CONTACT INFO

RENTAL & MAINTENANCE DEPARTMENT NORWAY

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In this section, we want to give you further details about some of our featured products.
The Electrical Multipurpose Cleaning Tool is an all electric tool powered through the ROV. The tool can be used to clean any type of surface. Also, acid can be injected through the brush for an even more thorough cleaning.

**ELECTRICAL MULTIPURPOSE CLEANING TOOL**

- All electric
- Low power - high torque
- Acid injection

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Dimension (L x W x H)</th>
<th>480 x 280 x 300 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight in air</td>
<td>25 kg</td>
</tr>
<tr>
<td>Weight in water</td>
<td>18 kg</td>
</tr>
<tr>
<td>External material</td>
<td>Aluminium 6082 T6</td>
</tr>
<tr>
<td>Surface treatment</td>
<td>Xylan</td>
</tr>
<tr>
<td>Color</td>
<td>Black with orange interfaces</td>
</tr>
<tr>
<td>Mechanical: Acid Injection:</td>
<td>6mm A-lock</td>
</tr>
<tr>
<td>Electrical: Power: Max:</td>
<td>48VDC - 480W</td>
</tr>
<tr>
<td>Min:</td>
<td>24VDC - 120W (limited in software)</td>
</tr>
<tr>
<td>Connector</td>
<td>Burton 2006</td>
</tr>
<tr>
<td>Communication</td>
<td>RS445</td>
</tr>
<tr>
<td>Handling</td>
<td>ROV-operated</td>
</tr>
<tr>
<td>Electrical performance</td>
<td>24VDC - 48VDC</td>
</tr>
<tr>
<td>Specifications</td>
<td>Temperature: Oil temperature</td>
</tr>
</tbody>
</table>

### FEATURES

- **All electric**
- **Low power - high torque**
- **Acid injection**
Oceaneering has developed the next generation torque tool. The Torque Tool is fully electric, efficient, and ISO 13628-8 class 1 to 4 compatible.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Dimension (L x H x W)</th>
<th>640 x 260 x 330 mm excluding handle. Height with handle is 376 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight in air</td>
<td>64 kg</td>
</tr>
<tr>
<td>Weight in water</td>
<td>43 kg</td>
</tr>
<tr>
<td>External material</td>
<td>Aluminium 6082 T6 (+ Stainless + POM)</td>
</tr>
<tr>
<td>Interfaces</td>
<td>Mechanical: ISO 13628-8 CL 1-4 - 67 - 2700 Nm. Electrical: Power 110 V/2A. Connector: Burton 1508</td>
</tr>
<tr>
<td>Communication</td>
<td>RS485/RS232</td>
</tr>
<tr>
<td>Handling</td>
<td>ROV-operated, tool elevator and flying lead orientation tool</td>
</tr>
<tr>
<td>Sensors</td>
<td>Position, Resolver - outgoing shaft, hall sensors. Torque, Strain-gage torque cell &amp; Motor current Internal temperature</td>
</tr>
</tbody>
</table>

**Control computer with power supply for testing and operating tool directly - provided in transport case.**
The system is developed for safe handling, easy access and storage of goods. The air-driven traveling crane can be moved in all directions and turned 360º. It is easy to operate and has a park position locking system. The design allows for maximum storage height.

**SHIPPING AND STORAGE EQUIPMENT**

**FEATURES**
- Drawer capacity 180 kg
- Air driven crane - payload 180 kg
- All drawer heights can be adjusted
- Storage rack for 6 pallets and 9 half pallets
- Storage for goods in the aisle
- Easy operated drawer lock
- Can be used/set up for various container sizes
- Crane payload 500 kg or other on request
- Additional drawers
- Electric or manual crane

**OPTIONS**
- Designed according to: DNV 2.7-1, NS 5514, NS 34 72
- Machine Directives 89/392/EEC
The hydraulic-driven Subsea Winch has a pull force of 15 ton. The winch has a lightweight and compact design for easy handling, and can also operate both vertically and horizontally.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull 15 000 kg</td>
<td></td>
</tr>
<tr>
<td>ROV-friendly</td>
<td></td>
</tr>
<tr>
<td>40 m rope</td>
<td></td>
</tr>
<tr>
<td>Depth rate</td>
<td>2000 MSW</td>
</tr>
<tr>
<td>Weight in air</td>
<td>572 kg</td>
</tr>
<tr>
<td>Weight in water</td>
<td>23 kg</td>
</tr>
<tr>
<td>Max Input Flow</td>
<td>75 l/min</td>
</tr>
<tr>
<td>Spooling Speed</td>
<td>0-5 m/min</td>
</tr>
<tr>
<td>Braking force (fiber rope)</td>
<td>22 100 kg</td>
</tr>
<tr>
<td>Parking brake</td>
<td>15 000 kg</td>
</tr>
<tr>
<td>Lock to structure</td>
<td>Mechanical lock with fail safe</td>
</tr>
</tbody>
</table>

Transport case: Size (L x W x H): 1200 x 1000 x 2000, weight: 658 kg
## GTO ROV DREDGE

The GTO ROV Dredge is designed for subsea excavation and disposal of sediments and gravel up to 230 mm, with a removal capacity of up to 80 tonnes per hour.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>4 in</th>
<th>6 in</th>
<th>6 in XL</th>
<th>10 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal capacity</td>
<td>15 t/hr</td>
<td>20 t/hr</td>
<td>20 t/hr</td>
<td>20 t/hr</td>
</tr>
<tr>
<td>Exhaust throw distance</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
</tr>
<tr>
<td>Suction hose ID</td>
<td>100 mm / 4 in</td>
<td>150 mm / 6 in</td>
<td>150 mm / 6 in</td>
<td>200 mm / 8 in</td>
</tr>
<tr>
<td>Max stone size</td>
<td>90 mm / 3 1/2 in</td>
<td>135 mm / 5 1/2 in</td>
<td>135 mm / 5 1/2 in</td>
<td>230 mm / 9 in</td>
</tr>
<tr>
<td>Water jet on nozzle</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Over pressure on jet</td>
<td>N/A</td>
<td>5 bar / 74 psi</td>
<td>5 bar / 74 psi</td>
<td>5 bar / 75 psi</td>
</tr>
<tr>
<td>Suction hose length</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
</tr>
<tr>
<td>Required Hydraulic supply</td>
<td>2.6 gpm @ 2900 psi</td>
<td>3.9 gpm @ 2900 psi</td>
<td>3.6 gpm @ 2900 psi</td>
<td>3.6 gpm @ 2900 psi</td>
</tr>
</tbody>
</table>

*Dependent on type of sediment and operational conditions.

