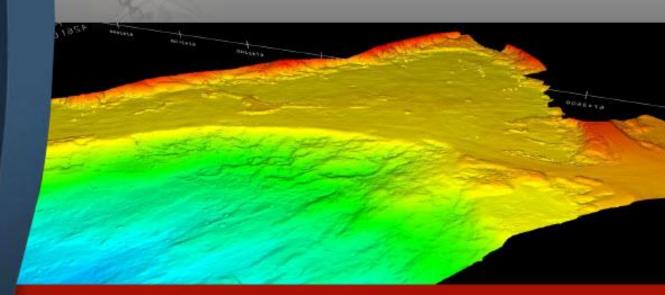


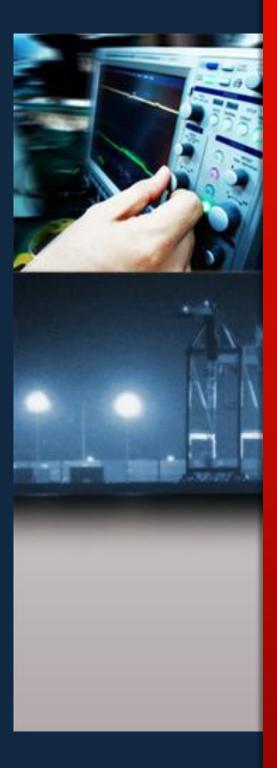
## **BK MARINE AS**



### **SERVICES AND SOLUTIONS**

- COST EFFECTIVE AND FLEXIBLE SOLUTIONS





#### **BK Marine AS**

**BK Marine** is an company in the subsea sector with long experience from underwater work and problem solving.

We centers our expertise to discover, develop and provide innovative solutions for the subsea industry. We work closely with our customers to recognize their needs and requirements as we extend beyond research and development in presenting them with solutions that will complement their goals.

**We** provide development and progression of new ideas and evaluation and application of new technologies to existing subsea services.

To be able to serve the marked in a good and cost effective way, **BK Marine** have invested in high quaity equipment and experienced multi skilled personnel.

**BK Marine** have available equipment and personnel to cover all areas, both regarding technology, experience and cost, adjusted for the different areas.

#### **Professional Resources**

A combination of highly technical and competent engineers working with software, electrical, and mechanical field provides years of experience in development and innovation as the core.

The company philosophy is to be a problem solver and take all new challenges in the underwater business and to be able to handle various challenges in the future.

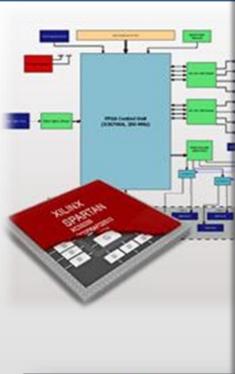


# Creating Value for our Customers

With an extensive experience in subsea services and solutions, we help our customers achieve a high quality and cost effective approach, designed to execute all the project requirements.

We offer solutions to cater your needs and we provide technical services from start to finish of the project development.





#### Consultants service

**BK Marine** has experience in consulting and advisory services for the subsea and cable industry and have been involved in planning of:

- Survey system design
- > Sensor and logging systems
- Cable route survey
- > Cable route engineering
- Cable laying operations
- > Cable burial operations

**BK Marine** has also provided services as client representatives on similar projects.



The company have a group of highly experienced onshore and offshore operators and works closely with its clients to meet all project requirements.

**BK Marine** can offer the following services:

- Engineering services
- Consultants services
- Client representative
- Survey and survey solutions
- Cable route engineering
- Cable route survey
- Cable laying support
- Cable burial and trenching support
- ROV support
- Sensor technique
- System design
- Reporting and documentation
- Project administration

### **Survey solutions**

A hydrographic survey may be conducted to support a variety of activities:
Nautical charting, port and harbor maintenance (dredging), coastal engineering (beach erosion and replenishment studies), coastal zone management, and offshore resource development.

The one data type common to all hydrographic surveys is water depth.

Of additional concern to most surveys is the nature of the sea floor material (i.e. sand, mud, rock) due to its implications for anchoring, dredging, structure construction, pipeline and cable routing and fisheries habitat.

To cope with the demanding task of performing a high quality survey and measurements **BK Marine** have develop and tailored together an extensive suite of equipment to fulfill the requirements of high accuracy and precision in the measurements.

All measurements are done either with ROV or from surface vessel.

