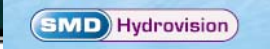


Sea-Plow VII Cable Burial System



SMD Plow

Trench Depth	0 - 1.5 meters
Pull Force	40,000 kg nominal
Size (l x b x h)	8m x 4mm x 4.3mm
Weight	14,000kg in air 11,200kg in water
Cable type	All telecom cable up to 150 mm, 1.5meters bend radius throughout
Repeaters	All cable bodies up to 400mm diameter
Depth Rating	1,500 MSW
Soil Types	5kPa mud to soft rock
Handling	By tow wire using lifting drawbar
Control System	PC based with diagnostic status

Major System Components

Main Control Equipment

Sea Plow VII Vehicle
 1 X Control Van
 1 X Maintenance Van
 1 X Spare Van

Launch & Recovery System

"A" Frame (35 tons SWL)
 Tow Winch (65 tons SWL) with take up reel
 Tow Wire
 Stern Roller Assembly

Umbilicals

1 X 4,000 meters
 1 spare X 4,000 meters

Hydraulic System

15 kW electro-hydraulic power pack (35 functions)

Vehicle Accessories

Instrumentation

1 inclinometers,
 21 transducers
 10 contact closures,
 5 moisture detectors
 3 echo sounders,
 1 heading sensor compass
 3 temperature sensors

Surveillance

Obstacle avoidance sonar,
 hydrophone
 B&W SIT cameras,
 pan and tilt units
 4 lighting units

General Information

The Seaplow 7 System is an SMD make plow uniquely designed to require a 40 TM. bollard pull. They can trench and bury submarine cable to a depth of 1.5 meters, in up to 1,500 meters of water depth, and operate in a wide variety of seabed environments, ranging from sand to medium strength clays.

The Plow System, is self-contained, using 20-foot vans (modified ISO containers) for control cabin, rigging, maintenance and spares, as well as Hydraulic Power Units for topside launch and recovery. The remainder of the system is shipped to the mobilization site in open ISO containers, including the A-Frame for launch and recovery, the tow winch, control umbilical cable with containerized winch, and the plow itself.

The plow has two hydraulically actuated and independently adjustable skids, one on either side of the plow body, to control plow stabilization and plow depth. Also have stabilizing wheels independently actuated with travel and distance encoders. The cable burial depth is controlled by a depressor actuating inside the plow share. All plow functions and movements are controlled via the Pilot's keypad from the shipboard control cabin.

The full sensor instrumentation suite also allows the operator to continuously monitor Tow Tension, Depth of Burial, and the whole performance criteria. Three subsea video cameras and 5 lamps provide continuous visual view of the plowing operation. The sensor information and video is transmitted to the operator console in the control van via an electro-optical umbilical cable.