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**FEATURED PRODUCTS**

**GTO ROV Dredge**

Oceaneering Rental Tooling and Equipment
Our durable Down Hole Camera system is a lightweight system for easy transportation and is developed for deployment on wireline, tugger or drillpipe.

Tilt / rotate camera
Interface for drill pipe - IF Box
Water jetting through drill pipe

TECHNICAL DATA

- Depth rate: 1000 MSW
- Hoisting protection body, OD range from: 6 ¾ in / 165 mm
- Hoisting for camera only, OD: 3 ¼ in / 80 mm
- Camera OD: 2.5 in / 62 mm

TRANSPORT INFORMATION / SYSTEM CONTAINS

- Surface Controller: 35 kg
- Winch & Winch Controller (550 m): 380 kg
- Optional Cable in box (550 m): 200 kg
- Protection body POM / SS: 15 / 75 kg
- Camera with built in lights or ext. light ring: 5 kg

Ocean C Monkfish Camera
Interface for wireline, tugger and drillpipe
Heating protection body with interface for drillpipe or wireline
Winch
Surface Controller - provided in transport case
A very effective and robust tool for retrieving objects lost in the well. Easy to setup and operate. Magnets can be mounted on the jaw. The tool is built for use with the Oceaneering Down Hole Camera System (not included), but other camera systems can be mounted.

**TECHNICAL DATA**

- **Depth rate:** 1000 MSW
- **Size:** OD = 405 mm
- **Weight in air:** 215 KG
- **Claw operating pressure:** 210 bar maximum
- **Manipulator functions:** Wrist rotate and Jaw open/close
- **Connections:** JIC # 4
- **Fluid:** Hydraway HVXA 22 or equal
- **Additional equipment needed:** Hydraulic reel
- **Parking brake:** 15.000 kg
- **Lock to structure:** Mechanical lock w/fail safe
- **Spooling Speed:** 0-5 m/min.
- **Braking force (fiber rope):** 22.100 kg
- **Max Input Flow (l/min):** 75
- **Weight in air/water (kg):** 520 kg
- **Depth rate (MSW):** 2000

**DOWN HOLE FISHING TOOL SYSTEM**

- Interface for drill pipe - IF Box
- Tilt / rotate camera
- Interchangeable jaws

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**Surface Controller**

**Magnets**

**Interchangeable jaws**
RENTAL TOOLS AND EQUIPMENT

In this section, you will find a selection of tools and equipment available for rent.
TORQUE TOOL API 17D - CL 1-4

2700 Nm

The Oceaneering Hydraulic ISO / API 17D Class 1-4 Torque Tool can be used for a wide range of applications and be customized to different needs. Live torque feedback can be provided via an Oceaneering Remote Control Unit (RCU).

TORQUE TOOL API 17D - CL 1-4

2700 Nm / GS-IESS (Compact)

The Oceaneering Compact Torque Tool is a compact stand-alone unit that can operate over the whole class 1-4 range without motor change-outs. A manipulator operated handle controls high/low-torque mode. The integrated display shows torque and turns, and valve operation history is logged.

TORQUE TOOL API 17D - CL 5

6800 Nm

The Oceaneering Hydraulic ISO / API 17D Class 5 Torque Tool can be used for a wide range of applications and customized to different needs.
TORQUE TOOL API 17D - CL 6&7

34 kNm / 236 mm

The Oceaneering Hydraulic ISO / API 17D Class 6&7 Torque Tool can be customized to different needs. Low torque feedback can be provided via an Oceaneering Remote Control Unit (RCU).

BOX SIZE: 120 x 80 x 60 cm / WEIGHT: 150 Kg

TORQUE TOOL API 17D - CL 7

17 kNm

The Oceaneering Hydraulic ISO / API 17D Class 7 Torque Tool can be customized to different needs. Live torque feedback can be provided via an Oceaneering Remote Control Unit (RCU).

BOX SIZE: 120 x 80 x 60 cm / WEIGHT: 150 Kg

TORQUE TOOL API 17D - CL 6&7

34 kNm / 236 mm

The Oceaneering Hydraulic ISO / API 17D Class 6&7 Torque Tool can be customized to different needs. Low torque feedback can be provided via an Oceaneering Remote Control Unit (RCU).

BOX SIZE: 120 x 80 x 60 cm / WEIGHT: 150 Kg

TORQUE TOOL API 17D - CL 4

Dummmy

This tool is made for API 17D interface testing onshore.

BOX SIZE: 80 x 60 x 60 cm / WEIGHT: 35 Kg

TORQUE TOOL API 17D - CL 1-4 - EL

2700 Nm

All functions of this tool are controlled from topside application. The tool features a large torque range (67 Nm to 2700 Nm), with full control, due to built-in torque transducer. The tool is compatible with a range of ROV systems including the RS-485 and RS-232 communication to topside control computer. The tool offers low power draw in operation, 550W - 110VAC max. One cable connection is needed.

BOX SIZE: 80 x 60 x 60 cm / WEIGHT: 93 Kg
The Test Jig is designed to read torque from torque tools and gear adaptors class 4. The load cell and readout unit are battery powered for easy and safe use at any location.

The Test Jig is designed to read torque from torque tools and gear adaptors class 5. The load cell and readout unit are battery powered for easy and safe use at any location.

The Test Jig is designed to read torque from torque tools and gear adaptors class 7. The load cell and readout unit are battery powered for easy and safe use at any location.
Torque Tool Equipment

**Torque Tool 17H Socket Kit**

- **Standard Torque Tool CL 1-4**
- The Torque Tool 17H Socket Kit is meant to be used on Oceaneering standard Torque Tool CL 1-4. Its purpose is to replace the 17D socket on the standard torque tool socket with a 17H socket. To secure maximum moment, the tool is supplemented with a nose bucket to achieve the transfer of torque forces. In addition, the kit contains a long version of the socket when limited access makes it necessary.

**Torque Tool Paddle Valve Kit**

- **Standard Torque Tool CL 1-4**
- The Torque Tool Paddle Valve Kit is meant to be used on Oceaneering standard Torque Tool CL 1-4. Its purpose is to replace the 17D socket on the standard torque tool socket with a paddle valve and to reduce the torque on the tool to 20 Nm.
**TORQUE TOOL ADAPTOR**

This tool is meant to be mounted on the CL 7 standard Oceaneering Torque Tool.

17 kNm GHO/VC5

**TORQUE TOOL ADAPTOR**

ISO/FDIS Adaptor

Torque Tool Adaptor ISO/FDIS kit is meant to be used on the CL 1-4 standard Oceaneering Torque Tool. Its purpose is to replace the 17D socket on the standard torque tool socket with a 17H Socket. To secure maximum moment, it is supplemented with a nose bucket to achieve the transfer of torque forces.

