

1. Problem Statement

Traditionally, when carrying out Class-required crude oil tank inspections on the FPSO, a minimum four-man team of Rope Access Technicians had to enter the confined space and work at height for lengthy periods of time. This methodology incurred significant risks including mechanical isolation; the set-up of rope rescue evacuation systems; and significant tank cleaning to prevent slips - which also took up valuable manpower resources.

2. Aims

Now, a Class-approved remote inspection technique by EM&I - a leading global organisation providing inspection and specialised repair and maintenance services to the oil and gas industry - is being used which involves deploying a pressurised camera with inbuilt lighting and remote pan and tilt control through deck access hatches and lowering it to the designated inspection depth. As well as the inspection being carried out a lot faster, there is also no need to make the tank safe for manned entry.

3. Method

The project was led by our Naval Architect on Bleo Holm, working with the full support from all other appropriate teams.

Appropriate risk assessments were carried out in advance of implementation.

4. Impact

A double safe win with the need to enter confined space and the need to work at height removed. 90% reduction in manhours. This represents a saving of £20,000 per tank. Sixteen tanks over five years equates to a potential saving of circa £320,000. The team are now looking at four other chemicals to identify if savings can be made. Learnings are being shared with other assets to allow them to investigate if they can realise savings by implementing the same steps where appropriate.

This inspection technique will continue to be used on Bleo Holm.

Total hours saved

90+% reduction
in man hours

Total savings anticipated

£20,000 per tank
£320,000 over five years