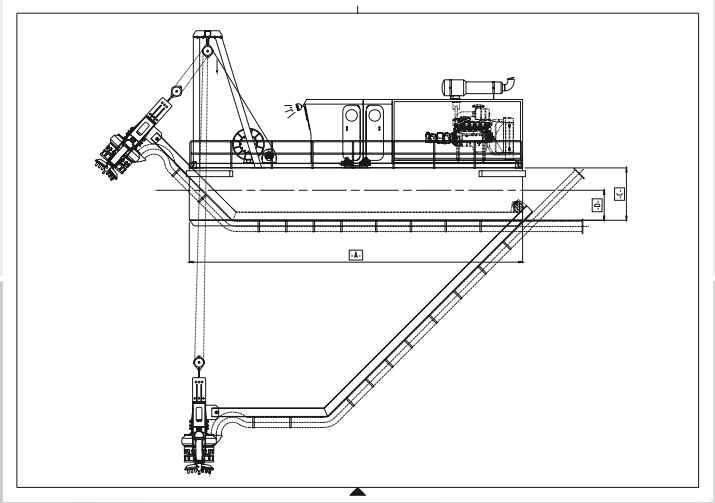
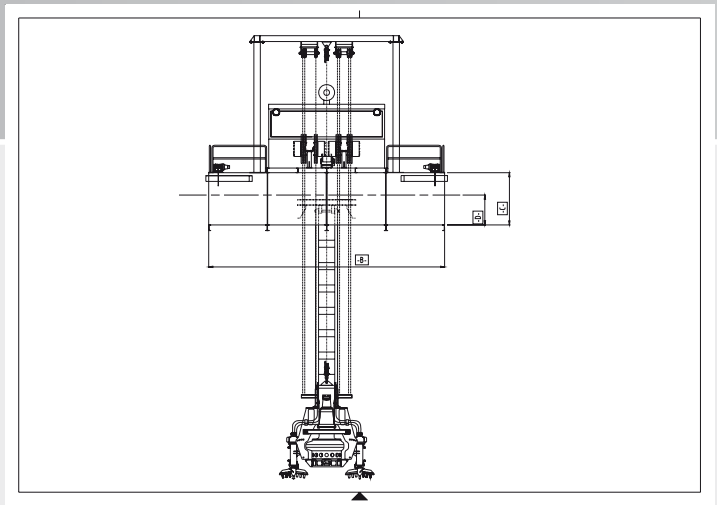
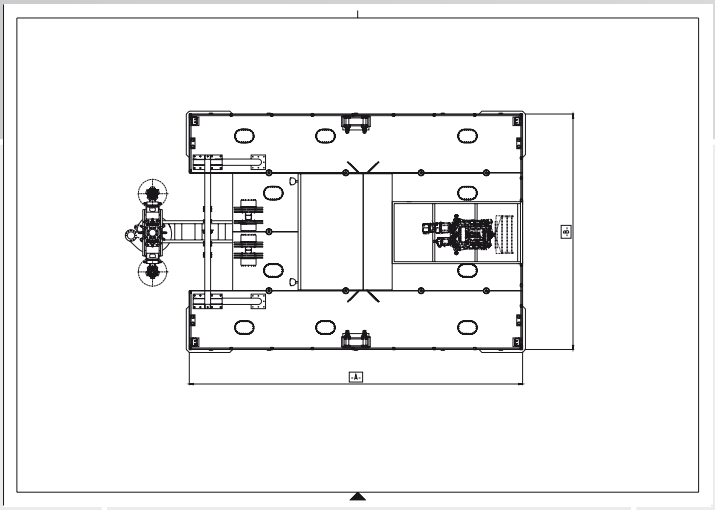
DRS Series
DREDGE with LADDER