**FLYING LEAD ORIENTATION TOOL (FLOT)**

The FLOT is designed to allow the torque tool to be positioned in real-time without the need for reconfiguration of the torque tool handle or the ROV mounting provisions. The FLOT allows the torque tool to orientate and guide the flying leads into the stab plates on the subsea equipment.

The FLOT provides pitch and roll capabilities for maneuvering the torque tool. The pitch range is from -90° to +90°, permitting the torque tool to be operated in the horizontal or vertical mode, as well as allowing for launch and recovery of the FLOT. The roll is controllable from -10° to +10° in instances where the ROV is not aligned straight with the flying lead receptacles.

**TORQUE TOOL ELEVATOR**

4 Meter (6 Meter)

The Tool Elevator is an ROV mounted winch-frame designed to position various tools in vertical or horizontal mode. Use of a tool elevator isolates handling of the tools from the ROV’s manipulators, enabling work on simultaneous tasks. Maximum lifting force is 140 Kg.

**RENTAL TOOLS AND EQUIPMENT**

BOX SIZE: 60 x 60 x 40 cm  /  WEIGHT: 15 Kg

BOX SIZE: 50 x 35 x 28 cm  /  WEIGHT: 18 Kg

BOX SIZE: 60 x 60 x 40 cm  /  WEIGHT: 40 Kg

BOX SIZE: 120 x 80 x 56  /  WEIGHT: 120 Kg
The RCU consists of two main parts: the surface control unit and the subsea unit. The surface unit consists of a laptop PC with an RS 232-485 converter providing communication interface to the subsea unit. The PC comes with pre-installed software for controlling the subsea unit. The subsea valve module is capable of setting two different pressures. This allows separate pressure to the latch cylinders versus the torque motor on the API 17D Class 1-4 Torque Tool.

REMOTE CONTROL UNIT (RCU)

RCU, 3000 msw

The HPU is built with enclosed hydraulics to prevent oil spill and to obtain safe operation. The DNV 2.7-1 certified HPU enclosed cabinet has a robust stainless steel design and secures safe operation. To ensure correct pump rotation, the HPU has a built-in auto phase shifter. The HPU is equipped with filters. This ensures clean oil distributed from the HPU to external equipment.

HYDRAULIC POWER UNIT (HPU)

HPU – ExEx, Atex Zone 2

<table>
<thead>
<tr>
<th>Size</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCU</td>
<td>80 x 60 x 50 cm</td>
<td>65 Kg</td>
<td>65 Kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPU</td>
<td>120 x 80 x 120 cm</td>
<td>625 Kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Visual Inspection

<table>
<thead>
<tr>
<th>Camera</th>
<th>Box Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OCEAN C MONKFISH CAMERA</strong></td>
<td>50 x 40 x 20 cm</td>
<td>15 Kg</td>
</tr>
<tr>
<td><strong>FISHEYE CAMERA</strong></td>
<td>30 x 25 x 20 cm</td>
<td>5 Kg</td>
</tr>
</tbody>
</table>

#### Down Hole Camera System

- **Interface for Drill Pipe, Wireline or Tugger**
- Our durable Down Hole Camera system is a lightweight system for easy transportation and is developed for deployment on various drill pipe systems. It is easy to set up and operate, and controlled by a standard laptop. It is possible to set up external monitors to be able to follow the inspection from different locations. The system consists of a camera, a surface laptop, 500 m cable reel and a hosting body. In addition, video recording and video overlay can be performed easily.

- **BOX SIZE**: 50 x 40 x 20 cm / **WEIGHT**: 15 Kg
- **BOX SIZE**: 30 x 25 x 20 cm / **WEIGHT**: 5 Kg

#### Ocean C Monkfish Camera

- The Ocean C Monkfish Camera is designed to fulfill many different inspection needs. The camera can be set up easily. Power, signal and light are all connected through one single connector. 230 V power is needed to support the surface controller. The internal light source is always in line with the camera view angle, and it is controlled by a standard laptop.

- **BOX SIZE**: 50 x 40 x 20 cm / **WEIGHT**: 15 Kg

#### Fisheye Camera

- The camera uses the latest Super HAD and DSP technology giving excellent light sensitivity and image definition. In addition, a built-in field memory allows long-time exposure, snap-shot capability and 4x digital zoom. Close-up inspection capability is obtained by using a 10x (40x with digital) magnification for powerful long-range viewing. The innovative rotate and tilt mechanism allows the camera to continuously rotate through 360º while allowing 180º of tilt movement. The diameter of the camera is 157 mm.

- **BOX SIZE**: 30 x 25 x 20 cm / **WEIGHT**: 5 Kg
The OE11-242 Underwater Flashgun has been designed specifically for use with the Kongsberg Maritime OE14-208 Digital Stills Camera. When under control of the OE14-208, the variable power feature can be used allowing the exposure to be increased or decreased by 1/3 of a stop up to a maximum of +2 stops and a minimum of -2 stops.

**BOX SIZE:** 65 x 50 x 25 cm / **WEIGHT:** 20 Kg

**FLASHGUN/BLITZ** 3000 MSW

The OE14-112 (PAL) and OE14-113 (NTSC) Color Cameras offer a wide range of features in a versatile package. The camera uses the latest Super HAD and DSP technology giving excellent light sensitivity and image definition. In addition, a built-in field memory allows long time exposure, snap-shot capability and 4x digital zoom. The camera can also be given an ID number together with time and date.

**BOX SIZE:** 65 x 55 x 25 cm / **WEIGHT:** 15 Kg

**MONITOR 17 IN** 17 in LED - Exe nA II T5 / IP66 / II 3G

The 17 in monitor is certified for Exe nA II environment. The flat-screen LCD delivers crisp and bright pictures from a lightweight package that uses a lot less power than a comparable CRT display. It can be used standalone with its own desk stand or it can be rack mounted. VESA standard 100 mm mounting holes also open up a wide range of installation possibilities.

**BOX SIZE:** 65 x 50 x 25 cm / **WEIGHT:** 20 Kg

**DIGITAL STILLS CAMERA** 3000 MSW, Z 4x / 5 MP & Flashgun/Blitz

The OE14-208 (PAL and NTSC) is a new generation digital stills color camera. Each image is framed using real-time video and is temporarily stored in built-in memory (standard 256Mb expandable up to 4Gb). The image can then be uploaded on the surface using a rapid USB link. Images are selectable at resolutions of 640 x 480 up to 2592 x 1944 in JPEG or RAW format.

