	FULL OPTIONAL	HIGH DEPTH
Winches	✓	✓	✓
Hoist	✓	✓	✓
Operator's cabin	✓	✓	✓
Control panel	✓	✓	✓
Depth meter	✓	✓	✓
GPS		✓	✓
Propeller		✓	✓
Hose reel		✓	✓
Bathymetry system		✓	✓
Pressure compensator			✓

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DRH300e [electric pump]





- Electric hoist**
 - Manages the decent and ascent of the pump
 - Depth meter
- Hull**
 - Two pontoons 8x1.8x1.25m with central hull
 - Low draft
- 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

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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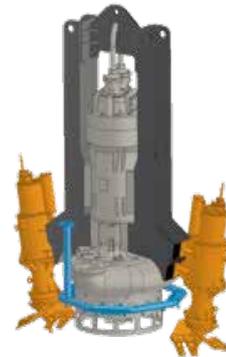


DRH300e

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 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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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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