

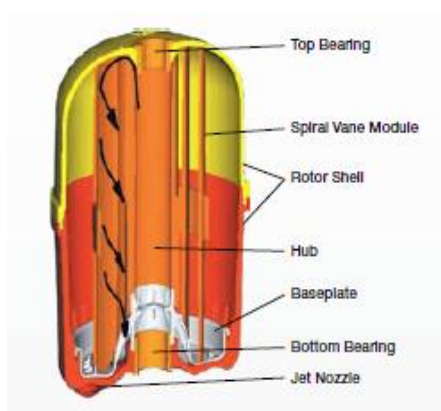


Centriguard™ Centrifuge For Maximum Soot Removal

Increased Performance, Decreased Maintenance

Lube oil is an essential element in the life of your engine. Among other things, lube oil lubricates, cools, cleans, protects, and seals the engine components. Over time, contamination is introduced into the lube system due to the combustion process, engine wear, and spent additives. With the addition of global clean air standards, more contaminant tends to enter the combustion chamber making lube filtration even more important than ever.

To meet today's increasingly stringent environmental requirements, original equipment manufacturers (OEMs) are changing engine designs to reduce harmful exhaust emissions. Such design changes can result in an increase in contaminant levels of lube oil, particularly soot, which can cause valve bridge and fuel injection wear, filter plugging, bearing failures and sludge formation. At the same time, end users need to extend their oil drain intervals and reduce costly downtime. Cummins Filtration has created a solution to meet both of these critical needs; Centriguard Centrifuge filters.



In addition to selecting a Centriguard unit that is suitable for an engine, it is important to fully understand how to maximize the benefits that Centriguard offers. Correct selection can be made by referring to the product literature available from the Cummins Filtration website under Lube Filtration. Once a unit is selected and installed, the benefits can be realized in two distinct areas.

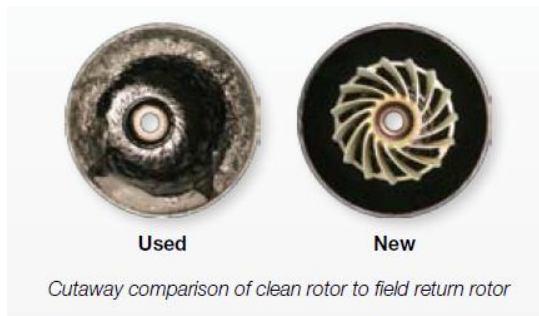
The first and most obvious benefit is wear reduction in the engine when using Centriguard. As the unit removes additional contamination over and above the conventional lube filter, the moving parts have less exposure to contamination and therefore less wear.

The other benefit of fitting Centriguard is that the life of the oil can be extended to help reduce operating costs. With less contamination in the oil, the service intervals can be extended.

It is important to establish a base line for oil service life for the engine that is to have the Centriguard fitted. The terminal life of the oil with the conventional oil filters should be established by oil sampling and noting when the oil has reached its maximum limit for soot. This is the base line service interval (eg 25k kms).

After the Centriguard has been installed correctly, with new oil and a conventional oil filter, the oil sampling should continue to establish the new baseline for oil life (the new point at which the oil reaches its maximum soot limit). This will be the new oil service interval. When this information has been gathered, the operator will need to observe the new kilometer (or hourly) interval to establish when the rotor in the Centrifuge will require changing.

To go a step further, the operator can change the rotor at the halfway point of the service interval. This is a good practice because the unique design of the Centriguard makes its capturing capacity most efficient in the first half of its life, i.e. the rotor will be $\frac{3}{4}$ full halfway through the service interval.



This means that if the rotor has a capacity of 1000 grams of contaminant then 750 grams will be captured at the halfway point. If the rotor is replaced halfway, then a total of 1500 grams will be captured during the full interval instead of 1000 grams that would have been captured by leaving the single rotor in for the service duration.

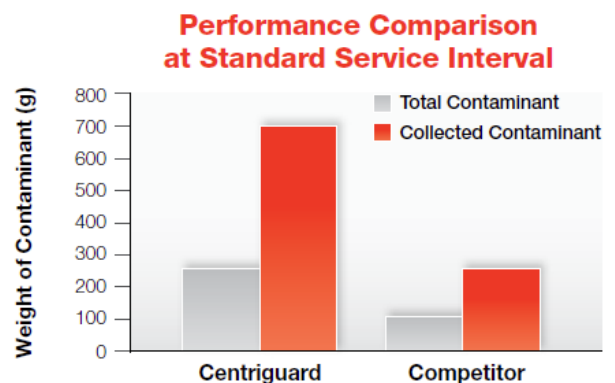


The engine is exposed to less particle wear as well as less soot being loaded in to the oil. This will further enable the oil to be used longer and continuing to monitor oil condition will indicate the extended service life of the oil.

Note: Care should be taken to follow engine manufacturers' recommendations on maximum oil soot levels.

The Benefits of Centrifuge

- Meets the specifications demanded by today's diesel engines worldwide
- Lower operating costs - Equipment can operate in extended service environments (ESI) with lower part-replacement and service costs
- Increased vehicle uptime - With its patented ConeStaC™ and SpiraTec™ technology, Centrifuge offers lower wear rates, resulting in lower oil consumption than conventional filters and decreased vehicle downtime through extended filter life
- Reduced environmental waste - The ConeStaC™ and SpiraTec™ system is composed of a plastic liner shell, plastic cones and plastic base plate, which make it completely disposable and incinerable. This means less waste in disposal and minimal environmental impact.



Suitable for a Broad Range of Applications

Cummins Filtration offers a wide variety of OEM "first fit" and aftermarket centrifuge systems for diesel engines, transmissions, and industrial applications worldwide, including 18 litre and above diesel engines, 450 hp and above and 335 KW and above. Retrofit capabilities also allow mounting the centrifuge system remotely from the engine, if required.

Learn more about Centrifuge via this informational video:

http://www.cumminsfiltration.com/html/en/products/lube/centriguard_bdvideo.html

**Nothing Guards
Like Fleetguard.**



For more information, visit
cumminsfiltration.com

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