**BOX SIZE:** 40 x 30 X 20 cm / **WEIGHT:** 5 Kg

**MANIPULATOR CAMERA** with an Extension Rod, 4000 MSW

The Manipulator Camera features high resolution color CCD sensor. It is highly resistant to shock and vibration with wide power supply 12VDC to 48VDC. Both LED brightness control (manual or auto) and wide angle version are available.

**BOX SIZE:** 46 x 56 x 25 cm / **WEIGHT:** 20 Kg

**OCEAN PRO HD CAMERA** HD, 30i / 4000 MSW

The Ocean Pro HD TV Camera captures broadcast quality color video in 1080i format with a 16:9 aspect ratio. A 0.5" zoom lens with remote control of zoom, focus and iris, provides a W9" wide to R9" full zoom in water field of view. The video output is completely noise free on a single optical fiber, and a R5-223 serial interface enables remote control of all the camera functions.

**BOX SIZE:** 60 x 40 X 30 cm / **WEIGHT:** 15 Kg

**FLASHGUN/BLITZ** 3000 MSW

The OE11-122 Underwater Flashgun has been designed specifically for use with the Kongsberg Maritime OE14-208 Digital Stills Camera. When under control of the OE14-208, the variable power feature can be used allowing the exposure to be increased or decreased by 1/3 of a stop up to a maximum of +2 stops and a minimum of -2 stops.

**BOX SIZE:** 60 x 50 x 35 cm / **WEIGHT:** 20 Kg

**CAMERA - C R/T** 2 Tos - KS

The OE14-112 (PAL) and OE14-113 (NTSC) Color Cameras offer a wide range of features in a versatile package. The camera uses the latest Super HAD and DSP technology giving excellent light sensitivity and image definition. In addition, a built-in field memory allows long time exposure, snap-shot capability and 4x digital zoom. The camera can also be given an ID number together with time and date.

**BOX SIZE:** 60 x 50 x 35 cm / **WEIGHT:** 20 Kg

**OCEAN PRO HD CAMERA** HD, 30i / 4000 MSW

The Ocean Pro HD TV Camera captures broadcast quality color video in 1080i format with a 16:9 aspect ratio. A 0.5" zoom lens with remote control of zoom, focus and iris, provides a W9" wide to R9" full zoom in water field of view. The video output is completely noise free on a single optical fiber, and a R5-223 serial interface enables remote control of all the camera functions.

**BOX SIZE:** 60 x 40 X 30 cm / **WEIGHT:** 15 Kg

**DIGITAL STILLS CAMERA** 3000 MSW, Z 4x / 5 MP & Flashgun/Blitz

The OE14-208 (PAL and NTSC) is a new generation digital stills color camera. Each image is framed using real-time video and is temporarily stored in built-in memory (standard 256Mb expandable up to 4Gb). The image can then be uploaded on the surface using a rapid USB link. Images are selectable at resolutions of 640 x 480 up to 2592 x 1944 in JPEG or RAW format.

**BOX SIZE:** 40 x 30 X 20 cm / **WEIGHT:** 5 Kg

**MANIPULATOR CAMERA** with an Extension Rod, 4000 MSW

The Manipulator Camera features high resolution color CCD sensor. It is highly resistant to shock and vibration with wide power supply 12VDC to 48VDC. Both LED brightness control (manual or auto) and wide angle version are available.

**BOX SIZE:** 46 x 56 x 25 cm / **WEIGHT:** 20 Kg

**OCEAN PRO HD CAMERA** HD, 30i / 4000 MSW

The Ocean Pro HD TV Camera captures broadcast quality color video in 1080i format with a 16:9 aspect ratio. A 0.5" zoom lens with remote control of zoom, focus and iris, provides a W9" wide to R9" full zoom in water field of view. The video output is completely noise free on a single optical fiber, and a R5-223 serial interface enables remote control of all the camera functions.

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The OE14-208 (PAL and NTSC) is a new generation digital stills color camera. Each image is framed using real-time video and is temporarily stored in built-in memory (standard 256Mb expandable up to 4Gb). The image can then be uploaded on the surface using a rapid USB link. Images are selectable at resolutions of 640 x 480 up to 2592 x 1944 in JPEG or RAW format.

**BOX SIZE:** 40 x 30 X 20 cm / **WEIGHT:** 5 Kg

**MANIPULATOR CAMERA** with an Extension Rod, 4000 MSW

The Manipulator Camera features high resolution color CCD sensor. It is highly resistant to shock and vibration with wide power supply 12VDC to 48VDC. Both LED brightness control (manual or auto) and wide angle version are available.

**BOX SIZE:** 46 x 56 x 25 cm / **WEIGHT:** 20 Kg
CLEANING TOOLS

MULTIPURPOSE CLEANING TOOL

2 in & 5 in

The Multipurpose Cleaning Tool can be used on all types of surfaces. The brush head is made of plastic to avoid damages on surfaces such as seal. Acid can be injected through the brush to further improve the cleaning.

MULTIPURPOSE CLEANING TOOL

10 in

The Multipurpose Cleaning Tool can be used on all types of surfaces. The brush head is made of plastic to avoid damages on surfaces such as seal. Acid can be injected through the brush to further improve the cleaning.

MULTIPURPOSE CLEANING TOOL

2 in & 5 in

The Multipurpose Cleaning Tool can be used on all types of surfaces. The brush head is made of plastic to avoid damages on surfaces such as seal. Acid can be injected through the brush to further improve the cleaning.

EL MULTIPURPOSE CLEANING TOOL

10 in 24VDC - 48VDC

The Electrical Multipurpose Cleaning Tool is an all-electric tool powered through the ROV. The tool can be used to clean any type of surface. Acid can be injected through the brush for a thorough cleaning.

Cleaning Tools
Cleaning Tools

**2XH MULTIPURPOSE CLEANING TOOL**

The Dual Multipurpose Cleaning Tool can be used on all types of surfaces. The brush head is made of plastic to avoid damages on surfaces including seal. Acid can be injected through the brush to further improve cleaning.

**18 3/4 IN WELLHEAD CLEANING TOOL**

The purpose of the Wellhead Cleaning Tool is to clean any calcium hydrate deposits or foreign objects on the seal surface. The tool consists of an 18 3/4 inch brush with integrated ports for acid injection. A plastic skirt prevents the acid and aids in the docking operation. Two integrated locks keep the tool static while cleaning. The tool can be run on acid as an option.

**18 3/4 IN WELLHEAD CLEANING TOOL**

The purpose of the Wellhead Cleaning Tool for Camron hub is to clean any calcium hydrate deposits or foreign objects on the seal surface. The tool consists of an 18 3/4 inch brush with integrated ports for acid injection. A plastic skirt prevents the acid and aids in the docking operation. Two integrated locks keep the tool static while cleaning. The tool can be run on acid as an option.

