



TECHENOMICS  
INTERNATIONAL

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Press Release

## Techenomics makes sure diesel fuel is working effectively and keeping the air cleaner

### ***Testing services for diesel powered engines and equipment***

Fluid management specialist Techenomics recognises that combatting the deleterious effects of sulphur in diesel fuel is an important aspect of any maintenance program for diesel powered engines and equipment.

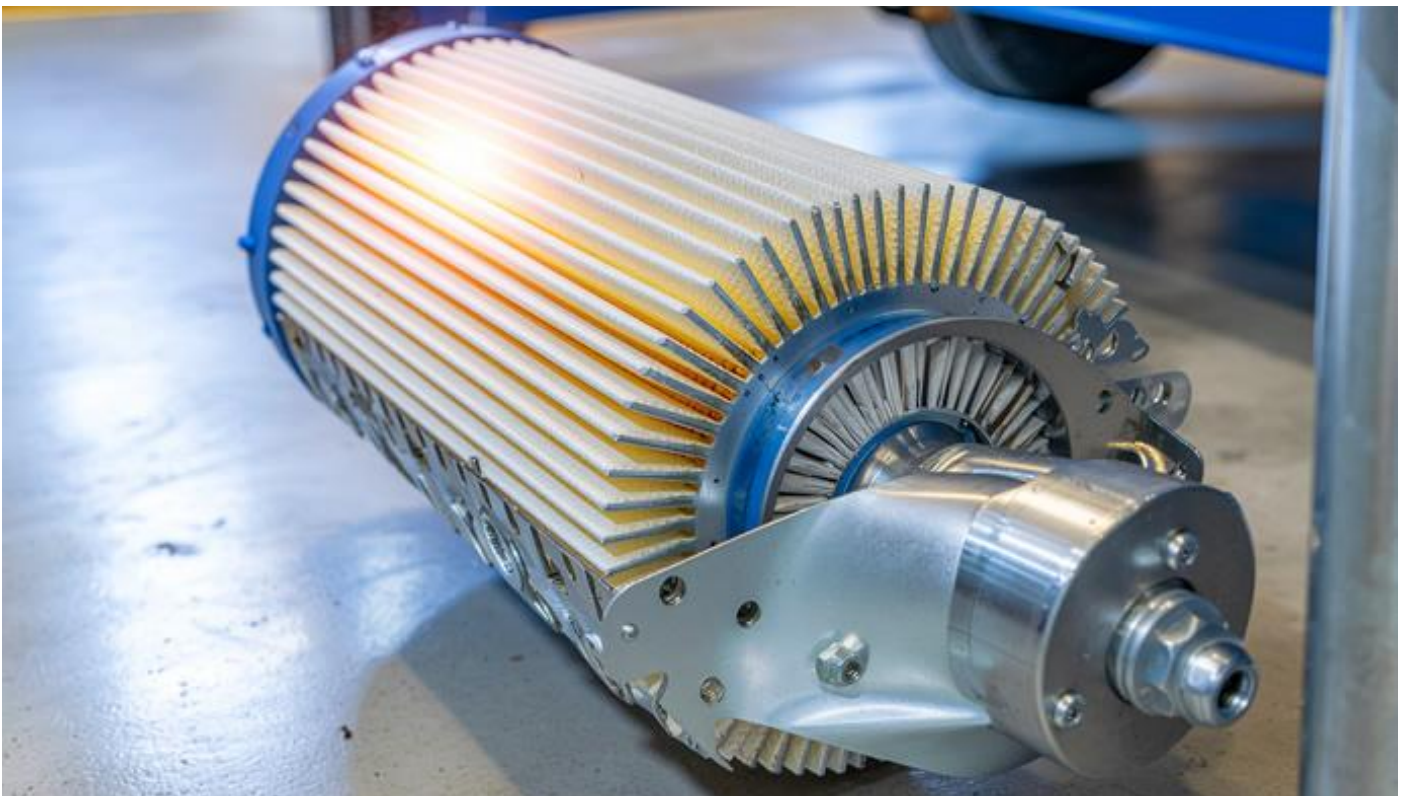
In this way, the company helps ensure diesel fuel complies with government emissions regulations and sulphur content is limited. Techenomics has operations in Australia, Indonesia and Mongolia which offer testing services for diesel fuel, including Ultra Low Sulphur Diesel (ULSD).



**CHRIS ADSETT**  
CEO OF TECHENOMICS

Although ULSD has been refined so that its sulphur content is 15 parts per million or less, it is still important that it is tested regularly.

Sulphur is a natural part of the crude oil from which diesel fuel is derived and is one of the key causes of particulates or soot in diesel.



Soot is the primary culprit of the noxious black exhaust fumes associated with diesel fuel use and is among the prime contributors to air pollution.

The move toward ULSD globally has been aimed at lowering diesel engines' harmful exhaust emissions and improving air quality.

ULSD is used in concert with the newer generation of diesel engines and has enabled diesel vehicles to meet the same strict emission standards as gasoline-powered vehicles.

Diesel engines now utilise an emissions-reducing device called a particulate filter in a process similar to a self-cleaning oven's cycle - a filter traps the tiny particles of soot in the exhaust fumes. The filter uses a sensor that measures back pressure, or the force required to push the exhaust gases out of the engine and through to the tailpipes.

As the soot particles in the particulate filter accumulate, the back pressure in the exhaust system increases. When the pressure builds to a certain point, the sensor tells the engine management computer to inject more fuel into the engine. This causes heat to build up in the front of the filter, which burns up the accumulated soot particles. The entire cycle occurs within a few minutes and is not detectable by the vehicle's driver.

It is important for operators of equipment using diesel fuel to regularly and correctly check sulphur in diesel fuel. Techenomics' CEO Chris Adsett said the company used ASTM D4294 as its standard method of testing in conjunction with an X-Ray Fluorescence Sulphur Tester that can check sulphur at 7ppm until 5%. He said it was a 10 standard test method for sulphur in petroleum and petroleum products by Energy Dispersive X-ray Fluorescence Spectrometry.

"Using these tests regularly ensures the diesel fuel is operating to its maximum benefit in engines and mechanical equipment and, very importantly, not creating harmful emissions," he added.

"It is another example of how Techenomics' services and product are designed to help operators get more out of their lubricants to minimise costly downtime and boost productivity."

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