

CFE500



CFE500 is based on a hybrid subsea excavation system which is extremely adaptable, compact and controllable.

Pharos Offshore Group delivers innovative subsea controlled flow excavation solutions to the offshore Oil, Gas, Renewable and Telecommunications markets.

The CFE500 has been developed to meet the needs of clients engaged within the installation, IRM and decommissioning sectors of the offshore market. Pharos Offshore Groups experience, gained through the completion of over 100,000km of subsea burial, has been demonstrated throughout the CFE500's design and commissioning.

The excavator is easily adaptable and can excavate a comprehensive range of seabed materials accurately up to 200kPa with a jetting bolt-on. The CFE500 system is based around a single stage cast impellor which is coupled to a compact direct drive high torque fixed displacement motor. The base assembly of the system has a minimum self-weight of 7,000kg determined to counter the 3,700kg of reactionary force produced by the unit at maximum rotational speed of 400rpm; deriving a variable water velocity of 0-9mps through the exit water column.

The adaptation of the Kort nozzle to meet specific project requirements, be that rock, sedimentary displacement or seabed penetration to achieve higher gradient profile trenches in seabeds up to 50kPa to achieve product burial. Optional surface fed HP jets are available to compliment the high flow displacement capacity by providing four 40Bar cutting lances to displace materials of up to 200kPa. A configurable tilt frame housing allows the base unit to be tilted to 45° from vertical, extending the viable range of the exit flow toward specific targets; improving asset recovery capability, increasing material displacement when exposing covered assets and allowing parallel trench back-fill.

The tilt frame housing provides the additional benefit of optional ballast to assist stability in high currents, with integral traverse function displacing a further 1,000kg to counter reactional forces from the exit flow. The tilt frame instrumentation provides feedback on heading/ pitch/ roll of the unit, whilst accommodation is also included for camera and light system to assist initial target location.

Pharos Offshore's excavation team has an extensive track record for performing in challenging conditions and has undertaken a broad variety of excavation operations; ranging from a Jack-Up Rig Spud Can deburial project in the Central North Sea, a Power Cable lowering to 4m depth in the German North Sea, to a fibre optic cable lowering scope within the Southern North Sea.

CFE500 DETAILS:

Dimensions:

L 2.4 x W 2.1 x H 2.8m

Self-Weight:

7,000 - 9,000kg Configuration dependent

Spread Deck Footprint:

10m x 10m

Operating Depth:

5 - 300m Standard

300m+ Optional with subsea power pack

Hydraulic Supply:

0 - 350Bar @ Max 630LPM

Maximum Torque:

6000 Nm

Prop' Rotation:

0 - 400RPM

Exit Flow Rate:

4,700LPM

Reaction Thrust:

3,700kg

Nozzle:

Optional orifice diameter & length

Deployment:

Vessel crane, A-Frame

Optional:

AHRS Gyro

Camera/ Lamp system

Narrow beam imaging sonar

Imaging sonar

Get in touch

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