**2XH MULTIPURPOSE CLEANING TOOL**

The Dual Multipurpose Cleaning Tool can be used on all types of surfaces. The brush head is made of plastic to avoid damages on surfaces including seal. Acid can be injected through the brush to further improve cleaning.

**HIGH PRESSURE JETTING UNIT**

This unit is used to clean subsea surfaces with marine growth, foreign objects or other deposits. It is available for various outputs and ROV interfaces.

**18 3/4 IN WELLHEAD CLEANING TOOL**

The purpose of the Wellhead Cleaning Tool for Camron hub is to clean any calcium hydrate deposits or foreign objects on the seal surface. The tool consists of an 18 3/4 inch brush with integrated ports for acid injection. A plastic skirt prevents the acid and aids in the docking operation. Two integrated locks keep the tool static while cleaning. The tool can be run on acid as an option.
The Suction Kit is used for suction and jetting of marine growth or similar material. The kit features a directional valve that can be operated subsea to vary between suction or jetting functions. It is a field proven design for use on ROVs.

**Suction Kit**

| Box Size: 60 x 40 x 40 cm / Weight: 30 kg |

The Suction Kit is used for suction and jetting of marine growth or similar material. The kit features a directional valve that can be operated subsea to vary between suction or jetting functions. It is a field proven design for use on ROVs.

**Suction Kit**

| Box Size: 60 x 60 x 60 cm / Weight: 35 kg |

The Suction Pad Kit is an extension/add-on to the 1 inch or 2 inch suction kit. It is typically used to hold an ROV in position using suction forces from a suction pump.

**Suction Pad Kit**

| Box Size: 80 x 60 x 60 cm / Weight: 70 kg |

The High Pressure Jetting Pump is a diesel driven high pressure jetting pump (700 bar @ 73 L/min), hydraulic powered reels and chemical hoses (2 reels @ 500 m, 1000 bar). It is used for cleaning and removal of marine growth subsea. Chemicals can be included through an air driven injection pump, powered by a diesel driven air compressor (15 bar @ 4.5 m³).

**High Pressure Jetting Pump**

| Box Size: 60 x 20 x 50 cm / Weight: 1100 kg |
### CUTTING, GRINDING AND MILLING TOOLS

#### DIAMOND CUTTER

400 x 400 mm / 17 x 17 in

The Diamond Cutter is a flexible ROV-operated tool for cutting metal objects such as solid bolts and pipes. It is designed to cut metal structure subsea by using a diamond wire. It is capable of cutting structures up to 60 x 60 mm / 2.36 x 2.36 in. The tool is operated from the ROV hydraulic supply. Diamond wires are easily replaced.

**Box Size:** 150 x 110 x 60 cm / Weight: 150 Kg

#### DIAMOND WIRE SAW (DWS)

4 in - 16 in & 16 in - 36 in, ROV operated

The DWS is robust and efficient ROV-operated cutting tool, made to withstand the challenging environment of subsea operations. The DWS is ideal for cutting of pipelines, jacket legs or risers. Available in two different sizes. Contact us for other sizes.

**Box Size** 4"-16": 163 x 140 x 117 cm / **Weight**: 581 Kg

**Box Size** 16"-36": 211 x 183 x 104 cm / **Weight**: 908 Kg

#### CHISEL HAMMER

Stanley BR45 UW

The Stanley BR45 Underwater Breaker is for light to medium duty breaking of concrete, rock and coral. It is also suitable for light rod driving and tamping. The BR45 has a T-handle with a large trigger for precise control plus a diaphragm accumulator which provides additional blow energy and reduces recoil.

**Box Size:** 60 x 60 x 60 cm / **Weight**: 68 Kg
The Line Cutter is primarily used on wire rope and can cut wire ropes up to 38 mm diameter. It may also be used on alternative materials such as electrical power or communication cables.

The Core Drill’s purpose is to drill Ø 10-100 mm holes with a maximum depth of 370 mm. It provides interfacing on pipes with outward diameter from 6 inches and upwards to plane faces. The hydraulic core drill is attached to the structure by the force from four vacuum pads, powered with suction force from a standard suction pump placed on the ROV. The integral Stanley Hyrevz™ gear motor is manufactured to exacting standards to deliver maximum efficiency.

The Wire Cutter is primarily used on wire rope and can cut wire ropes up to 80 mm diameter. For diameters smaller than 80 mm, an effort should be made to place the material centrally along the anvil to minimize offset loadings.

The Grinder can be used for grinding and cleaning with either cup or standard grinding wheels, wire or nylon brushes. The integral Stanley Hyrevz™ gear motor is manufactured to exacting standards to deliver maximum efficiency.

**GRINDER**

- **9 in**
  - **BOX SIZE:** 60 x 60 x 50 cm / **WEIGHT:** 70 Kg
  - **BOX SIZE:** 60 x 60 x 48 cm / **WEIGHT:** 69 Kg

**ROV GRINDER, 10KW**

- **Multiple-angled, 16 in diamond blade**
  - **BOX SIZE:** 60 x 60 x 50 cm / **WEIGHT:** 67 Kg
  - **BOX SIZE:** 60 x 60 x 48 cm / **WEIGHT:** 65 Kg

**CORE DRILL**

- **Ø 10-100 mm**
  - **The Core Drill’s purpose is to drill Ø 10-100 mm holes with a maximum depth of 370 mm. It provides interfacing on pipes with outward diameter from 6 inches and upwards to plane faces. The hydraulic core drill is attached to the structure by the force from four vacuum pads, powered with suction force from a standard suction pump placed on the ROV.**

**LINE CUTTER**

- **Soft - 25 mm / 1 in**
  - **The Line Cutter is primarily used on ropes and can cut ropes up to 25 mm diameter. It may also be used on alternative materials such as electrical power or communication cables.**

- **Hard - 38 mm / 1.5 in - DassCut**
  - **The Line Cutter is primarily used on wire rope and can cut wire ropes up to 38 mm diameter. It may also be used on alternative materials such as electrical power or communication cables.**

**WIRE CUTTER 80**

- **Max 80 mm**
  - **The Wire Cutter is primarily used on wire rope and can cut wire ropes up to 80 mm diameter. It may also be used on alternative materials such as electrical power or communication cables. For diameters smaller than 80 mm, an effort should be made to place the material centrally along the anvil to minimize offset loadings.**
WIRE CUTTERS 115 (OPTIONAL 150)

115 mm RCV, Max 1770 N/mm²

The Wire Cutter is primarily used on wire rope and will cut wire ropes up to 115 mm diameter. It may also be used on alternative materials such as electrical power or communication cables. For diameters smaller than 115 mm, an effort should be made to place the material centrally along the anvil to minimize offset loadings.

