

GEARBOX UPGRADE

Throughout the life of a gearbox unit operating requirements and conditions can change significantly. Allen Gears Services is skilled in assessing the suitability of a unit within a current project and suggesting improvements and upgrades to offer increased reliability, ease of maintenance or increased power through a plant.

Whether there is an existing unit in a package which requires a change in duty, or a unit which has continual failures, Allen Gears will visit the site, technically assess the unit and fit new components as required; if necessary to fit into existing gear cases or space envelopes.

Allen Gears Services can also provide upgrades for a change in operation of a unit. For example, being taken out of an old generator drive and utilised in a test cell environment - we can assess the suitability of the unit and evaluate the best solution to maximise efficiency and performance.

unrivalled benefits



recent experience case study

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Veolia Water

Inverkip was Scotland's first oil-fired power station, with construction beginning in 1970. Consisting of two generating units, the plant was designed to produce 1900 mega-watts of electricity but, due to the cost of oil, it has rarely worked at full capacity, except during the 1984 miner's strike. It stopped generating electricity in the late 1980s. Within Inverkip power station the boiler feed pump package was therefore no longer being utilised.

Veolia Water is specialist in solution provision within the water and waste water industries.

The challenge

Veolia Water had a contract to utilise the electric motor and gearbox from the pump at Inverkip power station, and install it into a new test bed in a factory in Scotland – this was to be utilised to test various types of pump.

In order to be installed into the new environment, the gearbox required a full overhaul and inspection. The gearbox OEM wasn't interested.

The solution

The unit was returned to Allen Gears factory where we stripped the unit and carried out a full inspection. A technical report was then produced to pass back to the customer and the gearbox was fully refurbished and then re-assembled.

We responded quickly and carried out the inspection in good time to ensure that the asset could be put back to work in its new environment within weeks.

Technical Data

- Requirement:** Change of application requiring full inspection and overhaul
- Plant:** Weir Pumps Ltd manufacturing plant
- Customer:** Veolia Water
- Application:** Test bed
- Application Type:** Electric motor driven boiler feed pump
- Gearbox Type:** Parallel shaft gearbox
- Gearbox Manufacturer:** David Brown
- Power:** 1150 HP
- Speeds:** Input: 4,150 rpm, Output: 2,650 rpm



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