

NEXANS CAPJET Mini



•The Capjet Mini system was originally developed as a cable burial and survey system for nearshore operations, i.e. down to 50m water depth. The system was first used in the fall of 2017 on the Beatrice project for protection of two parallel export cables from a wind farm outside the coast of Scotland. After the first trenching campaign on the Beatrice project, the Capjet Mini was further developed to achieve optimized trenching results for the next campaign, based on first campaign experiences.

•The Capjet Mini system is based on previous nearshore trenching machines (rental), and the experience and knowledge obtained during former Nexans protection projects. The system is designed to be similar in use to the Capjet 1MW systems, with the same control system and trenching philosophy. The swords are however not interchangeable with the 1MW system. There are no LARS and winch systems dedicated to this trencher, as the Capjet Mini is relatively lightweight (<1000 kg). A winch and crane system on each nominated trenching support vessel, TSV (minimum 1,5 ton @ maximum reach) will be satisfactory.

Size & weight

Capjet Mini 3.8 x 2.4 x 1.4 m (without swords), max 1.2 t
Portable control system (to be set up in TSV)
Power source from TSV
Umbilical app. 50m bundled

Handling system

Operation up to Hs 3.5 m vessel dependent
Crane, with integrated winch, min. 1.5 t @ max. reach

Frame and lift structure

AISI 316 steel air filled structure
Pressure rating 50 m
Buoyancy - air filled bags for trim and recovery

Control system

All data are collected on a serial to Ethernet drop down network which
Gives local control of all sensors and valvepacks.
The latest control system technology as OPC, distributed data collection, touchscreens and WEB based monitoring and support tools.
The system can be fully supported through the internet and low speed connections.
Realtime control system for transformer control, LARS and umbilical winch control and monitoring.
Integration in vessel PMS when power from vessel available
MRU monitoring

Trench module and water pumps

Adjustable swords (lift and angle)
Vertical lifting 500 mm
Fixed horizontal opening between swords 270 mm (sword dependent)
Fixed water distribution swords.
LP front nozzles (fixed water distribution)
Transport valves integrated in swords
Topside 1 x 240 HP LP water pump, 12 bar pressure @ 300m3

Sensors (typical)

Six color video cameras
1 off electrical P&T unit
Imaging sonar
Digiquarts pressure sensor
Digital yoke sensor
Mesotech digital altimeter
Octans fiberoptical survey gyro
Position sensors on all hydraulic movements
Doppler

Hydraulic system

Topside 1 x 100 HP HPU (up to 300 bar)
Valve pack NG4
Valve pack NG6 (thrusters)
Bollard pull:

- Forward approx 2000 kg
- Lateral 1000 kg
- Vertical 1000 kg

Sensors (Optional)

Cable tracker
Multibeam
INS
3D Imaging sonar