

Excalibur

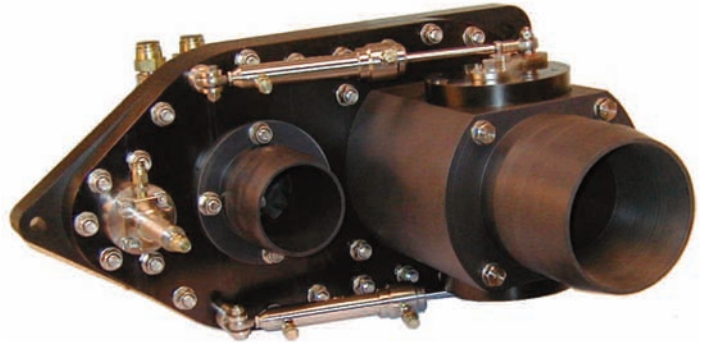
Combined excavation and jetting system

Features

- Excalibur is so compact that it may be mounted on most work class ROVs without the need for a dredging skid
- Break up of heavy and cohesive sea-bed muds and sand prior to excavation
- Removal of drill cuttings
- Deburial of subsea templates and manifolds
- Removal of marine growth prior to inspection
- Marine archaeology
- Treasure hunting and salvage operations

Applications

- The mounting design for the Volvo hydraulic motor allows the motor to be orientated at the most convenient angle for interfacing with the ROV's hydraulic supply
- The motor and impeller may be readily withdrawn without dismantling the pump
- The integrated eductor based excavation system is designed to pump mud, sand, gravel, drill cuttings, shale etc. without damage to the system and without risk of blockage
- A heavy duty cylinder valve reverses the flow at the nozzle to eject any object which may be causing an obstruction
- There are no moving parts on the dredging side of the system as power is derived from a stream of high velocity fluid creating a low pressure region behind the suction nozzle

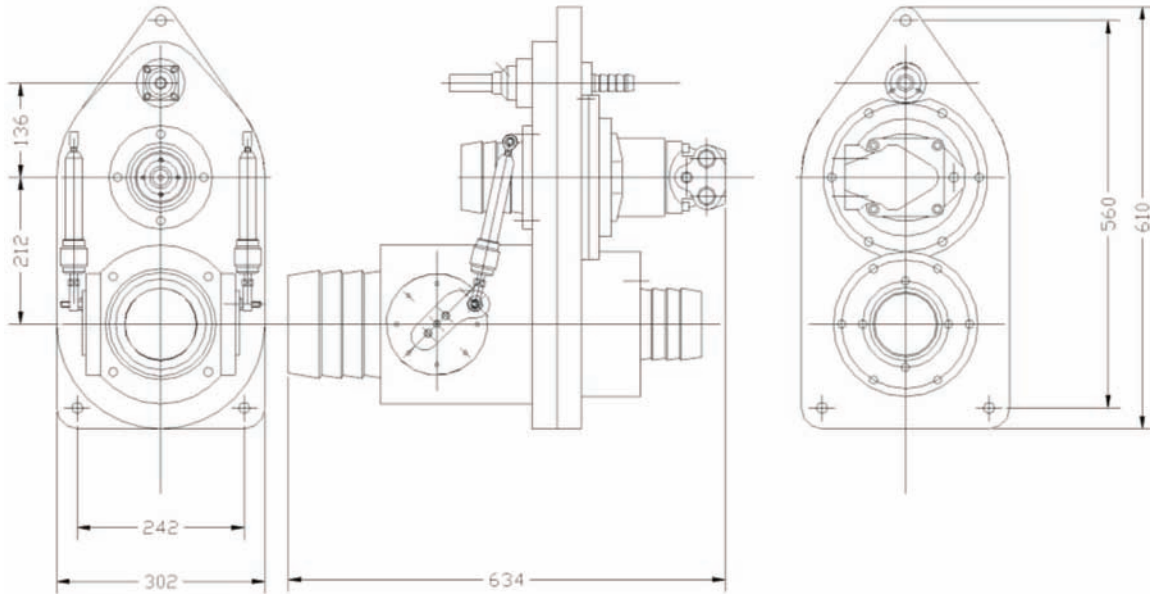


The Excalibur has been developed from the highly successful ZipPump and ZipJet range of products. It is the next development along from the ZipJet-Ultra.

Excalibur incorporates many technical advances learnt from several years of producing and operating our industry standard range of ROV mounted jetting and excavation systems.

This new pump has been developed to exploit the power available from the most modern WROVS. Just like the ZipJet-Ultra The nonmetallic body uses Ultra High Molecular Weight Polyethylene (UHMWPE). Emphasis has been placed on minimising the weight of the system to limit the amount of the WROV payload capacity used.

Specifications



Hydraulic Input

Pressure	170 to 276 Bar	2450 to 4000 psi
Flow	80 to 135 litres / min	17 to 30 gpm

Jetting Performance

Pressure	Up to 9 Bar	Up to 130 psi
Flow	Up to 45 m ³ hour	

Suction Performance

Suction Capacity	Up to 240 m ³ hour
Solids Removal Rate	Up to 24 Tonnes per hour at 10% solids to water by weight
Motor Type	Volvo F11 - 19

Nozzle and Hose Dimensions

Jetting Hose	1" BSP Hose barb
Jet Nozzle Diameter	14 mm to 19 mm
Discharge Hose Diameter	150 mm 6 inches
Suction Hose Diameter	100 mm 4 inches

Weights and Materials

Weight in Air	44 kg
Weight in Water	17 kg (approx)
Materials	Nylacast, UHMWPE

All specifications are subject to change in line with Tritech's policy of continual product development.

Ref: EDS-HYD-002.2