

21 February 2020

Press Release

## **Techenomic trials demonstrate IFWS2 reduces heat in gearboxes**

### ***The gearboxes at a power station and a flour mill are now running more efficiently***

Inorganic Fullerene-like Tungsten Disulphide (IFWS2) particles can be used in any mechanical situation where lubrication is required especially in gearboxes.

Gearboxes are key components of many fixed plants large and small, lubrication is vital to ensure they operate properly.

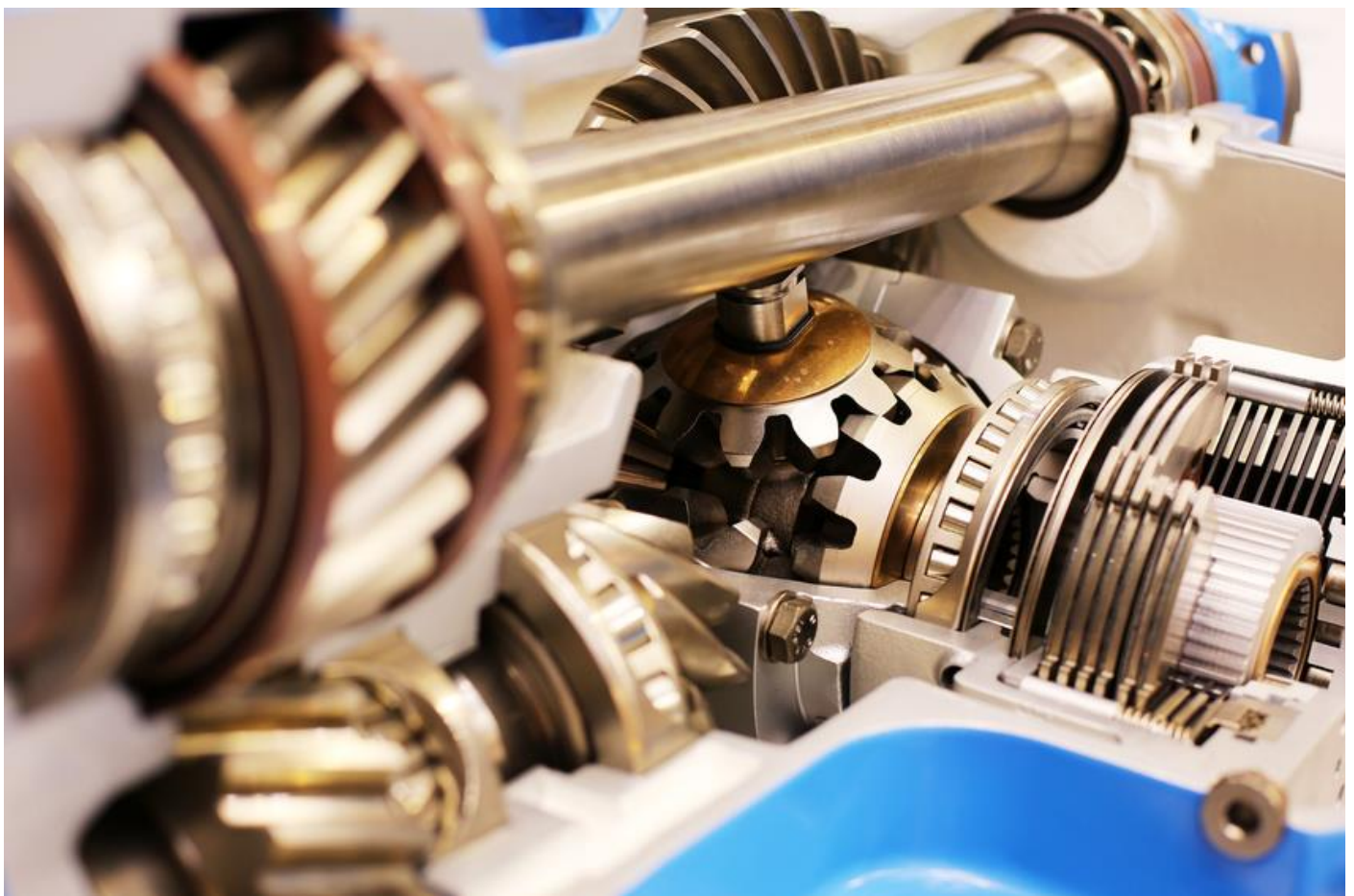
Excessive heat in gearboxes is caused by friction is a major issue which results in poor performance of the gearing premature tripping and even failure. Heat builds up and reduces lubricant life.

Techenomics CEO Chris Adsett says the effect of adding IFWS2 to lubricants to reduce friction and consequently heat in gearboxes has been demonstrated in trials at a power station and a flour mill, both in Australia.

At the coal-fired power station Techenomics is working with operators to reduce temperatures on two of their main David Brown gearboxes, which are key components of the conveyer system bringing coal from the train load-out or stockpile to the plant – any issues with these primary assets would result in considerably lower electricity generation.



**CHRISTOPHER HARRY ADSETT**  
CEO OF TECHENOMICS





By using the NIS IFWS2 product WS2 IC-3100, operating temperatures have been reduced by up to 20% thus reducing metal wear, improving gear and oil life and eliminating tripping.

Similarly at the flour mill, use of WS2 IC-3100 in the gearbox has reduced operating temperatures. The gearbox is out in the sun and is a key part of the process of bringing wheat into the plant so that flour can be produced.

The effectiveness of this asset was being impacted by temperature and before adding the IFWS2 product, it was averaging 74 degrees during operation. Within three month of IFWS2 use, this had been reduced to 54 degrees, a 27% reduction.

The WS2 IC-3100 also reduced motor amps by 6%. It had been drawing 30.5 amps and after three months of IFWS2 use it was down to 28.8 amps.



## SOLVE YOUR LUBRICATION PROBLEMS

We will test your oil with an appropriate WS2 additive to provide you with the relevant information to reduce your fuel consumption and lower your engine wear! Click here for more...

Chris Adsett says it is highly evident that IFWS2 IC-3100 is not only capable of reducing friction in a short period of time but also being able to sustain that friction reduction over long periods.

“The gearbox from the flour mill has been running IFWS2 for well over 14 months now with reduced temperatures in the gearbox and savings in amp reductions.”

Techenomics is distributing the IFWS2 products and exclusively to the mining industry world wide because they enhance the qualities of lubricants, ensuring the lubricant last longer and gearbox operation is more efficient, thereby adding value to the company’s total fluid management services.

For more information about Techenomics International visit [www.techenomics.net/](http://www.techenomics.net/) or contact Chris Adsett, [c.adsett@techenomics.com](mailto:c.adsett@techenomics.com) in Indonesia Freddy, [freddy@techenomics.com](mailto:freddy@techenomics.com); in South East Asia Siti, [siti@techenomics.com](mailto:siti@techenomics.com), in Mongolia Tumeer, [tumeer@techenomics.com](mailto:tumeer@techenomics.com), in Australia Jason Davis , [jason.davis@techenomics.com](mailto:jason.davis@techenomics.com), or in Africa Chris Adsett, [c.adsett@techenomics.com](mailto:c.adsett@techenomics.com).