Clean Fuel & Lubricant Solutions Knowledge Base

How to Use Water Absorbers

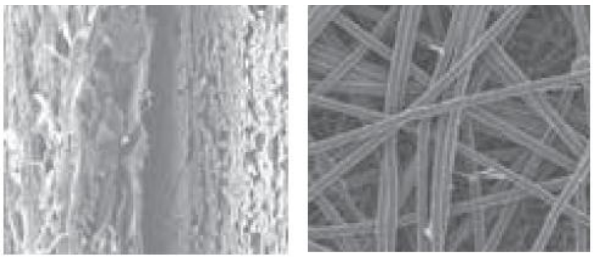
Adding Water Absorbers to a Bulk Filtration System

Free water is probably the single biggest cause of fuel system failure. Water absorbers are an effective way to meet OE requirements and prevent free water from being dispensed into your equipment. This will help reduce rust, corrosion, excessive wear and other damage.

How Water Absorbers Work

Medias at 100x under SEM

Absorbent **Particulate**



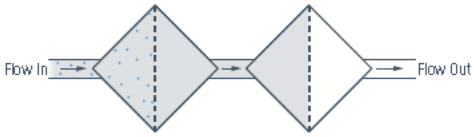
Particulate filters and water absorbers do two distinct jobs; the first removes hard particulate from fluids while the second removes free and emulsified water. Their medias are quite different, each designed to optimize the specific job at hand.

Particulate filters are made of synthetic fiber. The fibers' consistent size and shape allows the maximum amount of contaminant-catching surface area and specific pore size control. The result maximizes dirt catching efficiency and dirt holding capacity.

Water absorbers, on the other hand, use super-absorbent polymer technology with a high affinity for water absorption. This media quickly and effectively removes free water from petroleum-based fluids. Unlike coalescing media, absorbent media is not disabled by the surfactant in ULSD.

Installing Water Absorbers

The DBB0248 Water Absorber may be installed on its own or in combination with particulate filter(s). It fits all Clean Solutions heads and manifolds. It is also included in the X011449 Clean & Dry Diesel Filter Kit.



When plumbing absorbers together with particulate filters, they must be connected in **series**. The fluid should flow **first through the particulate filter** to clean it, and through the **absorber second** to remove free water.

The absorber is installed in the secondary position because the particulate filter is much better at catching and holding dirt. Dirt will not reach the absorber and therefore it will last much longer. In addition, this enables the differential pressure gauge on the absorber to work as a diagnostic tool alerting when there is a water problem in the tank so that appropriate measures may be taken. If the absorber were plumbed first, it would load with both dirt and water and this diagnostic ability would be lost.

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