



Shipping - Case Study



Case Study Information

Customer	Shipping Company
Location	United Kingdom

Equipment Supplied:

2 x Centrifugal Vertical Immersion Pumps w/ Vortex Impellers - Azcue VRX Range

Application	Sea Water Sanitation
Liquid	Sea Water
Flow	40 m ³ /h
Total Head	12m
Casing	Bronze
Impeller	Bronze
Shaft	Stainless Steel
S/Discharge Ø	DN100
Power	8.6 kW
Voltage	440v-III
Frequency	60Hz
RPM	1750

Enquiry:

- ✓ A UK based marine shipping company contacted us needing to upgrade their sea water sanitation system. Their current system, used to empty a sump where the sea water and waste solids collected, was over 15 years old and was becoming unreliable. The sea water contained soft solids and they needed a more reliable system to avoid any more problems for their engineers on board ship.

Solution:

- ✓ Castle Pumps have a wealth of experience with marine applications and we were confident that we could offer a more reliable system. We wanted to ascertain all the facts to ensure we selected the most suitable pumps possible; it was important for us to know the sump depth and the maximum size of the solids.
- ✓ To make the system as reliable as possible, we advised using two pumps in a duty/standby operation to ensure that there was a backup pump in case of any failures. We selected vertical immersion pumps with vortex non-clogging impellers to cope with the soft solids, the pump casings and impellers were in bronze to avoid corrosion in the sea water.
- ✓ These vertically immersed centrifugal pumps can be supplied with various column lengths to fit sumps of any depth, the pump head is totally immersed in the fluid ensuring that the pump is always primed and there is no risk of cavitation. Vertical immersion pumps also have the added benefit of the motor being situated above the fluid, which avoids any possible overheating of the motor that arises with the use of fully submersible pumps.