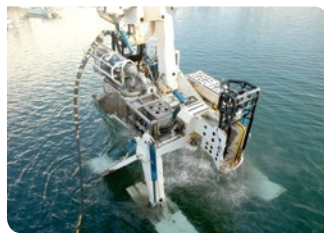
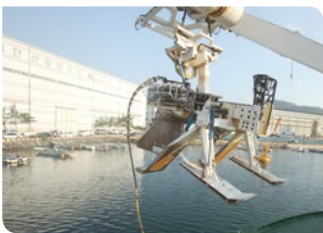


MD3XT PLOUGH



MD3XT was manufactured by SMD in 2013, and has been recognised globally as setting the standard in cable ploughing, reliably trenching in most soils including clays and sands. Using patented technology, the plough is designed to minimise pull force requirements and provide effective trenching capability from zero to 3.3m depth. Its performance is able to be enhanced with jetting upgraded and coupled with a tow winch, umbilical and LARS system.

MD3XT PLOUGH

Weight

| | |
|------------------|---------|
| Air Weight | 27.5ton |
| Submerged Weight | 22.0ton |

Dimensions

| | |
|------------------|-----------|
| Skid Down | 9.49m (L) |
| Drawbar Down | 5.50m (H) |
| Over Stabilisers | 5.08m (W) |

Operation

| | |
|--|---|
| - Pulled by tow wire from surface vessel | |
| Operating Depth | 1,500m |
| Towing Force | 10ton to 80ton (0m to 2.2m deep) 50ton (2.2m to 3.3m deep) |
| Max. Permissible pull at Plough | 80ton |
| Burial Depth | Up to 3.3m |
| Cable Size | 17mm to 90mm Diameter |
| Repeaters | Up to 380mm Diameter |
| Cable Splice Boxes | Up to 150 Diameter |
| Cable Bend Radius | Minimum along the cable path 1.5m |
| Soil Type | Any, with Good Rock Ripping Ability |
| Cable Tracking | Lateral Cable Angle Potentiometer and TV Camera |
| Ploughing Speed | Up to 1m/s Depending on Seabed Condition |

Operating Conditions

| | |
|-----------------------|--------------|
| Operating Temperature | +40C to -4C |
| Ambient Temperature | +50C to -15C |

Hydraulics

| | |
|----------------|-----------------------------|
| Fittings Motor | 3-Phase, 2kV, 50/60Hz, 15kW |
| Reservoir | 100litres Working Capacity |

Subsea Jetting System

| | |
|-------------------|--|
| Motor / Pump Sets | 2 X 250kW submersible motor / Pump sets |
| Jets | - 1 X set with Different Nozzle Diameters - 1 X set of Nozzle Blanks |
| Power Control | - Main Share Jet tool consumption up to 500kW - Switch each 250kW supply to front jet tool or share |

Subsea Electronics and Telemetry

| | |
|---------------|-------------------------|
| Test Pressure | 1.25 X Working Pressure |
| Mounting | Anti Vibration Type |

Instrumentation

| | |
|----------------------|---|
| Pressure Transducers | - Water Depth - Depressor Pressure - Hydraulic System |
| Jetting Transducers | Water Pressure (X2) |
| Linear Transducers | Hydraulic Oil Reservoir Volume |
| Altitude | Echo Sounder (Range 0.6m to 30m) |

Surveillance

| | |
|--------------|---|
| Cameras | 3 X Near-SIT Camera (Kongsberg Simrad) |
| Lamps | 5 X 150w 245v LED (Bowtech) |
| Sonar | Obstacle Avoidance (Tritech, Super seaking) |
| Pan and Tilt | Sub-Atlantic, 24V Pan and Tilt Unit |
| Hydrophone | For Noise Monitoring - Benthos |