

Sub-Sea Pipeline Leak Detection System

A new range of systems for rapid detection of leaks
from sub-sea structures



APPLICATIONS

- Detection of leaks in pipelines and subsea installations
- Leak detection using many Fluorescein and Rhodamine fluorescence based products
- Direct hydrocarbon detection
- In-situ oil in water monitoring
- Hydrothermal vent studies



FEATURES

- Rapid mobilisation world-wide
- Complete turnkey system with data visualisation software
- High fluorescence sensitivity and good background rejection give excellent sensitivity
- Good long term calibration stability
- Low power consumption
- Operationally robust
- Systems deployable from ROVs, profiled, towed or diver held
- Simplicity of integration and use
- Systems operational to full ocean depths
- Wide range of products detected
- More than 30 years proven track record

Leading suppliers of leak detection systems for over 30 years

Highly reliable leak detection system

The highly reliable Sub-Sea Pipeline Leak Detection System has an impressive track record since 1983, of providing a quick and cost-effective method of detecting sub-sea leaks from offshore pipelines, platforms and structures. The system can be used during commissioning of new pipelines or detecting leaks in operational pipe and control lines.

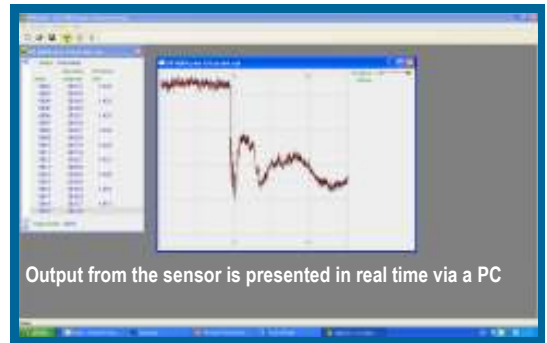
Chelsea Technologies Group offers a number of leak detection systems targeted to rapidly locating sub-sea leaks of different compounds including:

- hydrocarbons in pipelines and near seabed
- fluorescent dyes (with either Rhodamine or Fluorescein type fluorescence) for pipeline commissioning
- Control fluids including both UV and non UV fluorescence based.

The Chelsea Sub-Sea Pipeline Leak Detection Systems are extremely sensitive and capable of detecting leaks as low as 1 ppt in sea water.



Dye-plume leaking from pipeline flange



Deployment

Chelsea offers three deployment configurations for the Sub-Sea Pipeline Leak Detection System which include:

- ROV mounted, 600 metre rated
- ROV mounted, full ocean depth (6000 metre) rated
- Diver held system

Leaks are rapidly detected by positioning the sensor along the suspect pipe or control line on the current wake side. Output from the sensor is presented in real time via a PC with the Chelsea Graphical User Interface 'UNiplot' which both stores the data and presents the data in graphical form on the PC display. ROV based fluorometers are provided with an RS232 digital interface



Deployment from ROV, AUV, vehicles & diver held.

System Description

All systems are provided with:

- Fluorometers (the particular fluorometers supplied will be depend on desired depth and application)
- Interface Unit
- Complete cable set (system dependent)
- Laptop PC with 'UNiplot' GUI
- Transit case
- Complete user handbook set.

If two targets are required to be detected during the same operation, two different fluorometers can be offered within the one system.

Wide Target Range

The Chelsea Sub-Sea Pipeline Leak Detection Systems can be configured to measure a wide range of current products used within the Offshore industry. These include; RX9022 (Roemex), Pelagic 100 & Pelagic 50/50 with pink dye (Niche), Aqualink, Red 1247, Red 1749 (Houghton), Fluorodye UC, Hydrosure Cleardye, Cleardye (Champion), Transaqua (Castrol), Morlina 5 (Shell), EP1186 (AGMA) and many more. Please contact Chelsea Technologies Group Ltd for further details or to discuss your requirements.



Chelsea offers systems for both hire and purchase. Please contact us or your local representative for further details.



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