



## Seascope developed and built custom made control management and visualization systems for subsea use.

As example seascope built and designed a Jetplough control setup. (The Jetplough is a subsea plough for digging in a cable in the sediment.) The setup consists basically out of a subsea E-pod (electronics bottle) a cable umbilical and a surface control cabinet. To the E-pod several sensor, cameras and lights are connected. The E-pod is powered from the surface trough one of the cables in the umbilical. Data is transmitted over the other cable in the umbilical. The surface control cabinet is a control and power cabinet with all hardware and software to control and monitor the E-pod. The visualization is done with a graphical user interface (GUI) displayed on some monitors. In the GUI software to user can control the system.

The E-pod is one atmosphere electronic pod containing all electronics and connectors from the umbilical to all sensors. It function also as a junction box. The E-pod will be prepared with a vacuum nipple to test its water tightness after each closing. E-pod consist out of a steel tank with stainless steel flange and blind plate.

The control cabinet consist out of a bottom cabinet with all power and data control, a top control cabinet with the keyboard and the monitor bracket with the Jetplough interface and video monitor. The cabinet is powered by 220 volts The bottom cabinet has as built in UPS which powers all components.

The controls and monitoring are based on a PC with a graphical user interface (GUI) on a 22" monitor and a DVR with 19" monitor. The interface is used to control and monitor the E-pod. The DVR is used to display 2 camera and record the images to the internal hard drive.

*In the past Seascope developed also control management and visualization system for other projects. Such as a stinger used for a S-lay Pipeline installation. And the manufacturing of the controls, imaging and geographical positioning of a giant wreck removal grabber.*

### GUI Software

Built on basis of 1 main screen with several secondary screens for settings, alarms etc.. The software contains the following:

- Graphical visualization of the skid positions;
- Digital and analogue sensors values;
- Sensor calibration and set points;
- Alarms, visual and audible, with configurable set points;
- Log function to ascii file of all data selected;
- Control of camera, lights and other;
- Surface sensor display (cable length, cable tension, etc..)
- Output string of selected values;
- Day and night screen (selectable)

### Features

- Applicable to other systems for subsea use.
- Custom-built according customer requirements

