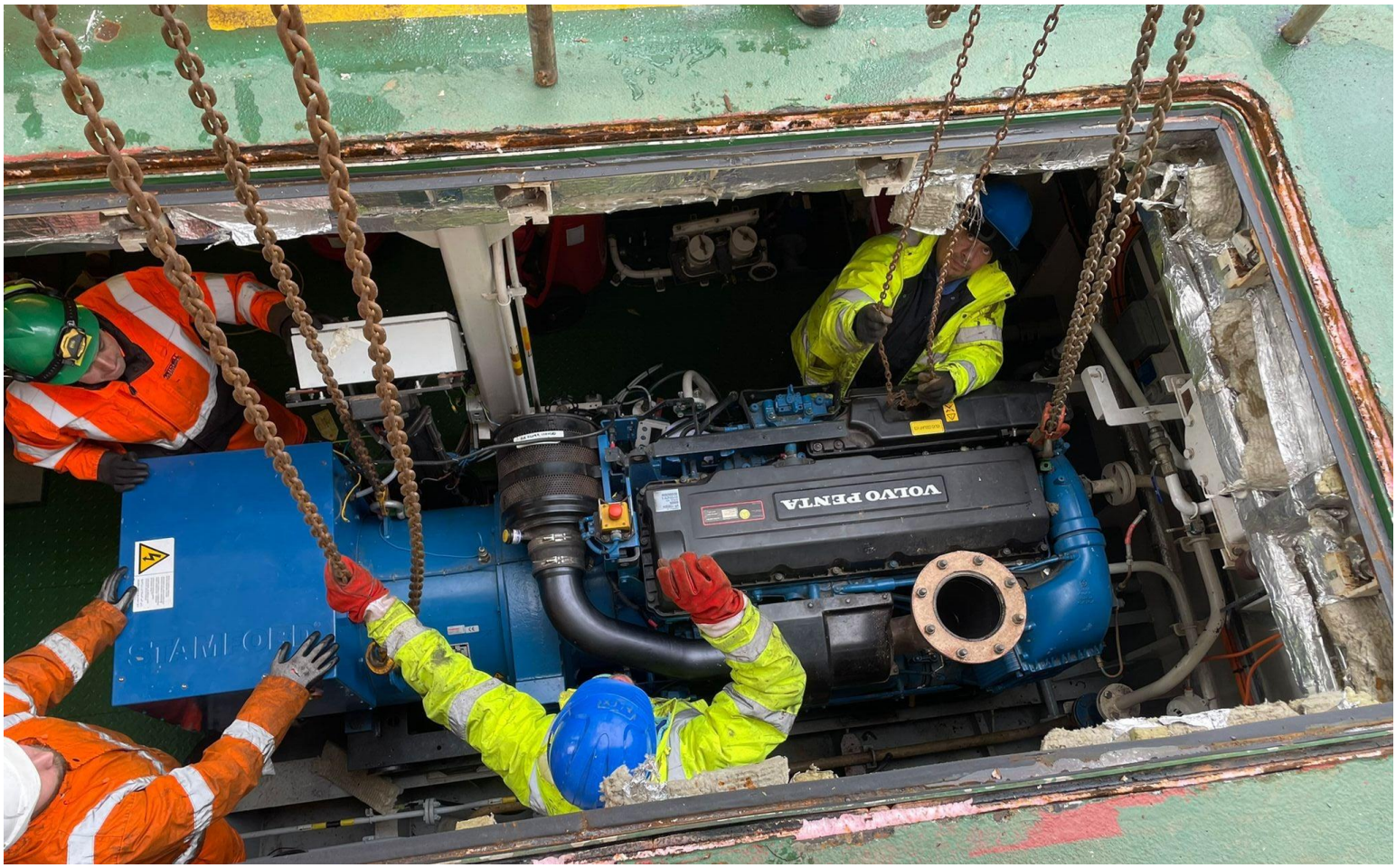
MITCHELL POWERSYSTEMS

# Case Study – Overhaul Volvo Penta Marine Generator

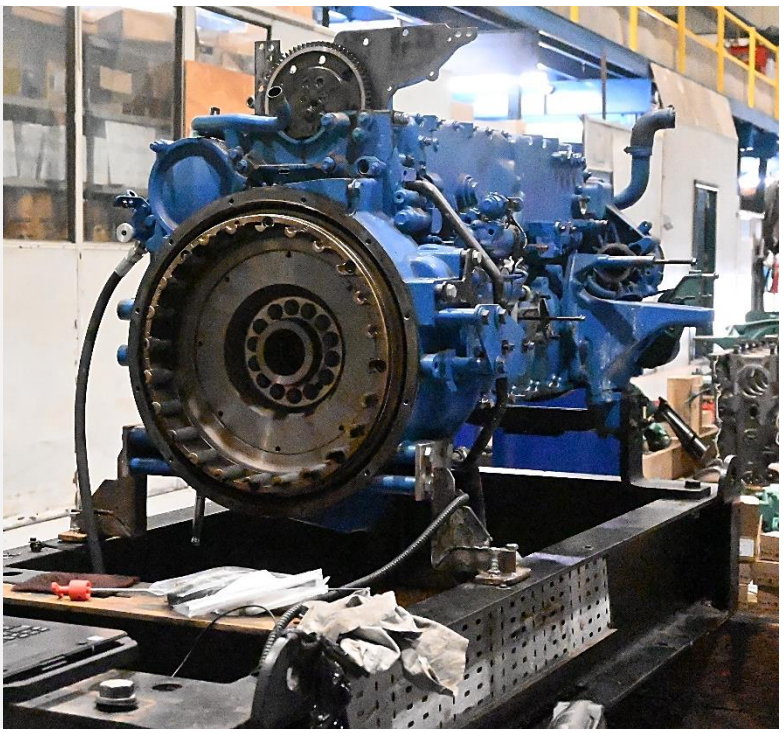



## Overhaul of Volvo Penta D13 Marine Genset

This Volvo Penta D13 B-E Marine Genset that powers a critical life-line RORO ferry was removed from the vessel by our Service Engineers for a scheduled 16,000-hour overhaul, carried out at our Glasgow Service Centre.

Thanks to continuous training in the latest Volvo Penta technology and repair methods, as well as the use of exclusively Genuine Volvo Penta Parts, the engine was completely overhauled in accordance with OEM specifications by our factory trained Workshop Technicians.

The generator was finally fully load tested, witnessed by the customer, then reinstalled back into the vessel.



## Engine disassembly and inspection

The engine overhaul process included the complete disassembly of the engine part-by-part into subcomponents to clean, qualify and test.

Each component was screened and checked against the manufacturer's specifications for the possibility of reuse to minimise cost for the customer.

