

TYCO MD3 Cable Burial System



SMD Hydrovision

SMD MD3 Plow

FLOW SYSTEM SPECIFICATION

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|--|---|
| Manufacturer | SMD (SOIL MACHINE DYNAMICS LTD) UK |
| Type | Telecommunication, submarine cable burial Power & oilfield umbilical burial, |
| Rated Water Depth | 1,500 meters |
| Maximum Burial Depth with sinkage..... | 3.0m. |
| Cable Diameter | 17 - 150mm |
| Tow Tension at Plow | 80 Ton Bollard Pull |

(NB: Host vessel's tow winch capacity, bollard pull and operational environment may dictate maximum pulling force)

The Cable Plow System MD3 is an SMD made burial system uniquely designed and capable of an 80 Ton bollard pull. It can trench and bury submarine cable to a depth of 3.0 meters, in up to 1,500 meters of water depth, and operate in a wide variety of seabed environments, ranging from sand to firm clays.

tyco

Telecommunications

System Components Weights and Dimensions

| | | |
|---------------|---------------------|-------------------|
| Length | <i>maximum.....</i> | 9.3 meters |
| Width | <i>maximum.....</i> | 5.0 meters |
| Height | <i>maximum.....</i> | 4.4 meters |
| Weight | <i>Dry</i> | 25 tons |

Operational Parameters

| | |
|---|--------------------|
| Minimum Soil Strength | 5 kPa |
| Minimum Lay Cable Bend Radius | 1.5 meters |
| Repeater maximum Diameter..... | 380 mm |
| Maximum size of Splice Box in the share..... | 150 mm |
| Cable Diameter | 17 - 150 mm |
| Maximum side slope of the seabed. | 30° |
| Maximum up / down slope of the seabed. | 30° |

Surveillance Equipment

| | |
|-----------------------------|-----------------|
| Cameras | 3 |
| Lights..... | 5 |
| Sonar | Mesotech |
| Pan & Tilts..... | 2 |

The Plow System, MD3 is self contained using 20-foot vans (modified ISO containers) for control cabin, maintenance and spares, as well as Hydraulic Power Unit for topside launch and recovery.

The MD3 PLOW utilizes a central hinged depth control system allowing the plow towing assembly and bell-mouth to be contained close to the seabed in all plowing conditions, the plow also has hydraulically deployed repeater burial system for trenching of repeaters with a maximum diameter of 380mm. This plow also has forward mounted jet burial tool as well as under-heel jetting.

A full sensor instrumentation suite allows the operator to continuously monitor Tow Tension, Depth of Burial and plow system status. The sensor information and video is transmitted to the operator console in the control van via an electro-optical umbilical cable.