



# AMPHIBIOUS DREDGES

**DRAGFLOW**  
ULTIMATE EFFICIENCY

**SUBMERSIBLE  
DREDGING PUMPS**



**REMOTE CONTROLLED  
DREDGES**



**CABLE  
DREDGES**



**AMPHIBIOUS  
DREDGES**



# DRM

## Crawler multipurpose dredge

The DRM series of dredges consist of **multipurpose dredges** that can work both in water and on land.

Designed to tackle projects where site conditions vary from areas with very shallow waters to deeper areas and in projects where extreme mobility is important.

The DRM design offers the mobility of an amphibious excavator along with the stability of a dredge, without using side pontoons.

### Main features:

- **Total mobility** on land and water
- **Managed by a single operator**
- **Dredging depth up to 6.5 m**
- **Flow rate up to 1000 m<sup>3</sup>/h**
- Possibility to use **different hydraulic tools**
- **Available with bucket** up to 1 m<sup>3</sup>
- Transportable in **five 40-foot containers**





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# Special features

## 1. Hydraulic Power Units

Dragflow Hydraulic Power Units are **custom built** to handle the requirements of our system and our customers.

They can include a **wide range of features**:

- **Fully customizable** for additional tools
- Available with **Diesel engines or electric motors** for hydraulic operation
- **Soundproof cabin** to reduce noise levels during operation
- **Diesel engines available TIER 4 FINAL STAGE V**

## 2. Tracked Hull

The DRM tracks can be made of both **steel** and **polymeric material**. They are made using **independent links** that allow easier maintenance and replacement, making the whole machine much more reliable.

## 3. Buoyancy studies

Buoyancy studies were performed according to **IACS regulations** to achieve the **perfect configuration** for this machine under extreme conditions.

The presence of the central flotation body makes the difference during movement and dredging operation.

**DRM**





### Hydraulic arm

- Precisely moves the dredging pump
- Depth measurement sensors
- Possibility to install other hydraulic tools

### Hydraulic power unit

- Soundproof cabin
- Diesel engine
- Closed-loop circuit
- Oil pumps for auxiliary systems
- Fully customizable hydraulic circuit

### Winches (x4)

- Used to move the dredge
- Steel cables up to 210 m

### Optional propeller

### Stabilizer Spuds (x4)

### Hull

- Two pontoons 11x2x1.5 m with central floater for extreme stability
- Limited draft



### Operator's cabin

- Full control panel
- Heating and air conditioning
- Ergonomic seat
- Safety equipment
- Status indicators of the different utilities
- Emergency stop controls



### Propeller

- The hydraulic propeller is driven from the operator's cabin, and moves the dredge independently without any link to the shore or anchors.



### MAIN FEATURES OF THE HULL

Length	11.5 m
Width	7 m
Height	4.5 m
Weight	53 ton



### TRANSPORT

Transportable in five 40-foot containers. Assembly operations usually require only 8-10 hours.



### MODULAR DESIGN

**Dimensions** Two pontoons 11x2x1.5 m with central floater.

**Draft** 1.5 m



### DIESEL ENGINE

**Type** Diesel engine (265 kW / 360 HP)

**Fuel Tank capacity** 3500 l

**Emissions** EU STAGE III A



### RANGE OF DREDGING PUMPS

**HY85/180** MAX FLOW RATE [m<sup>3</sup>/h]: 600  
MAX PUMPING DISTANCE [m]: 1500  
DISCHARGE DIAMETER: DN200  
MAX SOLID PASSAGE: 60 mm

**HY85/160HC** MAX FLOW RATE [m<sup>3</sup>/h]: 1000  
MAX PUMPING DISTANCE [m]: 700  
DISCHARGE DIAMETER: DN250  
MAX SOLID PASSAGE: 90 mm

*Performance depends on the actual site conditions and the duty point.*

# DRSP

## Multipurpose dredge

The DRSP (Multipurpose Dredge) represents a step forward in the approach to dredging technique. The extreme mobility in any type of swamp, together with the **total stability** allows the user to reach even the most remote locations, otherwise impossible to reach with any other equipment.

**The pumping capacity of up to 1000 m<sup>3</sup>/h** with discharge distance up to **1500 meters** allows the user to **perform highly efficient operations**. The combination of such equipment with the DRAGFLOW dredging technology makes the **DRSP a very efficient and reliable dredging system**.

### Main features:

- Great stability and buoyancy in different aquatic environments
- Independent propulsion system in both water and on land
- Dredging up to 6.7 meters deep
- Interchangeable hydraulic tools



# DRSP



## DRSP UPGRADE

With this update, the DRSP dredges reach an additional level of independence for those especially difficult environments. The tracked module can be added to new and existing DRSP dredges for a further increase in mobility.

### Hydraulic arm

- Max working depth: 6.7 m
- Moves the dredging pump
- Depth measurement sensors
- Possibility to install other hydraulic tools

### Hydraulic power unit

- The power unit can be based on electric motors or diesel engines that comply with the latest European emission regulations.