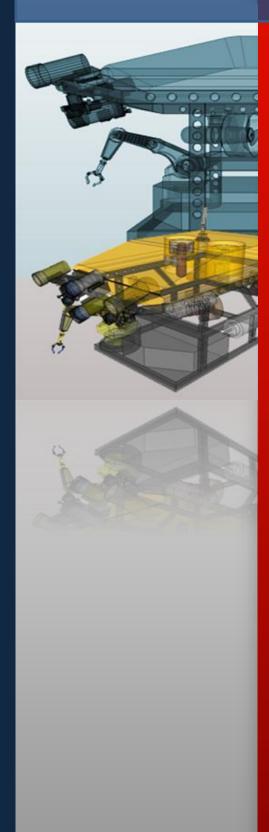
Together with a high mobility our systems increases the efficiency and quality- and thereby leads to large savings for the customer.

**BK Marine** can offer a wide range of survey solutions:

- Single beam echosounder
- Multibeam echosounder
- Sub Bottom Profiler
- Side Scan Sonar
- Marine Magnetometer
- Cable route survey
- Cable and pipe line Tracking
- Visual Survey
- UXO Survey
- ROV Survey
- Geotechnical Survey
- Grab sampler
- Water jet probing



# "We will only offer high-quality and Innovative solutions at BK Marine"



#### **ROV** support

We have long experience from challenging operations worldwide in applications for the oil and gas, telecommunications, hydrographic survey markets, offshore renewable energy, and ports.

**BK Marine** have experience from operating and configuring of several ROV system and for a various type of projects.
All from small Obs. ROV to larger "work class "ROV.



**BK Marine** can offer the following for ROV support:

- Modification and system integration
- Survey system integration
- Cable tracking systems
- Pipeline survey system
- Service and operation
- Data logging
- Reporting

### Cable laying support

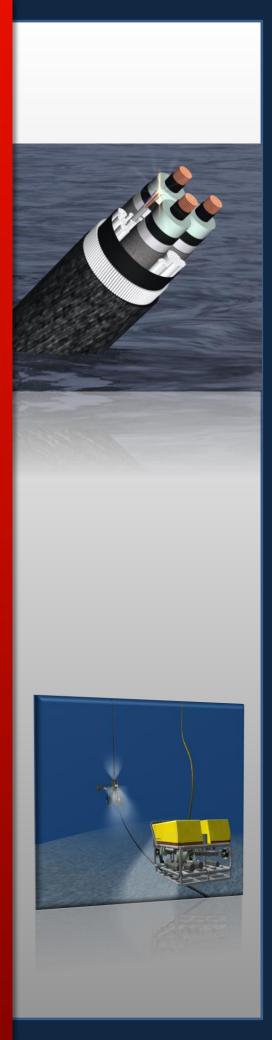
Installing a submarine cable can be a complex and time consuming operation. It uses a range of disciplines and skills, which vary from project to project.



Our operators have long experience in the subsea cable industry and have supported a grate number of different companies all over the world during cable laying operations.

**BK Marine** offers a wide range of services for cable laying operations, such as:

- Planning and organization
- Survey system integration
- Navigation and monitoring
- Service and operation
- Data logging
- Reporting and documentation





# Cable burial and trenching support

The purpose of the burial operation is to provide protection for the cables in a trench that is designed to protect the cables from third party aggressions.



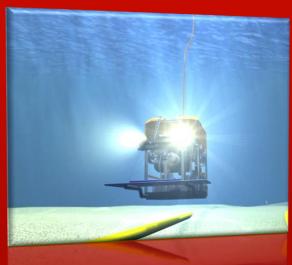
**BK Marine** can offer a wide range of services and support for cable burial operations.

Our operators have long experience and knowledge in undertaking this kind of operations and can offer the following services:

- > Planning and organization
- Survey system integration
- Navigation and monitoring
- Service and operation
- Data logging
- Reporting and documentation

