Case Study

Jaguar Inverter Drive

Victorian Pumping Station Solution

Papplewick Pumping Station
Application: The application was to provide an improved ability to control the exhaust fan and make the processes much more energy efficient

Equipment: Jaguar VXM AC Variable Speed Drive

IMO Precision Controls has donated necessary engineering products to Papplewick Pumping Station, which over the years has seen an extensive restoration programme completed to keep the site moving as Britain’s finest example of Victorian Water Works.

Based on the outskirts of Nottingham, Papplewick Pumping station was built between 1882 – 1884 to supplement the water supply for the growing Midlands city. Today, the engine house is home to the original twin beam engines, thought to be the last built by the famous firm of James Watt & Co.

The upkeep and day to day maintenance of the buildings are being undertaken by the Papplewick Pumping Station Preservation Group, who first contacted IMO to seek advice on the maintenance of a Jaguar VX Drive which had been in service for over 12 years.

IMO immediately took the decision to replace the Drive and donate a Jaguar VXM Inverter, to provide an improved ability to control the exhaust fan, and make the processes much more energy efficient.

Says Mr Simons, member of the Papplewick Pumping Station Preservation Group: “We were really impressed with the response from IMO, who have not only replaced the drive but also much improved the efficiency of the whole system. And the installation has all been completed in time for our new visitor season, when we conduct the majority of our steaming days, which is great.”

The new Jaguar VXM Drive is now being used to control a 40Hp Exhaust Fan, which services the 6 Galloway Boilers used to generate the pressure needed to power the Beam engines. The speed of the fan is varied by the VSD to control the exhaust pressure required for each of the boilers and managing the exhaust to the chimney some 100yds away from the plant room.

Rob Robbins, IMO Drives Business Manager added: “The Papplewick Pumping Station is steeped with history, for its Victorian engineering and architectural design, itself full of aesthetic charm, and it is a true testament of its time. Now, with the addition of IMO’s VXM Inverter, the fusion of old and modern technology is complete to keep this fine water works moving, more energy efficiently for many more years to come, whilst providing visitors with an insight to our engineering heritage.”