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SCISSOR

180 mm

The cutter is primarily used on ropes up to 180 mm diameter. It may also be used on alternative materials such as electrical power or communication cables.

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CHOP SAW

22 in - 60 in

Oceaneering chop saws are designed for seamless ROV cutting operations and can be utilized for pipelines, salvage and other offshore applications. The rugged, ROV friendly saws can be integrated with most manufactured ROVs for cutting pipes and other structural shapes. The saws easily cut many materials including syntactic, plastic, stainless steel, carbon steel and concrete. Various standard sizes of the chop saw can be mobilized ready to dive within hours. Customized versions are also available.

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WIRE CUTTERS

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The Linear Actuator Override Tool (LAOT) has been designed to open dedicated linear gate valves on the XMT system by acting directly on the valve stem. The LAOT is mechanically locked onto the valve and operated hydraulically with a cylinder. The tool has a built-in rod for measuring stroke and a manometer for measuring pressure. The stroke can also be locked hydraulically by shutting an isolation valve, allowing removal of the stab without releasing the force on the valve. To be able to apply a force of 75 ton, the tool is fitted with an integrated pressure intensifier.

The GL-4 Release Tool is a manipulator deployed tool used to activate the release sleeve of the GL-4 Guidewire Post Top. The tool is placed in a groove on the post top which provides a shoulder for the tool to retract against when activated. The top half of the tool is stroked down so that the semicircular plunger pushes down on the post top release sleeve causing separation.
The Subsea Pressure Sensor monitors differential pressure, and it can be used on the Oceaneering Suction Kit to enable pressure readings on suction pump inlet/outlet. In addition, it can be hooked up to the Oceaneering Remote Control Unit (RCU).

The 700 bar pressure sensor can be hooked up to the Oceaneering Remote Control Unit (RCU).

**SUBSEA PRESSURE SENSOR**

Differential, +/- 15 bar
The Subsea Pressure Sensor monitors differential pressure, and it can be used on the Oceaneering Suction Kit to enable pressure readings on suction pump inlet/outlet. In addition, it can be hooked up to the Oceaneering Remote Control Unit (RCU).

**SUBSEA PRESSURE SENSOR**

700 bar
The 700 bar pressure sensor can be hooked up to the Oceaneering Remote Control Unit (RCU).
Measuring Tools / Sensors

**DEPTHS AND TEMPERATURE SENSOR**
500/2000 MSW Sav

The Sensor provides accurate depth and temperature measurements to 500/2000 m.

**DEPTHS SENSOR**
700 MSW Paro

The Sensor provides accurate depth measurements to 700 m.

**DEPTHS SENSOR**
2000 MSW Paro

The Sensor provides accurate depth measurements to 2000 m.

**FLOW SENSOR**
Turbine, 3 in ASA 150 - 2250 l/min

The Flow Sensor can capture measurement of flow in liters per minute. It can also be connected to an Oceaneering Remote Control Unit (RCU) to present flow data on an RCU surface laptop.

**ROV CURRENT METER**
3000 MSW - Valeport

The Model 803 ROV Current Meter is a unique instrument, providing ROV pilots with relative water velocity data in real time. It may be fitted to ROVs to provide actual through-the-water speeds, or fitted to tether management systems to give a measurement of local flow conditions.
SSBL POSITIONING TRANSPONDER (SPT)

1000 MSW - SPT 319 with floating collar

The medium frequency SPT 319 transponder has 56 channels for use with the HPRI series and the HEPAP systems. The transponder replies with a single or a multipulse response. This reply contains different information to the HPRI or HEPAP systems depending on the current application.

The SPT 319 transponder can work from its own internal battery pack or an external power supply.

MINI SSBL TRANSPONDER (MST)

2000 MSW - MST324/N

The MST can work from its own internal battery pack, or an external power supply, and it can be interrogated acoustically through water or via a cable responder function.

The Oceaneering pH probe is a self-powered tool designed to read the pH in water depths up to 3050 MSW. One direct application for the pH measurement tool is to detect the presence of cement coming out from the wellhead during the cement injection process of the well completion. The presence of cement alters the pH of the water in the well surroundings. By accurately detecting the presence of cement coming out, the operator can stop the injection process, saving time and material.

CEMENT SNIFTER

pH probe - 3050 MSW

The Oceaneering pH probe is a self-powered tool designed to read the pH in water depths up to 3050 MSW. One direct application for the pH measurement tool is to detect the presence of cement coming out from the wellhead during the cement injection process of the well completion. The presence of cement alters the pH of the water in the well surroundings. By accurately detecting the presence of cement coming out, the operator can stop the injection process, saving time and material.
The Inclinometer is designed to be mounted on the conductor before launch to measure pitch and roll on Wellhead conductors. Pitch and roll can easily be read off the electronic display or on the bullseye which is mounted on the tool. An ROV-operated on/off switch is provided for battery saving purposes.

**INCLINOMETER CLAMP**

- **Circle, 42 in - 36 Lag**
  - BOX SIZE: 170 x 780 x 850 cm
  - WEIGHT: 135 Kg

**INCLINOMETER**

- **Circle, 24 in - Horseshoe**
  - BOX SIZE: 60 x 60 x 60 cm
  - WEIGHT: 15 Kg

- **Circle, 21 in - 120P**
  - BOX SIZE: 120 x 100 x 60 cm
  - WEIGHT: 90 Kg

- **Circle, 18 in - BOP**
  - BOX SIZE: 90 x 50 x 40 cm
  - WEIGHT: 45 Kg

- **Circle, 15 in - 80P**
  - BOX SIZE: 80 x 60 x 60 cm
  - WEIGHT: 65 Kg

- **Circle, 24 in - 120P**
  - BOX SIZE: 150 x 780 x 850 cm
  - WEIGHT: 135 Kg

The Inclinometer is designed to be mounted on various interfaces. Pitch and roll can easily be read off the electronic display. An ROV-operated on/off switch is provided for battery saving purposes.
GAS SAMPLE TOOL

Bottle 12 liter

The tool is used to sample gas or liquid subsea.

BOX SIZE: 80 x 60 x 40 cm / WEIGHT: 55 Kg

MUD SAMPLE RACK

24 Buckets

The equipment is developed to handle mud samples subsea. It consists of 24 buckets divided in two racks. These two racks are handled as one unit.

