KOHLER®

Case Study

Powering Innovation:

How Kohler's Marine generator empowered The Success Of Thai Kolon's ASV Project

Customer

Marsun Public Company Limited

Marine Generator

5EFKOZD

Overview

To support offshore oil and gas operations in the Gulf of Thailand, ROVULA (Thailand) Company Limited, a service provider of intelligent underwater solutions, partnered with Marsun Public Company Limited (PCL), a leading shipbuilder, to develop an autonomous surface vehicle (ASV) that can be piloted remotely via satellite communication. This transport is intended to navigate the various challenges associated with pipeline servicing and inspection in deep-sea environments, thus reducing operation time and mitigating human risks.

However, in the midst of the project installation, Marsun PCL realized there was insufficient space within the engine room to accommodate the majority of marine gensets available on the market. As a result, the company turned to Thai Kolon, a renowned turnkey solution provider in machinery and marine equipment with over 30 years of experience in the industry, to identify a solution to the problem. By working with Kohler, Thai Kolon was able to provide a suitable marine generator that meets Marsun's load and safety requirements, thus securing the project and ensuring it can deliver its commitment within the stipulated time frame.

Challenge:

Locating A Suitable Marine Genset That Meets The Load And Safety Requirement Of The Project

Maintaining asset integrity is integral to a seamless offshore oil and gas operation. However, the nature of the work and the deepsea environments result in significant risks for the maintenance crew and long operation times. The aim is to streamline the entire procedure by allowing operators to operate an ASV remotely, thus ensuring a more efficient and safe working condition and process.

As part of the project, ROVULA and Marsun PCL had to ensure they were able to meet the following objectives:

1. The ASV must be capable of operating in a one-year return period environment in the Gulf of Thailand, where it can function as a security and surveillance application;
2. The ASV must be capable of supporting various marine activities, such as equipment transfer;
3. The ASV's speed must vary from 0.2 knots (following mode) to 30 knots (surveillance mode);
4. The two companies are to develop a subsea positioning system for the resident ASV;
5. The subsea ASV must feature a communication gateway that connects the vehicle to the surface facilities;
6. Further add-on options, such as a mini-ROV and drone, are also under consideration.

As the company in charge of the construction of the ASV, Marsun was responsible for sourcing the essential materials necessary for the project. However, in the midst of the project installation, the organization realized that the engine room had limited space to accommodate most marine gensets capable of powering the vehicle. So, it turned to Thai Kolon to identify a fix to its genset problem.

The Solution :

Kohler's 5EFKOZD Marine Generator

In collaboration with Kohler, Thai Kolon supplied Marsun Shipyard with our 5EFKOZD marine generator, which functions as the primary energy source for the ASV. It provided power for its electric propulsion system and the rest of the equipment onboard, including the navigation and communication systems. Due to the compact size of this particular genset, it was able to fit within the tight space in the engine room.

As a turnkey solution provider, Thai Kolon assisted Marsun PCL with the commissioning test for the genset to ensure it met the load and safety requirements of the project. Subsequently, the results were collected and presented to Marsun, who was pleased with the performance of the marine generator and awarded the company the project, placing it in charge of installing the genset, commissioning its sea-trial, and providing after-sales support for the generator, which it delivered within the stipulated timeline.

"We trust Kohler's efficiency, stability, and after-service support for its marine gensets, which is why its 5kW marine generator serves as the primary power source for our ASV project. There is no reason for us to utilise another generator due to Kohler's long-standing reputation and Thai Kolon's connection in Thailand," said Mr Pathipan, Project Manager of Marsun PCL.

Thai Kolon's success story with our marine generator is a showcase of what our products can offer businesses in the maritime industry. Visit our website today to explore our comprehensive list of dealers if you seek a reliable genset solution to drive efficiency, cost savings, and operational excellence for your organisation.

Thai Kolon has more than 30 years of experience and is renowned as a system integrator in distributing machinery and marine equipments since 1984. They have three branch offices in Samutprakarn, Bangkok and Phuket to serve maritime customers in all locations of Thailand and neighboring countries.