



Subtrench Group

**Maximising Reliability - Minimising Risk
Safety Underpins Everything We Do**

PIPELINE & CABLE TRENCHING MACHINE



In Simultaneous Lay & Burial
Chain Cutter Cable Trenching Mode

Principal Data

- **Type** : Tracked Jetting & Mechanical Chain Cutter Modular Trencher. Pipelines: Multipass; Cables/ Umbilicals/ Flexibles: Single Pass.
- **Capability** : Pre, Post and Simultaneous lay & Burial Capability. Cables, Umbilicals, Flexibles to 250 – 300mm OD & 3.3m bend radius. Pipelines to 900mm OD.
- **Soils** : Silts/ sands through soft to medium to stiff clays through soft to hard rock.
- **Trench Depths** : To 3.3m
- **Dimensions** : carriage: 6.5m (L) x 5.5m (W) x 3.3m (H). Overall length depends upon tool used.
- **Weights** : 24 to 40 T (Air); 22 to 38 T (Submerged).
- **Total Power** : 1750 kW (standard), 3050 kW (enhanced).
- **Speed range** : Travelling: generally between 0 to 3 km/hr
: Trenching: generally between 1 to 20 m/min (60 to 1,200 m/hr) and depending upon the soils & trench depth per pass and tool used.



Trencher Operating in Northern Russia in Winter



Sister Trencher with Chain Cutter and Jet Pumps offshore Holland



Pipeline Sister Trencher Performing Shore Crossing in Russia in Summer

- Specification subject to change without notice

Main Features

- Suitable for cables/ flexibles/ umbilicals up to 300mm OB and pipelines up to 900mm OD.
- Suitable for soils ranging from silts/ sands through clays through soft to hard rock with interchangeable jet sword and chain cutter tools.
- Depending upon the tool, can be used in pre, post or simultaneous lay and trench (cables, etc.) mode.
- Hydraulically track driven to provide a greater operating range whilst being able to maintain a consistent trenching speed appropriate for the particular soil(s) being trenched. Accurate steering and alignment during operations.
- Deck mounted Jet Pumps, HPU and Hydraulic Driven Reel.
- Deck mounted control cabin.
- Very low ground bearing pressures ranging from 13 to 20 kPa depending upon which tool is used.
- Monitoring and control system.
- Suitable for use in harsh and/or sensitive marine and inland water environments.
- A comprehensive set of spares are carried in the dedicated workshop container.
- Interchangeable Trenching Tools:
 - 3.3m and 1.3m deep chain cutter/ depressor booms with water jets which can trench progressively to the required trench depth.
 - 3.3m and 1.3m deep, jet sword/ depressors which can trench progressively to the required trench depth.

Water Pumps

- 2 off, deck mounted, diesel driven, 1,300 kW centrifugal pumps. Each with 3,100 kPa (450 psi) at 900 cum/hr (4,000 usgpm).

Hydraulic Power Unit

- 350kW diesel driven HPU.

Supply Umbilical

- Combined water/ hydraulic/ monitoring supply umbilical mounted on Hydraulically Driven Reel with Small HPU.

Monitoring & Controls

- CITECT SCADA system with operations from a central control room. Real time monitoring and recording.
- Profiling sonars front & rear
- Avoidance sonar
- Fixed cameras with lights front & rear
- Pan and Tilt cameras with lights for monitoring.
- Tiltometer, Pitch and Roll
- Tracking mechanism.
- Others: Cutter, Jet Swords, Depressor, Tracks, HPU, Jet Pumps, Cable Guide Entry, Solenoid Pod, M&C Pod