	DRS 035/050/085	DRS 300/400
Main dimensions		
Length [a]	8 m	12 m
Width [b]	6 m	8 m
Height [c]	1,5 m	1,8 m
Modular Structure	3 steel floaters	4 steel floaters
Oil capacity	290 liters	430 liters
Fuel capacity	540 liters	1260 liters
Protection	Antifouling paint and cathodic protection Beams anti-breakthrough	
Certification	R.I.N.A. Certification	
Pump handling		
Pump handling	N°1 ladder hydraulic commended	
Dredging Depth	Up to 20 m	
Hydraulic Power Pack		
Engine	Diesel/Electric motor	Diesel/Electric motor
Electric plant	12/24 V	12/24 V
Hydraulic plant	No. 1 oil pump variable flow – dredging pump No. 1 oil pump variable flow - excavators No. 1 oil pump variable flow - ladder dredge	
Dredging unit		
Dredging Pump	Dragflow Pump HY35, HY50, HY85 or HY85/160	Dragflow Pump HY300 or HY400
Delivery	From 100 to 250 mm	From 250 to 350 mm
Impeller diameter	From 380 mm a 490 mm	760 mm
Capacity	From 100 to 850 m³/h of mixture	From 720 to 1200 m³/h of mixture
Solid Capacity	25-30%	25-30%
Discharge distance	Up to 600 m	Up to 1 Km
Solid handling	From 35 to 90 mm	120 mm
Weight	From 500 to 1000 Kg	From 3500 to 3600 Kg







	DRS 035/050/085	DRS 300/400
Excavators and Jet-Ring		
Excavators	Dragflow EXHY20 and EXHY35 Power from 11 kW/30 RPM to 30 kW/50 RPM	
Jet Ring	Breakup with jet of water at high pressure From 30 to 200 m³/h at 6-8 bar	
Operator Cabin		
Features	- Side opening doors with lock - Air conditioning with heat pump - Hydraulic and electric controls - Front position, navigation and maintenance lights	
Winches		
Type	N° 4 hydraulic winches	
Length	50 meters (or longer)	
1° layer	5,7 mt. - 4600 Kg	
Diameter	12 mm	
Equipment		
Base	Hull complete with oil-pressure plant, protection by plastic bad weather cloth and with central system controls next to the plant	
Full Optional	Hull complete with soundproof, oil-pressure plant and operator cabin with air conditioning and central system controls	

accessories

HULL WITH BUILT-IN TANK

To increase the working period between refuelling it is possible to use modular floaters with built-in diesel tanks.

DELIVERY PIPES AND FLOATERS

The success of dredging operation depends on type and quality of delivery pipes and floaters that support the discharge line.

Dragflow provides two different types of pipes:

- **Flexible delivery pipes:** they are subjected to higher abrasion, but guarantee the most handling versatility during dredging operations,
- **Surface delivery pipes:** designed to transport the material to the discharge point.

Dragflow offers both options according to customer's needs and preferences.

We supply floaters in two categories:

- **Floaters for flexible pipe:** these floaters have a particular structure that permit them to withstand the water pressure due to the depth of the work,
- **Floaters for surface delivery pipe.**

HYDRAULIC OIL SPOOLS

Spools permit the recovery of oil hoses. Dragflow provides two different types:

- Spring spools: maximum dredging depth 12m,
- Motorized spools.

BOOSTER PUMPS

It is possible to couple dredging pumps with booster pumps to cover a longer delivery distance. They are powered by diesel or gas engines or electrical motors.

accessories

AZIMUTHAL STERN THRUSTER

Azimuthal stern thruster with hydraulic driving gear provides propulsion to the pontoon and acts as a shaft with a rudder angle of +/-40°.

WINCHES OF DIFFERENT LENGHTS

The standard cable length of swing winches is 50m for all three different type of dredges.
On request two additional models are available:

- Winches with a cable length of 133m,
- Winches with a cable length of 211m.

ANTI-TURBIDITY BELL

Sea sediments can be polluted by metals, hydrocarbons, bacteria and chemical substances which in most cases are toxic, resilient and accumulate as debris. A digging operation without turbidity limitation of the surrounding waters could prevent serious damage to the marine ecosystem.
This problem has been solved by Dragflow by the production of a bell to limit water turbidity.

DREDGING MONITORING SYSTEM

Our Dredging Monitoring System allows the display of work in progress on a PC screen, with a top and side view of the dredging unit. Control tools are available both to the operator on the machine and to remote operators.
The terrestrial digital model is updated in real time recording the dredging operation and the extracted material.

Several kits are available, starting from one for tracking the location of dredging up to a kit for a complete monitoring of work in progress.

Dragflow supplies all the necessary tools, software and sensor setting and training for all the operators who will use the monitoring system.

STABILIZERS

Coupling with, or in alternative, to swing winches it is possible to have stabilizer spuds moved by hydraulic winches.