Case Study: Seawater A/C Cooling for Offshore Vessel

azcue pumps

ENQUIRY

Castle Pumps Ltd received an enquiry from one of our regular maritime logistics customers who have around 90 vessels including offshore supply vessels, cargo and oil tanker ships. Many of their vessels have Azcue pumps installed onboard, and so we have been working with them for years supplying pumps and spares. This particular enquiry was for two seawater cooling pumps for the onboard air conditioning system of one of their anchor handling tug supply vessels. These seawater pumps were to replace the existing models that had been installed for many years and now needed replacing.

KEY CHALLENGES

1. Able to handle seawater without corroding over time

2. Matches the existing dimensions and performance requirements

EQUIPMENT SUPPLIED

2 x Azcue LN Close Coupled Vertical Inline Pump

Model	LN-150-125
Installation	Vertical
Fluid	Seawater
Flow	85m3/hr
Pressure	30m
Pump Casing	Bronze
Impeller	Bronze
Shaft	Stainless Steel
Seal	Mechanical
Voltage	400v

SOLUTION

As this enquiry was to replace pumps in an existing air conditioning system the first point to consider is that the new pumps will match the duty and installation requirements of the existing models. Luckily, in this instance the customer was able to provide the full details of the required vertical inline pumps that we had originally supplied. This allowed us to quickly source exact replacement models that their engineer would be able to fit with ease.

Due to the corrosive nature of the salt content in seawater, the Azcue LN vertical inline centrifugal pumps were specified with a bronze casing and impeller with a stainless steel shaft. Bronze is a cost effective alternative to stainless, available at quicker lead times, but still suitable for long life use with seawater. Azcue pumps are marine type approved and have been installed in over 10,000 vessel builds, making them a trusted solution in the marine market.

CASTLE PUMPS LTD