

Zawtika Freespan Correction

Remedial works to a 300km long gas export pipeline in the Gulf of Mottama



In 2013, FoundOcean carried out operations in the Gulf of Mottama, Myanmar on a 300 kilometre-long gas export pipeline. Engineers surveyed the area and discovered the potential for freespans at 21 different locations. It was decided that the most effective course of action would be to install fabric formworks underneath the pipeline to provide adequate support and stabilization at each of the identified sections.

To carry out the remedial works, FoundOcean used its specialist fabric formwork deployment frame. On-deck, each empty formwork was strapped to the frame, the grout hoses were also connected at this point from the frame to the grout bag. The frame was lowered to the worksite using the vessels lifting crane. Once at the worksite, a remotely operated vehicle (ROV) maneuvered the frame into position next to the pipeline. The ROV then unfastened the grout bag and positioned it under the pipeline.

FoundOcean engineers lowered the flexible grouting hose to the worksite and connected it the deployment frame to fill the primary lower formwork compartment using a FoundOcean 10V grout mixer. Once full the grout hose was disconnected by ROV and the grout was allowed to cure. During this time, the grout deployment sled remained in position at a depth of 160 meters (525 feet). After 12 hours had passed, the ROV moved the grout hose from the first inlet connection on the deployment frame to the second connection. Grout was mixed and pumped from the vessel until good returns were seen, indicating a successfully filled formwork.

Five of the formworks comprised two compartments, and 16 comprised three compartments, meaning this process was repeated a third time for those.



A FoundOcean pipeline support fabric formwork

PROJECT FACTS

Industry	Oil & Gas
Region	South East Asia
Services	Freespan Correction
Project year	2013
Operator	PTT EP Ltd
Contractor	Saipem/Swiber Offshore
Water depth	135-160 m (443-525ft)
Material type	OPC ASTM Type I
Total Material	125 tonnes
Mixer type	10V
Material specification	50 MPa
Mixing rate	Up to 12m ³ /hr

TYPICAL 10V DECK PLAN

