

Southdown Power Station
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Rotational Alignment Technologies

Since 2003 Rotational Alignment Technologies (RAT) has been the primary and the preferred service provider for all alignment activities at the Mighty River Power Southdown Cogeneration site.

RAT has provided advisory service and the technical support to accomplish complex alignment procedures demanded for the Generation Packages and ancillary equipment.

The services undertaken by RAT have been comprehensive and wide ranging, primarily responsible for executing and assuring the alignment of the Generation Package drive train assemblies to strict and complex procedures demanded of the equipment, comprising of GE LM6000 aero derivative Gas Turbine, Lufkin 70,000 HP reduction gearbox and 50MW Brush generator.

RAT has been an integral team member of many major projects at Southdown, including major plant installation and "Ground Up" builds of Generation Package drive trains;

Services and projects Rotational Alignment Technologies has been involved in include;

- Gas Turbine removals and installations
- Retrofitting of complete Brush 93Tonne 45MW Brush Generator and multiple rotor removal and replacements
- Steam Turbine ABB Stall VAX 37.5MW alignment, comprising of HP Turbine, Reduction Gearbox, Generator and LP Turbine
- Annual Shuts
- Regular alignments of Cooling Tower Fan Units and process pumps
- Provided consultancy services for all alignment projects undertaken on site.

The long term experience and knowledge we have developed by utilising Rotational Alignment Technologies for these services has consistently provided commercial benefits which have been invaluable in terms of scheduling, length of down time, quality, ease of communication and cost savings compared to alternative service providers.

The workmanship and quality of service of RAT representatives has always been of the highest quality and they are diligent and reliable. Importantly their approach to customer relations is exceptional and they will do their utmost to accommodate urgent response. They also communicate and work extremely well with management, staff and other contractors.

I have absolutely no hesitation in recommending Rotational Alignment Technologies for all matters involving alignment.

Yours faithfully,

Chris Tyas
Maintenance Team Leader
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