

Civil Engineering - Case Study





Case Study Information

| Customer | Civil Engineering Company |
|----------|---------------------------|
| Location | UK |

Equipment Supplied:

Azcue Vertical Inline Monobloc Centrifugal Pump; Complete With Non Clogging Impeller & Motor

| Model | LN-150-200 |
|--------------|----------------------------------|
| Installation | Vertical |
| Fluid | Fresh Water |
| Flow Rate | 432 m3/hr |
| Pressure | 6m |
| Pump Casing | Bronze |
| Impeller | Bronze |
| Shaft | Stainless Steel |
| Seal | Mechanical |
| Voltage | 400v |
| Motor | 11 Kw running at 1450 RPM 4 Pole |

Enquiry:

✓ Castle pumps received an enquiry from a new customer in the UK who needed to transfer fresh water within an industrial process. The pump required a large flow rate of 432m3/hr and the water needed to be transferred free from contaminants.

Solution:

✓ Due to the fluid being fresh water, we selected a fully cast bronze pump - a material which can handle this type of fluid without risk of being corroded. The customer had initially looked at some Epoxy coated cast iron pumps but the Epoxy would eventually wear, which would expose the cast iron and result in corrosion and contamination of the fluid.

We coupled the pump to an electric 4 pole motor running at 1450 RPM, increasing the lifespan of not only the motor but also the wearing components within the pump. It is important to note that the initial costs for purchasing a pump make up a tiny percentage of the overall running costs. So by fitting a larger motor and running it slower, their overall costs will drop dramatically over the lifespan of the pump.