

# Efficient solutions - thruster housing machining

**Date:** March 2023

**Client:** TechnipFMC

**Location:** Dry Dock, North East England

## Client challenge

Our team was commissioned by TechnipFMC - a global technology provider, during the final stages of a re-fit on one of their support and construction vessels. Our task was to provide a machining solution for both port and starboard aft thrusters. Upon inspection, it was discovered that the bores in the thruster mechanism had experienced operational wear and was out of tolerance, necessitating our intervention to machine out the bores. This enabled our client to install replacement sleeves, and our team carried out the final machining as per the specification.

## What we did

Our team of expert machinists carefully assessed the condition of the thruster bores before devising a comprehensive solution to restore their functionality. Leveraging our cutting-edge technology, we employed our 150mm line boring, and 3m flange facing machines, to meticulously machine both the lower bores and upper faces of each thruster housing to the exact specifications and tolerance of 0.05mm. This precise and intricate machining work allowed us to successfully repair the damaged thrusters and ensure they functioned optimally, meeting the highest standards of quality and reliability.

## Results

Thanks to our expert machining work and subsequent re-fit, the thruster housing will be able to operate for an additional 20+ years, without the need for cutting out the entire structure from the ship's hull and fabricating replacement housings. This successful outcome not only saved our client significant time and money, but also ensured that the vessel could continue to operate with optimal efficiency and safety. Our team's commitment to precision and excellence allowed us to deliver a long-lasting solution that exceeded our client's expectations and cemented our reputation as a trusted and reliable partner for machining services.



Minimised downtime



Accurate machining



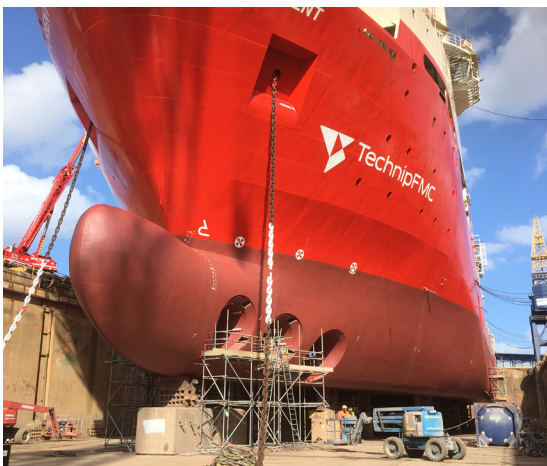
20+ years extended asset life



Savings of time and money



Reassembled port side thruster, post machining.



TechnipFMC's Deep Orient in dry dock



TechnipFMC's Deep Orient in dry dock

