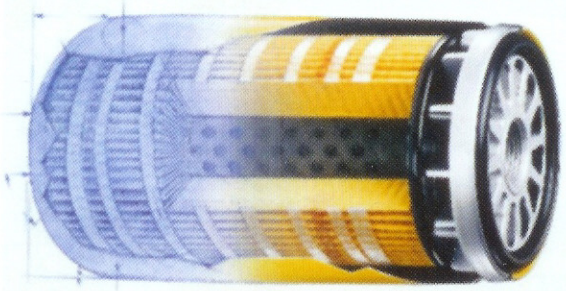
CAT® Power Systems

TECH TIPS

Filters: Engine's Life Warranty

Why use a High Efficiency Fuel Filter?



The most controllable contaminants are abrasive particulates, which can vary greatly in size, hardness and abrasion. Even particles that aren't visible can wear away at your fuel system and reduce performance. A close look at High Efficiency Fuel Filters shows why they're your best choice to meet today's fuel contamination challenges. These exclusive filters are engineered and built to remove more contaminants, so they provide maximum protection of injectors, pumps and other fuel system components. Make a feature-by-feature comparison of High Efficiency Fuel Filters with standard fuel filters. You'll soon see the higher value.

Yes, what you cannot see can still harm your engine

The size of a human hair is 80 microns. Standard filtration is 15 microns and 5-10 microns damages fuel systems. Should you then not use High Efficiency filtration (2 microns)?

Effective tips for High Efficiency Workshops

During storage and transfer of fuel

- Periodically drain and flush all fuel storage containers to remove any sediments.
- Maintain a regular schedule for draining machine fuel tanks: weekly for severely dusty conditions, every three months for normal conditions.
- Keep all fuel equipment clean.
- Maintain all hoses, gaskets and seals in your fuel storage and transfer equipment.
- Use line filters on all fuel transfer equipment.
- Never transfer fuel into open containers.
- Only purchase fuel from a reliable source, and demand periodic testing to ensure quality.
- Repair any fuel line leaks immediately.
- Keep fuel tank breathers open and functioning properly. Use an appropriate breather.
- Never operate a machine without the fuel cap.
- If a fuel cap does not seal properly, replace it immediately.

When changing filters

- Follow the recommended filter change schedule.
- Keep filters packed in their original box until they are installed.
- Never pre-fill a new filter — doing so allows some fuel to bypass the filter altogether.
- Maximise filtration protection by using High Efficiency Fuel Filters.

When performing engine service

- Clean debris from the engine compartment before removing filters and other fuel system components.
- On most engines use a high pressure wash to blast built-up grime off before "opening" the engine for repairs.
- Tightly cap or plug all openings during repairs, even if they are only needed for a few minutes.
- Clean reusable parts with solvents, using proper cleaning and drying methods.
- Keep new parts in their original package until needed.
- Never place components directly on the ground.
- Don't reuse seals, replace them.
- Perform routine inspection of fuel line connections from the tank to the fuel pump.

Keep it clean, and keep running at peak efficiency

Contaminants can be as abrasive as the materials used to machine parts in the manufacturing process, so it's important to remove as many contaminants as possible before the fuel reaches critical components. Fuel system contaminants are known to cause premature injector wear, reduce component life, reduce performance and cause sudden injector seizure. Abrasive contaminants of only 5-10 microns and larger can damage injectors by breaking down the fluid film between moving parts and eventually scratching injector plungers and barrels, causing metal-to-metal contact and injector seizure. As little as one spoonful of dirt in a tank of unfiltered fuel can ruin a fuel injector in less than eight hours.

Stop Contamination before it stops you.