DEEPOCEAN

UT-1

SPECIFICATION SHEET



UT-1 ULTRA TRENCHER

The UT-1 is the world's most powerful jetting ROV with 2.1MW of total power. It is also fitted with sophisticated drive motors, which allow precise control of pressure and flow, giving a high degree of flexibility when undertaking workscopes in varied environmental conditions and a competitive edge.

With an extensive track record and class leading performance, the UT-1 is configurable for a wide range of applications including trenching of pipelines through to the installation of submarine cables in varying seabed conditions. The UT-1's cable capture tool can provide support for simultaneous installation of submarine cables whilst its upgraded swords allow jetting performance exceeding any other jet trencher currently in the market place.

The UT-1 is ideally suited for use with the multi-role subsea construction vessel, Volantis, with a state-of-the-art heave compensated launch and recovery system, which includes a submersible latch beam, cursor and high speed constant tension winches. This offers unparalleled flexibility in severe environmental weather conditions offering high Sea State deployment.

KEY FEATURES

- CONFIGURABLE FOR A WIDE RANGE OF APPLICATIONS
- UNIQUE SWORD DESIGN FOR ULTRA DEEP TRENCHING
- HIGH SEA STATE DEPLOYMENT
- SOPHISTICATED DRIVE MOTORS TO CONTROL PRESSURE AND FLOW

GENERAL	
MAX. OPERATING DEPTH	1500m
MAX. PRODUCT DIAMETER	1100mm
MAX. BURIAL DEPTH	3.0m
LENGTH	9.4m
WIDTH	7.8m
HEIGHT	7.57m
WEIGHT IN AIR	63te
SUBMERGED WEIGHT	-500kg buoyant
MAX. BOLLARD PULL	5800kg
ROV POWER	2100kw 2 x 300kW, 300V 4 x 375kW, 3300V
LENGTH OF UMBILICAL FITTED	1800m, 62.5mm diameter

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Suitable for a range of soil types, including sands to soft clays

THRUSTERS	
VECTORED	4 x 750mm horizontal
VERTICAL	4 x 750mm
REAR (BALANCE)	2 x 750mm pivoting
PITCH CAPACITY	7° approx.
ROLL CAPACITY	7° approx.
CONSTRUCTION	High strength steel frame
BUOYANCY	Syntactic foam with macrospheres

JETTING SYSTEM	
CONFIGURATION	Twin legged jet tool mounted on double scissors linkage
TRENCH DEPTH	Variable from 0-3.0m Jet orientation constant from 0.75 to 3m
WIDTH CONTROL - PIPE MODE	Leg spanning (between inside of legs) Min. 250mm, Max. 1200mm
WIDTH CONTROL - CABLE MODE	Variable, independent lift control Min - 250mm Max - 1200m
WATER PUMPS	Up to 4 x 375kW All fitted with full flow check valves to prevent reverse water flow Water supply (approx.) 4800m³/hr@7bar (4 pumps)
OSCILLATING SWORDS	2 arrays on each jet leg, directing jets forward and inwards and aft to attack the whole soil face in front of and beneath the pipe. Suitable for sand and clay. Upper half of array can be remotely shut off. Legs can also be set to oscillate continuously
MULTI-PASS	Second or multiple passes can be made along the pipe as necessary. Pipe tracker follows partially buried product
BACKFILLING	Jets mounted at bottom of jet legs can be used to create soil collapse onto product as part of a separate pass

SPECIALIST TOOLING		
LENGTH OF UMBILICAL FITTED	1800m, 62.5mm diameter	
DREDGE/EDUCTOR	Twin legged dredge mounted on 180° pivoting system	
TRENCH DEPTH	Variable from 0 - 0.3m	
DREDGE	4 x 375kW jet dredge pumps Water supply can be diverted into jetting system Water supply 4800m³/hr@7bar (4 pumps) Wayer supply can be continuously varied	
BACKWASH SYSTEM	Supplementary rear facing jet swords to aid product lowering and extend life of open trench	
DEPRESSOR	Up to 1.5m DOB capability (with 2 cable detectors mounted)	

SURVEILLANCE EQUIPMENT		
PIPE FOLLOWING	By TSS pipe tracker and by O/A sonar	
CAMERAS	2 x colour zoom 6 x monochrome SIT equivalent	
LAMPS	12 x 250W incandescent subsea lamps (Dimmed individually)	
PAN AND TILT	5 x Robust 24V P&T units in lightweight alumininm housing	
OA SONAR	Kongsberg Simrad 974	
PROFILERS	Kongsberg Simrad 974	
DOPPLER VELOCITY LOG	Workhorse Navigator	
GYRO	Octans FOG 300	
ALTIMETER	Kongsberg Simrad MS1007	



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