

INDUSTRIAL MOTORS & GEARMOTORS

Case study



Associated British Ports Immingham Dock Impounding Pumps

ABP were interested in developing a case to show how energy could be saved by applying Variable Speed Drives (VSD) to the three Impounding Pumps at Immingham Dock.

The motors under consideration drive fixed speed pumps which fill the lock at the dock entry to maintain a water level. The motors were installed many years ago and during the study to evaluate the fitment of VSD's one of the pump motors suffered a catastrophic failure thereby accelerating the need to find a speedy solution.

Southern & Redfern Industrial Solutions developed a replacement solution which was accepted and ordered by ABP – the scope being to remove all old 3.3kV switchgear and supply and install a new 690V motor rated at 630kW coupled to a 12-pulse 1MW VSD fed from an 11,000/690V transformer.

The new motors weigh almost 10 Tonnes – Southern & Redfern Industrial Solutions also developed the necessary mechanical interface between the new motor and existing pump.