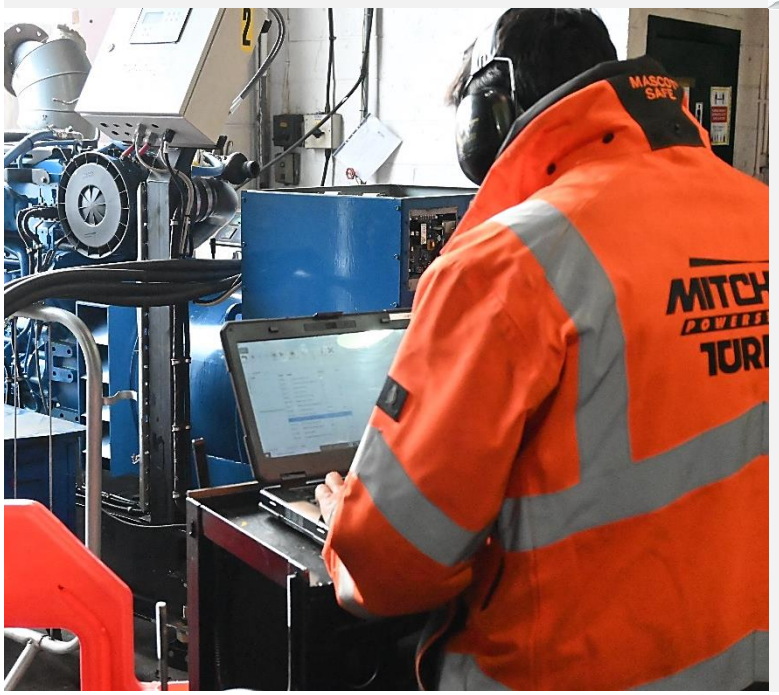
Worn and damaged parts were segregated for customer inspection, if required.

## Engine reassembly

The engine reassembly processes included using rebuilt parts and components and new wear parts (gaskets, seals, bolts, screws, etc.)

Our in-process inspection and tests carried out complied with Volvo Penta guidance and overhaul specifications.

New components and parts needed were exclusively genuine Volvo Penta parts supplied from our in-house stock holding. Quality inside means a more reliable, dependable remanufactured engine.

## Load test and reinstallation

Following completion of the rebuild the engine was fully load tested for an extended 8-hour period in load stages.

The load test was witnessed by the customer and the test results signed off.

Following final inspection and test the engine was prepared for transport back to the vessel where it was reinstalled, systems connected to the vessel and tested again insitu to confirm it was fully operational and ready for return to service.