



Case Study: Marine Gas Oil Conversion



Case Study Information

Customer	Ferry Operator
Application	Marine gas oil conversion
Location	UK

Key Challenges

1. Ability to handle the lower viscosity of marine gas oil
2. Tight customer deadline to meet docking programme

Equipment Supplied:

1 x Azcue Vertical Inline Screw Pump

Fluid	Marine Gas Oil (MGO)
Installation	Vertical
Flow	40 m ³ /hr
Discharge Head	5 bar
11kW Motor 690V 3 Phase 60Hz IP55	

Enquiry:

- ✓ A UK ferry operator undergoing a marine gas oil conversion contacted us with a requirement for a marine gas oil pump with Lloyds approval. Their previous marine fuel pump was no longer compatible due to the lower viscosity of MGO compared to heavy fuel oil (HFO). They needed this pump delivered within 3-4 weeks to meet the vessel's dry docking programme. This was a very tight deadline as normally pumps like this are supplied on a 4-6 week lead time.

Vessels are increasingly undergoing conversions from HFO to fluids such as MGO due to the legal requirement to comply with emission targets set in the Sulphur Emission Control Area (SECA). The Low Sulphur Directive now requires ships to use fuel with a maximum of 0.1% sulphur content in Emission Control Areas. New marine fuel pumps are usually required for compatibility with the change in fuel now used on board.

Solution:

- ✓ We specified a cast iron, vertical inline screw pump; a pump design ideal for handling the lower viscosity and lubricating properties of marine gas oil. We choose to supply screw pumps over gear pumps, which are also popular for the transfer of fuels, due to their better mechanical efficiency, smaller footprint and smoother, quieter pumping.

The pump also came complete with suction and discharge manometers to satisfy class requirements. The pump was delivered complete with a pressure relief valve, set as per the customer's request, enabling the pump to avoid damage should it experience higher than expected pressures.

Thanks to the fast track production programme that we offer, we were able to supply the screw pump, complete with the Lloyds marine certification in 3.5 weeks, enabling the customer to meet the vessel's dry docking programme and avoid any demurrage. Due to our quick response in supplying the marine gas oil pump, the customer also requested us to supply an accompanying flow meter and DN80 strainer for their new onboard fuel system.