

film-ocean

innovative subsea solutions

About

Film-Ocean is an independent subsea contractor providing ROV inspection and intervention services. We specialise in providing innovative, cost effective subsea solutions to the global oil and gas industry and have an extensive track record in performing subsea integrity inspections on floating and fixed structures from the asset or support vessel with a fleet of high specification ROV's.

3D Photogrammetry



Product Overview

Multi camera (multi image) photogrammetry is the analysis of 2D images to reconstruct features in 3D. This enables a greater distinguishability of items being surveyed and inspected underwater. Accurate measurements are able to be extracted from models after processing as well as numerous other by-products: ortho-rectified seabed maps, etc.

Using a high definition video camera or underwater digital stills camera Film-Ocean can offer accurate cost-effective 3D imaging of subsurface components. Using either a known dimension from as built information or using our subsea calipers to record a control measurement the scaled 3d models can be used to provide accurate dimensions.

Computer vision applications are now capable of resolving the effects of underwater diffraction and refraction as part of the optical characteristics and sensor design of modern digital cameras. Underwater photogrammetry used to be a highly technical and costly process, whereas now it is an accessible tool which enables the recording, interpretation, analysis and presentation of detailed materials related to underwater operations clearly and in quicker time frames. This progress indicates a step change in the way survey and inspection operations can be enhanced in today's current market, therefore allowing an increase in cost effectiveness of underwater operations where detailed analysis is needed.