# HYDROPLOW

# BURIAL TOOL



#### **DESCRIPTION**

The Hydroplow is a machine designed to lay and bury cables in a simultaneous mode. The progress forward is achieved by a combination of pulling forces by the cable laying vessel (by means of a wire attached to the machine) and fluidization of the seabed materials for the passage of the "stinger", utilizing surface supplied high pressure water, distributed through a series of nozzles located on the stinger face. In this way the movement of the Hydroplow is allowed with relative low and controlled towing forces.

The cables are regularly fed from the laying vessel to the funnel located on the upper side of the stinger. The cable loading is realized by means of a hydraulic diverless operated opening system of the top side of the stinger, allowing the cable to be laid into the stinger from the support vessel. A safety locking system will prevent accidental opening of the top side of the stinger and guarantee stiffness of the structure during launch and recovery.





### **TECHNICAL SPECIFICATIONS**

# **KEY FEATURES**

- · 3M cable MBR
- $\cdot$  2 m to 6 m cable burial depth capability (configurable)
- · 30 tons bollard pull
- · Diverless subsea cable loading and unloading
- · Operating depth up to 50m with standard features
- · Emergency cable unloading system, ROV and surface operated
- · Comprehensive instrumentation and surveillance system, including emergency backup system
- · Launch and Recovery System
- · Modular frame for road transportation using regular trucks

All performance figures quoted are nominal, performance is dependent environmental conditions prevailing at the time of operations.

| GENERAL            |                      |
|--------------------|----------------------|
| Depth Rating       | 50m                  |
| Dimensions (LxWxH) | 12.2 m x 6 m x 4.3 m |
| Weight in air      | 32 tons              |
| Submerged weight   | 30 tons              |

#### HYDRAULIC SYSTEMS CONFIGURATION

Surface supplied hydraulic power fed by marine grade synthetic reinforced hoses Marine grade hydraulic cylinders with stainless steel rod and dedicated lock valve to prevent accidental opening Subsea hydraulic pod with subsea hydraulic ROV intervention panel – emergency

unloading

| SUBSEA JETTING SYSTEM |                        |
|-----------------------|------------------------|
| Jetting Power         | Surface water supply   |
|                       | 800m3/h with pressure  |
|                       | of 12 bar at stinger   |
| Surface Power         | Surface jetting system |
|                       | power up to 950 kW     |



| SUBSEA ELECTRONICS |  |
|--------------------|--|
| Cameras            | Multiple subsea b/w low  |
|                    | light cameras  |
| Lamps              | Multiple and dimmable<br>led   |
| Sensors            | Jet pressure, water depth and hydraulic system pressure, attitude sensors (pitch, roll and heading), multiple stinger angle, proximity sensors for stinger opening and closing crosscheck. |
| Sonar              | Collision avoidance sonar, altimeter and scanning profiler   |