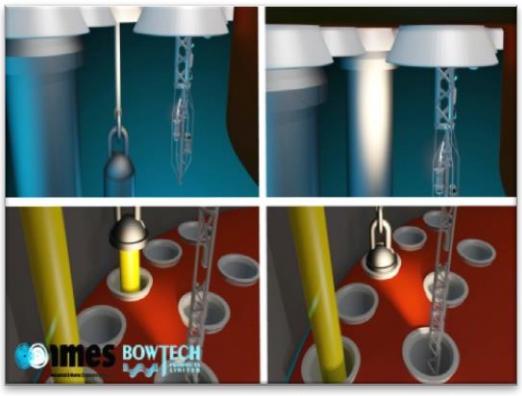
Riser Inhaul Camera System (RICS)

In 2009 IMES were asked to design a tool for a major oil and gas operator that was capable of deploying down a spare FPSO I-Tube and observing the inhaul and release of risers. Due to the time typically required for a riser inhaul/release operation and the requirement for continuous observation in the splash zone a conventional ROV operated free-swimming inspection system would not be viable for safety reasons. The complete system from concept to delivery was achieved in less than 4 months. This is the RICS, Riser Inhaul Camera System.

In December 2010 IMES won a second contract to provide an RICS for a new FPSO being deployed to Norwegian waters; again delivery was completed within 4 months. Due to the high quality and specifications of the original RICS equipment, both ex-rated systems were able to meet the stricter Norwegian NORSOK standards allowing both tools could be deployed in support of each other. More recently Imes Ltd have developed a new and more advanced tool which has been designed to deploy down a much narrower camera access Tube purpose built to observe the riser in-haul without the need to use a spare I-Tube.

During the summer of 2013 through to the spring of 2014 IMES completed the task of observing and digitally recording the 15 risers and 3 umbilicals released from a North Sea FPSO prior to its departure from station. Utilising two bespoke sets of RICS equipment, IMES team of Engineers embarked on the FPSO and deployed both tools simultaneously to facilitate the quickest possible turn-around between riser releases and make maximum use of calm weather windows.

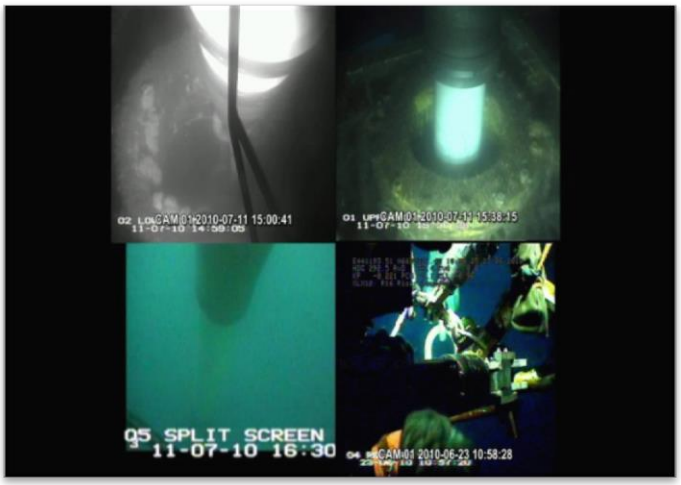


The Riser Inhaul Camera Systems were designed by IMES engineers and assembled in our Aberdeen facility. Specialist subsea camera systems were required that provided both pan and tilt with optical zoom as well as being ATEX approved. During the design phase for these bespoke products Imes worked hand in hand with Bowtech to develop the world's first high lumen subsea and ATEX rated lights using the latest LED technology.

Riser Inhaul Camera System (RICS)

The ATEX rated cameras can focus on objects only centimetres away or zoom to clearly read the writing on a 50p coin at 8m distance. With its ATEX certification the RICS can be fully powered up and tested on the deck of the FPSO turret prior to deployment.

After successful campaigns on two FPSO's over the last 4 years, IMES are in the process of developing further systems to investigate damage and corrosion to the lower and upper I-Tubes as well as the splash zone ensuring an early warning of possible failure.



Technical Specifications:

- Modular design for assembly in confined spaces
- ATEX Rated
- Real time visualisation

To see the RICS in operation visit: http://www.imes-group.com/i-tube-visual-inspection.html

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