BOX SIZE: 130 x 70 x 60 cm / WEIGHT: 120 Kg
DWP AND RESERVOIR

DIRTY OIL PACK

DWP 28 cc

This Dirty Oil Pack is an Isolated Hydraulic Power Unit (IHPU) that can be easily incorporated into an ROV hydraulic system to provide an isolated hydraulic supply for operating tooling and equipment that may potentially otherwise cause contamination to the main ROV hydraulic supply.

Box Size: 80 x 60 x 60 cm / Weight: 95 Kg

ACID RESERVOIR WITH MOTOR/PUMP

Oil & Acid, 26 Litre - 2 in DWP

The Acid Reservoir serves as a reservoir for the intended subsea system. The unit is a piston-based reservoir with four springs attached to the piston to keep gauge pressure inside the reservoir. Reservoir without pump can be delivered from 16 Liter to 34 Liter.

Box Size: 120 x 80 x 60 cm / Weight: 15 Kg

ACID RESERVOIR

Firestone 34 L - 2 in DWP

The Acid Reservoir serves as a reservoir for the intended subsea system.

Box Size: 70 x 70 x 40 cm / Weight: 38 Kg

RENTAL TOOLS AND EQUIPMENT
**SEAL HANDLING TOOLS**

**VX - RING TOOL**
13 5/8 in - Mechanical

The Mechanical VX-Ring Tool is a mechanical tool without use of hydraulics or electric power. The tool is designed to land on top of a wellhead or XT. By operating the open/close handle, the tool will release or grab the VX-Ring. The tool allows the bore protector to be fitted on XT when installing or removing the VX-Ring.

**AX, VX & DX - RING TOOL**
18 3/4 in - Mechanical. AX, VX & DX

The tool is fully mechanical without use of hydraulics or electric power. The tool is designed to land on top of a wellhead or XT. By operating the open/close handle, the tool will release or grab the AX-Ring, VX-Ring or DX-Ring. The tool allows the bore protector to be fitted on XT when installing or removing the VX, AX or DX-Ring.
The Mechanical VX-Ring Tool is a mechanical tool used to place or remove VX-rings installed without use of hydraulics or electric power. The tool is designed to land on top of a wellhead or XT. By operating the open/close handle, the tool will release or grab the VX-Ring. The tool allows the bore protector to be fitted on XT when installing or removing the VX-Ring.

**VX - RING TOOL**

**18 3/4 in - Mechanical**

**BOX SIZE: 60 x 60 x 40 cm** / **WEIGHT: 30 Kg**

**VX - RING TOOL**

**18 3/4 in - Mechanical, Cameron**

**BOX SIZE: 120 x 100 x 110 cm** / **WEIGHT: 40 Kg**

**VX - RING TOOL**

**18 3/4 in - Mechanical**

**BOX SIZE: 120 x 80 x 50 cm** / **WEIGHT: 35 Kg**

The Mechanical VX-Ring Tool is a mechanical tool used to place or remove VX-rings installed without use of hydraulics or electric power. The tool is designed to land on top of a wellhead or XT. By operating the open/close handle, the tool will release or grab the VX-Ring. The tool allows the bore protector to be fitted on XT when installing or removing the VX-Ring.

**VX - RING TOOL**

**18 3/4 in & 13 5/8 in - Mechanical**

**BOX SIZE: 60 x 60 x 48 cm** / **WEIGHT: 35 Kg**

**Seed Handling Tools**
Various Tools & Equipment

**GTO ROV Dredge**

The GTO ROV Dredge is designed for subsea excavation and disposal of sediments and gravel up to 230 mm. The GTO ROV Dredge is easily mounted to the ROV and requires no ship deck space and seafastening.

**Box Size:** 200 x 48 x 70 cm / **Weight:** 210 Kg

**Storage & Transport Container**

With XYZ Forklift Crane

The system is developed for safe handling, easy access and storage of goods. The air driven traveling crane can be moved in all directions and turned 360º. The design allows for maximum storage height. The system setup reflects the HSE recommendations for safe personnel operation and it is designed according to DNV 2.7-1, NS 5514 and NS 3472.

**Box Size:** 300 x 250 x 300 cm / **Weight:** 4300 Kg

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Various Tools & Equipment
**COMMUNICATION KIT**

Wireless kit, 16 Ch / E1 - Motorola

Clear-Com is a closed-circuit intercom system that consistently provides high clarity communication in high noise and low noise environments. A basic system consists of a single or multi-channel power supply or main station connected to various single or multi-channel remote stations, such as belt packs and loud speaker stations.

**BOX SIZE:** 140 x 60 x 50 cm / **WEIGHT:** 62 Kg

---

**TOOL DEPLOYMENT UNIT (TDU) SKID**

API RP 17H / ISO 13628-8 Compliant

The TDU Skid is designed to operate standard intervention tooling per recommendations in API RP 17H / ISO 13628-8. Standard tooling operations all meet or exceed all recommended operational envelopes. Typical tooling that the TDU Skid is designed to handle are 17H and 17D torque tool, linear over-ride tool and low torque tools and MQC jumper handling tools (combinations of torque tool and gripper tool).

**BOX SIZE:** 240 x 165 x 100 cm / **WEIGHT:** 460 Kg

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**SUBSEA WINCH**

15 Ton Winch

This is a hydraulic driven Subsea Winch with pull force of 15 ton. The winch has a lightweight and compact design for easy handling. It can operate both vertically and horizontally. The winch is interfaced with an API 17D ROV bucket. Other interfaces can be developed and delivered depending on customers’ requests.

**BOX SIZE:** 120 x 100 x 200 cm / **WEIGHT:** 660 Kg

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**ROV SUBSEA BASKET**

Open Top / SWL 1.0 Ton & SWL 4.4 Ton

The basket is designed for handling tooling to and from the worksite and can also be used as a parking platform for tools. All stainless steel construction minimizes corrosion. Single pend lift simplifies ROV handling.

**BOX SIZE:** 120 x 90 x 120 cm / **WEIGHT:** 300 Kg

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**VARIOUS TOOLS & EQUIPMENT**

- **COMMUNICATION KIT**
  - Wireless kit, 16 Ch / E1 - Motorola
  - Clear-Com is a closed-circuit intercom system that consistently provides high clarity communication in high noise and low noise environments. A basic system consists of a single or multi-channel power supply or main station connected to various single or multi-channel remote stations, such as belt packs and loud speaker stations.
  - **BOX SIZE:** 140 x 60 x 50 cm / **WEIGHT:** 62 Kg

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PACKAGED SOLUTIONS

Streamline your work by using our packaged solutions.
The field proven Oceaneering Core Drill is designed to drill holes from ø10 mm to ø100 mm through 5 mm to 370 mm thick steel.

