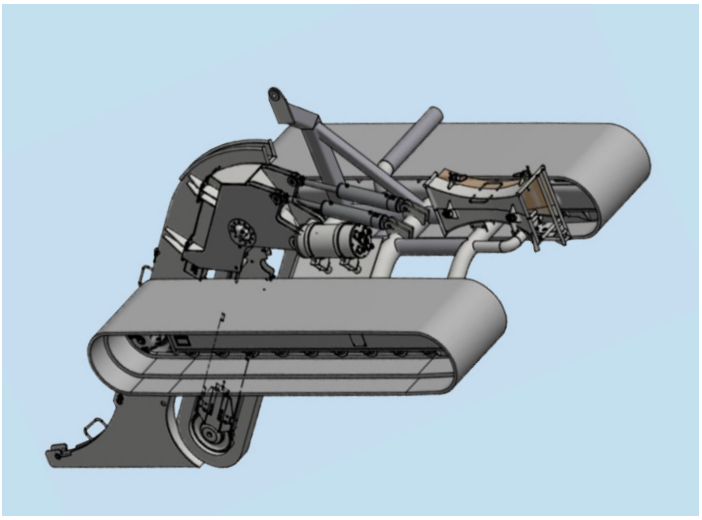
Subsea Tracked Cable Trencher – OTTER

OTTER subsea trencher is the effective and reliable tool for burial of wide range of cable types of different sizes at water depth up to 50 m. The trencher is build on tracked base with versatile configuration applicable for mechanical chain cutter installation (for firm clay and rock) as well as jetting tool (for sands and soft clays).



Highlights:
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- Water depth up to 50 m, trench depth up to 2,2 m
- Max. product size – 120 mm, min. bend radius –1,5 m
- Capability to use mechanical, jetting and combined trenching method
- High performance in a wide range of soils (from sands to rock)
- Remote control from host vessel with no requirement of divers constant use
- Optimal balance of weight and power that provides for stable traction with the sea bottom
- Fully hydraulic drive system
- Provision for acoustic positioning
- Capability of simultaneous trenching and backfilling of the trench by ejecting with water jet supplied from surface pump

Equipment set:

- Subsea trencher (dimensions: 9 m x 4,2 m x 2,6 m; weight: 8 t) – 1 no.
- Control cabin based on 10 ft container (dimensions: 6 m x 2,4 m x 2,6 m; weight: 5 t) – 1 no.
- Hydraulic power unit (dimensions: 3,5 m x 2,1 m x 2,3 m; weight: 5 t) – 1 no.
- Water pump (dimensions: 3,9 m x 1,9 m x 2,7 m; weight: 5,5 t) – 2 nos. (during jetting)

General:

Depth rating	0-50 m
Dimensions	9 m x 4,2 m x 2,6 m
Weight in air	8 t
Drive	self-propelled unit

Performance:

Speed (no burial)	0 - 1 km/h
Speed (burial)	0,01 - 0,5 km/h

Mechanical:

Frame structure	carbon steel
Base mounting	track, excavator-type
Tracks	nylon, 1,1m wide

Mechanical trenching system (chain cutter):

Configuration	AFT MH100
Trench depth	0 - 2,2 m
Trench width	250 mm
Soil type	sandstones, clays (up to 500 kPa), soft rock
Max. product size	120 mm
Min. bend radius	1,5 m
Power	up to 100 kW
Chain	Configured as per results of engineering to suit project specific requirements

Jetting system:

Configuration	Single leg depressor with jet nozzles
Trench depth	0 - 2,2 m
Trench width	250 mm
Soil type	sand, clays (up to 100 kPa)
Max. product size	120 mm
Min. bend radius	1,5 m
Water flow	1360 m^3/h (up to 16 bar)
Jet nozzles	20 holes for different size nozzles

Control system:

Remote functions	track drive, depressor deployment, chain drive, cameras and lighting activation, USBL beacon activation, extra control channels for optional equipment
Monitoring and data acquisition	PC Advantech TPC-1751T-E3AE

Surveillance system:

Cameras	C-technics CT3015, 2 nos.
Lighting	C-technics CT4006 Mini LED, 2 nos.
Acoustic positioning	Mini-Ranger 2 System Kit (option)

Sensors:

Trench depth	Rota LT LJA0500M
Pitch & Roll	G-NSDOG2-002
Cable angle at bellmouth	RT 0579B; RTS 090 1TS 0579
Tracks speed	RNF-664302-4SP160 RN3/20/8
Chain cutter speed	RNF-664305-4SP160 RN3/40/32
Heading	KVH C-100 fluxgate compass