### **Cable Tracking**

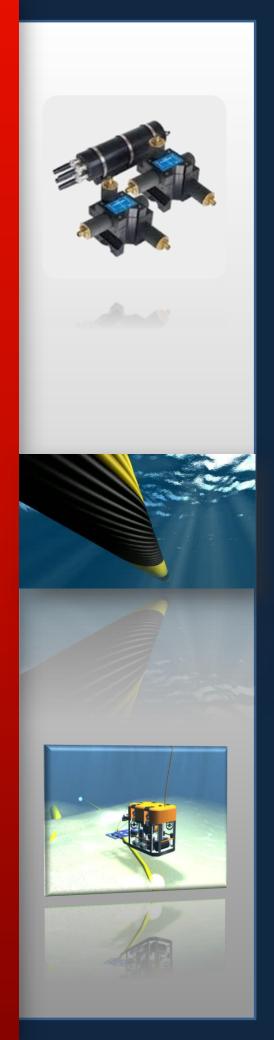
The TSS 350 Cable tracker collect data on cable location and depth of burial data, and it can discover cable faults. This cable tracking system has superior DSP techniques giving quality control of the collected information. It is specifically made for detecting and surveying tone-carrying cables, and is capable of tone frequency discrimination, which, combined with ROV skew angle detection, gives better determination of the ROV position relative to the cable. Thus, the accuracy of the detected cable position is improved. These features create a system that collects accurate cable position data



#### Features & Benefits:

- Cable location and depth of burial data
- Cable fault location
- Vehicle skew angle data
- Look-ahead information
- Tone discrimination
- DSP techniques give quality control information
- Full integrated system with altimeter, spares and documentation

BK Marine is one of few companies that can track "Live power cables".

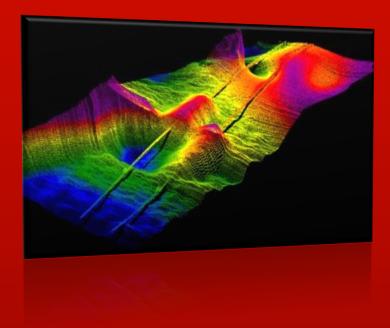




### Pipeline survey

**BK Marine** have system's for pipeline inspection and survey. The system consist of Pipe tracking system and digital video recording, combining both video and survey data.

The system is ideal for Pipeline and cable inspection, Combining Survey data with Video recording and also integration of historical data. The system make it easy for the client to control, combine and playback video and survey data together with events

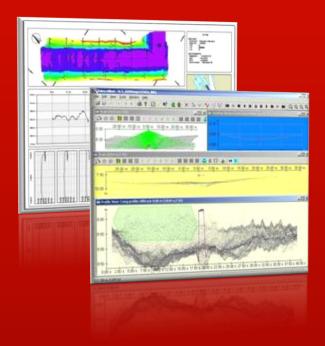


Our system is a complete solution for viewing integrated survey data and digital video from subsea inspection surveys

We integrate your existing charting data with new digital video inspection surveys to provide a powerful tool for the analysis of all your information including the ability to perform year on year comparison of your survey inspection data.

# Data processing and reporting

The high quality data produced by the different survey sensors are an excellent basis for producing a complete description of the seabed in the form of charts, 3D-displays, combined bathymetry and acoustic imagery, seabed classification etc. As the format is public, interfaces to other post-processing software is available or can easily be written.



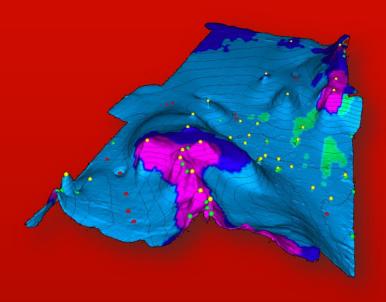
Our experienced staffs perform efficient processing, interpretation and reporting of our surveys on board the vessels. **BK Marine** has wide range of data storage systems maintain full data security and management, making it possible to supply our customers efficiently. We are also capable of delivering a wide range of recognized CAD and GIS formats.





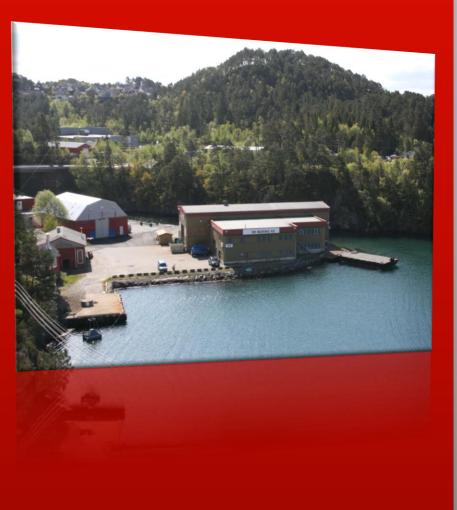
# BK Marine Objective and visions

**BK Marine** have long experience in subsea operations and services. We always aim to utilize the latest technology available in the marked which will give our customers faster, better and more cost effective solutions.



The company objective is to create costeffective and quality solutions and to serve the subsea industry by providing reliable and professional services.

It is our vision to be an innovative company that provides world-class services for the subsea industry





#### **Contact:**

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