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Press Release

Liquid Tungsten helps to power up New South Wales

Adding 3% IFWS-2 Liquid Tungsten 3100 to crucial conveyor gearboxes has resulted in temperature reductions of more than 20%

The Liquid Tungsten technology distributed by Techenomics has demonstrated its ability to keep a large power station operating effectively and thereby continuing to play a key role in powering up New South Wales (NSW).

Liquid Tungsten continues to show its effectiveness in improving the function of lubricants in a wide range of mechanical applications.

The nanotechnology has been proved to reduce friction and thereby lower temperatures, reduce mechanical wear, increase the life of lubricants, lower fuel consumption, limit maintenance and cut emissions in the operating components of engines and other mechanical equipment.

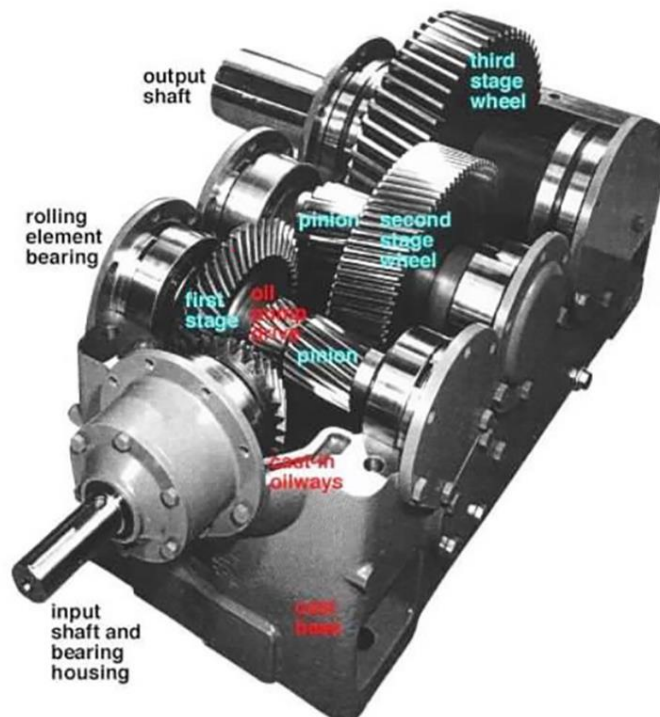
These properties have been demonstrated by Techenomics countless times in laboratory tests and operating trials and Liquid Tungsten has also now shown its impressive qualities at a 2,640 MW power station in NSW.

The coal-fired power station produces around 35% of the electricity requirements in Australia's most populous state with the coal fed by conveyor from the rail facility to the plant.

Two of the David Brown gearboxes driving the conveyor had been generating excessive temperatures of up to 93 degrees Centigrade during the summer months.



CHRIS ADSETT
CEO OF TECHENOMICS

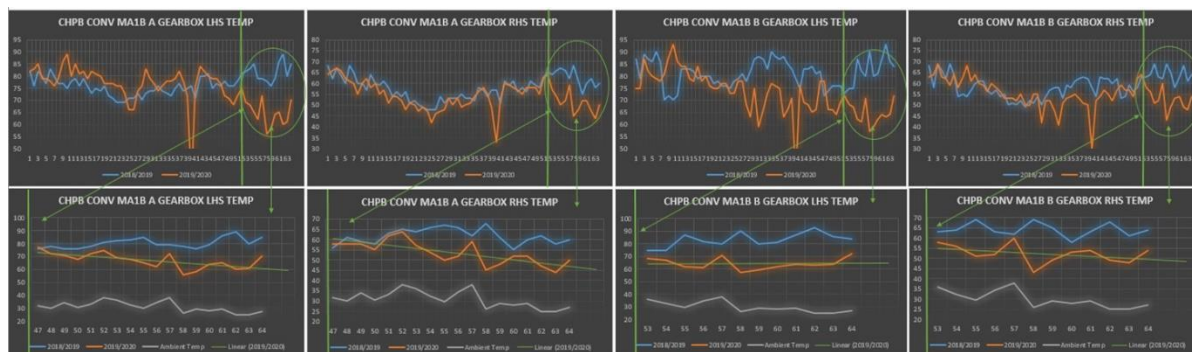


With general running temperatures of between 62 and 65°C, this was causing concern for the operators and highlighting potential issues.

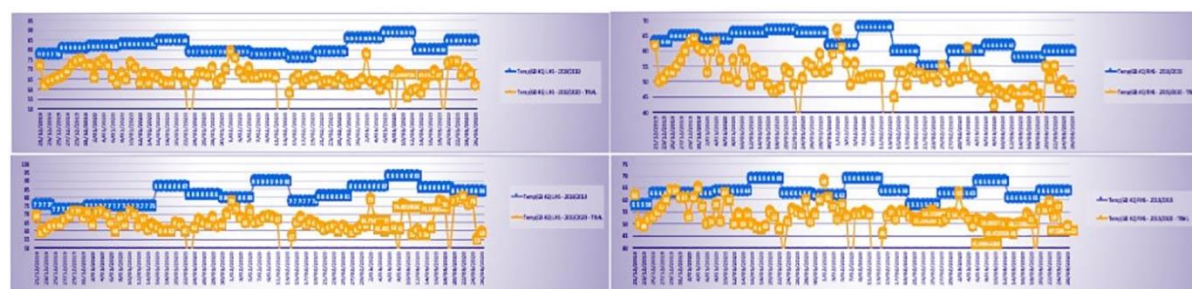
Step in Techenomics for a trial of Liquid Tungsten aimed at reducing internal friction in the gearboxes which each hold a total of 205 litres of 320 gear oil.

A dose rate of 3% of IFWS-2 Liquid Tungsten 3100 was agreed for the trial and as these are the primary gearboxes feeding the plant, it was essential that the trial run smoothly without any downtime.

Before the addition of Liquid Tungsten the average temperature on the left hand side was 81.74°C and on the right hand side was 82.48°C. After adding 3% Liquid Tungsten average on the left was 64.97°C and in the right was 64.59°C, representing an average reduction of 21% on the left and 22% on the right.



Reducing friction has also reduced the power draw of the gearboxes and conveyor, which in most instances would provide further benefits for the equipment operator, however in this instance as the operator is already a power producer, a 5% reduction in power consumption is not regarded as important as the reliability of the gearboxes.



Techenomics CEO Chris Adsett says the temperature reductions provided by the Liquid Tungsten have enabled the customer to extend the gearbox life.

"Due to the gearboxes being the main drive belts for the power plant, the operators continue to use Liquid Tungsten for the standard one-year oil changeout frequency.

"Whilst Liquid Tungsten can extend the lubricant life, they prefer to simply change the oil out and refill it with the 320-gear oil and add another 3% Liquid Tungsten.

"Without these gearboxes the power plant would not be able to continue generating power for NSW," he added.



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