### Rear Stabilizers

- Thanks to a maximum working depth of 7 m, the rear stabilizers can anchor the dredge during dredging operations.

### Front Stabilizers

- The front stabilizers increase the lateral stability of the dredge during the movement of the Hydraulic arm.

### Service crane

- With a maximum extension of 6 m, it can be used as support for dredging operations.



### Operator's cabin

- Full control panel
- Heating and air conditioning
- Ergonomic seat
- Safety equipment
- Status indicators of the different utilities
- Emergency stop controls



### Propeller

- The hydraulic propeller is driven from the operator's cabin, and moves the dredge independently without any link to the shore.



### MAIN FEATURES OF THE HULL

Length	10.5 m
Width	6.4 m
Height	3.4 m
Weight	35 ton



### TRANSPORT

Transportable in two 40-foot containers and a flat-rack. Assembly operations usually take only 8-10 hours.



### MODULAR DESIGN

<b>Dimensions</b>	A main pontoon 10.5x3.30x1.1 m with two side pontoons 6.7x1.5x1.1 m
<b>Draft</b>	0.66 m



### DIESEL ENGINE

<b>Type</b>	IVECO Diesel engine (265 kW / 360 HP). Other brands available on request.
<b>Fuel Tank capacity</b>	1200 l
<b>Emissions</b>	STAGE V emissions or lower depending on the legislation of the country of application.



### DRAGFLOW DREDGING

<b>HY85/180</b>	MAX FLOW RATE [m <sup>3</sup> /h]: 600 MAX PUMPING DISTANCE [m]: 1500 DISCHARGE DIAMETER: DN200 MAX SOLID PASSAGE: 60 mm
<b>HY85/160HC</b>	MAX FLOW RATE [m <sup>3</sup> /h]: 1000 MAX PUMPING DISTANCE [m]: 700 DISCHARGE DIAMETER: DN250 MAX SOLID PASSAGE: 90 mm

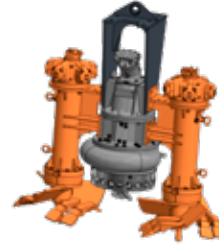
*Performance depends on the actual site conditions and duty point.*

# ACCESSORIES



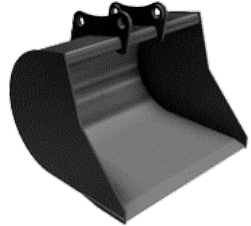
## DTM Dredging Cutter head

- Independent Hydraulic engine
- Flow rate (l/min) 40
- Material of the teeth system: hardened Steel alloy



## Side Cutters

- Replaceable teeth
- Hydraulic engine with radial pistons
- Oil requirements: 35 l/min each
- Rotate in both directions



## Digging bucket (1000 lt)

- SAE capacity: 1000 lt
- Weight: 830 kg
- Double base in S355



## Digging bucket (600 lt)

- N. 4 teeth type Cat J300
- SAE capacity: 600 lt
- Weight: 580 kg
- Double base in S355



## Rake

- N. 11 teeth type Cat J300
- Weight: 1200 kg
- Distance between the tips: 200 mm



## Vibro-hammer

- Flow rate min oil: 100 l/min
- Working pressure: 150 bar
- Max centrifugal force: 12000 kg
- Number of vibrations: 2300
- Weight: 1200 kg



## Bucket (with Teeth)

- Weight: 300 kg
- Capacity: 2 ton
- Force: 1.7 ton
- Surface: 0,35 m<sup>2</sup>



# DRAGFLOW DREDGING PUMP RANGE



## HY85/160

MAX FLOW RATE [m<sup>3</sup>/h]: 600  
MAX PUMPING DISTANCE [m]: 1500  
DISCHARGE DIAMETER: DN200  
MAX SOLID PASSAGE: 60 mm

## HY85/160HC

MAX FLOW RATE [m<sup>3</sup>/h]: 1000  
MAX PUMPING DISTANCE [m]: 700  
DISCHARGE DIAMETER: DN250  
MAX SOLID PASSAGE: 90 mm

*Performance depends on actual site conditions and duty point.*

## HYDRAULIC MOTOR

DISPLACEMENT  
[cc - (cu in)]: 160 - (9.8)  
POWER [kW-HP]: 120-165

## MATERIALS

Spheroidal cast iron body  
EN-GJS-800-2 (EN 1563)  
Parts subject to wear: High Chrome  
EN-GJN-HV600 (XCr18) (EN 12513)

**APPLICATIONS:**

**DREDGING**  
Colombia







**APPLICATIONS:**

**DREDGING**  
Philippines

**APPLICATIONS:**

**MINING**  
Panama





**APPLICATIONS:**

**DREDGING**  
Tunisia

**APPLICATIONS:**

**DREDGING**  
Switzerland





**APPLICATIONS:**

**DREDGING**  
Switzerland





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