Huge savings after LabTecta® installation

A wastewater plant in Wales was reporting persistent problems with the failure of the seals on its ditch rotor.

The bearing housings were partially submerged in wastewater, and contaminants were entering through the seals and causing premature bearing failure. In addition, complete bearing failure frequently resulted in the rotor coming free from the support assemblies, and sinking to the bottom of the aeration ditch. The retrieval and repair of the rotor and the replacement of the bearings was both very costly and hugely time-consuming. At one point the seals were failing every month and on average lasted just 4 months, with costs of £6,000 per failure, rising to £12,000 if the rotor snapped. After the reactive costs for the year reached a total of £39,000 AESSEAL® was approached.

The solution put forward by AESSEAL® was the installation of the company's LabTecta®66FS bearing protector. This incorporates recognised lip seal technology into AESSEAL's advanced labyrinth design, preventing both solids and moisture from entering the bearing chamber or damaging the integrated lip seal. The assembly allows the lip seal to contact an integral sleeve, eliminating the problem of shaft wear.

Since the installation in March 2023, which was carried out with minimal modifications, the new system has been working without a problem over 8 months later. The condition of the lubricants is checked regularly and there is no sign of water ingress or contaminants within the oil. The result is a major increase in reliability, using a purpose-built product, and involving a simple and efficient chain of supply. The client has already expressed a wish work with AESSEAL® again on this type of equipment, essentially creating a rolling program for the supply of the new seals.

'Major increase in reliability'

Industry:	Water & Waste
Product:	LabTecta®66FS
Application:	Ditch rotor
MTBF Increase:	>100% (and counting)
Savings:	£39,000 per year
Reference N.O:	TD3093618

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