The drill is manipulator-held and attaches to jacket legs or other structures using suction pads powered by a suction pump mounted on the ROV. When used with the Oceaneering Remote Control Unit (RCU) and suction pump, it is easy to control stroke, speed (rpm) and suction force from the ROV surface control room.

Streamline your work by adding these tools

The Suction Pump is mounted on the ROV and powers the suction pads on the core drill.

The Oceaneering Remote Control Unit (RCU) makes it easy to control stroke, speed (rpm) and suction force from the ROV surface control room.
The newly designed Oceaneering ISO 13628-8 Class 1-4 Torque Tool is a compact stand-alone unit that can operate over the whole class 1-4 range without motor change-outs.

The tool can be delivered with a Subsea Interchangeable Jig that can be mounted on top of an Oceaneering basket if the seabed is soiled.

The new torque tool can be connected to the ROV system by using an IR Stab. It is then easy to connect/disconnect the torque tool from the ROV hydraulic and electric system subsea. This feature can streamline and improve the efficiency of ROV operations due to less recoveries for replacing other ROV tools.

**IMPROVE THE EFFICIENCY OF TORQUE TOOL OPERATIONS**

Streamline your work by adding these tools:

- **The Subsea Interchangeable Jig** makes it possible to change sockets on the Torque Tool subsea.
- **The IR Stab** makes it easy to connect/disconnect the torque tool from the ROV hydraulic and electric system subsea. This can streamline and improve the efficiency of ROV operations due to less recoveries for replacing other ROV tools.
- **The Test Jig with a Transducer System** performs validation/calibration of the tool before operations to be able to have full control over the torque tool’s output torque.
- **By using an Oceaneering Remote Control Unit (RCU)** to operate the equipment, you will have full control of pressure (torque), flow (speed) and turns on the torque tool.
The Flying Lead Orientation Tool (FLOT) is designed to easily orientate and guide flying leads into stab plates on various subsea equipment.

A torque tool is mounted in the FLOT to be able to connect the flying lead to the flying lead receptacle or stab plate with correct torque. The FLOT provides pitch and roll capabilities for maneuvering the torque tool into position.

We recommend using a Remote Control Unit (RCU) to operate the torque tool and FLOT, and also a test jig with a transducer system for validation/calibration before operation.

Streamline your work by adding these tools:

- **A Torque Tool** is mounted in the FLOT to be able to connect the flying lead to the flying lead receptacle or stab plate with correct torque.
- **By using an Oceaneering Remote Control Unit (RCU)** to operate the equipment, you will have full control of pressure (torque), flow (speed), and turns on the torque tool.
- **The Test Jig with a Transducer System** performs validation/calibration of the tool before operation to be able to have full control over the torque tool’s output torque.

**THE SAFEST AND MOST ACCURATE SOLUTION TO CONNECT FLYING LEADS**

The Flying Lead Orientation Tool (FLOT) is designed to easily orientate and guide flying leads into stab plates on various subsea equipment.

A torque tool is mounted in the FLOT to be able to connect the flying lead to the flying lead receptacle or stab plate with correct torque. The FLOT provides pitch and roll capabilities for maneuvering the torque tool into position.

We recommend using a Remote Control Unit (RCU) to operate the torque tool and FLOT, and also a test jig with a transducer system for validation/calibration before operation.
The ROV Tool Elevator is designed to position torque tools and MQC plates in either vertical or horizontal mode.

Simultaneous tasks can be performed when using a tool elevator. All Oceaneering torque tools fit in the tool elevator.

To be able to have full control over the torque tool’s output torque, it is important to perform a validation/calibration of the tool before operation. This is done by using a test jig with a transducer system.

We recommend using a test jig with a transducer system for validation/calibration before operation and a Remote Control Unit (RCU) to operate the tool elevator and torque tool.

Streamline your work by adding these tools

- All Oceaneering Torque Tools fit in the tool elevator.
- The Test Jig with a Transducer System performs validation/calibration of the tool before operation to be able to have full control over the torque tool’s output torque.
- By using an Oceaneering Remote Control Unit (RCU) to operate the equipment, you will have full control of pressure (torque), flow (speed), and turns on the torque tool.

Simplify and Enable Work on Simultaneous Tasks
It is critical that a torque tool is properly calibrated and validated before use to be able to have full control over the output.

By doing a calibration check with a torque tool test jig system prior to the operation, you validate and pre-check the tool’s input and output values. This is important to prevent “over torque” of a valve’s operation torque/damage torque limitations.

The test jig equipment consists of two items, including one jig to interface the torque tool and one read out unit to measure and display the torque values from the torque tool.

To enhance the overall operation, an RCU is commonly used to feed the tool with hydraulics and to control the hydraulic supply to the torque tool.
Oceaneering offers a wide range of field proven adaptors which is made to suite Oceaneering standard Torque Tools.

Streamline your work by adding these tools

**Paddle Valve Kit for Standard Torque Tool Cl. 1-4**
The purpose of this kit is to reduce the torque on the tool to 20Nm and replace the 17D Socket on the standard torque tool socket with a Paddle Valve interface.

**Torque Tool 17H Socket Kit for Standard Torque Tool Cl. 1-4**
The purpose of the kit is to replace the 17D Socket on a standard torque tool socket with a 17H Socket. To secure maximum moment, it is supplemented with a Nose Bucket. In addition, the kit contains a long version of the socket in case of limited access.

**17 kNm GHO/VCS Adaptor for Standard Torque Tool Cl. 7**
The adaptor’s purpose is to be able to interface a standard torque tool Cl. 7 to a LCS 136SR A receptacle.
AVOID CONTAMINATION TO THE MAIN ROV HYDRAULICS

When using tools and equipment that may cause contamination to the ROV main hydraulic supply, this Dirty Work Pack is ideal to eliminate this risk.

The Dirty Work Pack (DWP) is a field proven product and it is easy to incorporate into an ROV hydraulic system. The pressure and flow is easily adjusted using the Oceaneering Remote Control Unit (RCU). Liquid to the DWP can be supplied from reservoirs spanning from 16 L to 34 L.
The field proven Oceaneering 17 inch Diamond Cutter tool is ideal for cutting metal objects such as solid bolts and pipes.

The tool is designed to cut metal structures up to 400 x 400 mm / 17 in x 17 in subsea. The Diamond Cutter easily hooks up to an ROV System and it is controlled and operated from the ROV’s hydraulics.

To optimize a cutting operation, suction pads are recommended to keep the ROV in a stable position while cutting. These suction pads are typically operated from a 2 inch suction kit mounted on the ROV. It is also recommended to use a Remote Control Unit (RCU) to be able to adjust the speed on the diamond wire.
For more information, please visit oceaneering.com