

Cat® High Efficiency Fuel Filters



Cat High Efficiency Fuel Filters are specifically designed to protect today's precision fuel systems. More contaminants are removed, providing maximum performance and component life.

Maximum protection for fuel injectors

Higher pressures and closer tolerances make today's fuel injectors, pumps and components more susceptible than ever to wear and damage from contaminants. Cat High Efficiency Fuel Filters fight fuel contamination more effectively than standard fuel filters. The critical component is a super-fine filtration media that removes more than 98 percent of particles 2 microns and larger. By comparison, standard filters only capture particles 15 microns and larger.

- Maximum engine performance and fuel economy
- Reduced exposure to abrasives
- Reduced wear on injectors and pumps
- Fewer fuel system adjustments
- Easier starting
- Longer filter life

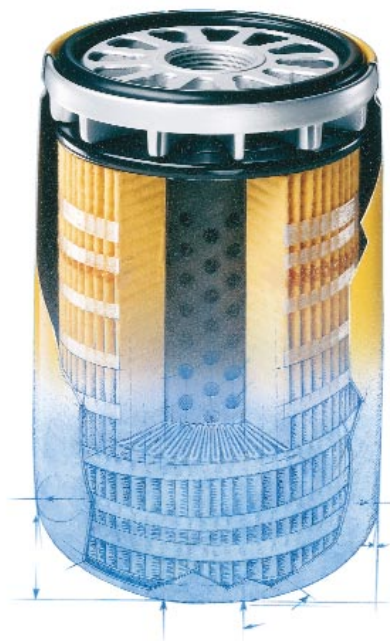


Cat High Efficiency Fuel Filters

Take a closer look at protection and performance

A close look at Cat 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 Cat High Efficiency Fuel Filters with fuel filters from other manufacturers. You'll soon see the higher value.



One-Piece Aluminum Base Plate

is reinforced to prevent ruptures during cold starts.

High Efficiency Cellulose/Synthetic Blend Media

removes more than 98% of particles 2 microns or larger.

Spiral Roving and Acrylic Beads

maintain pleat stability and spacing, prevent bunching, and maximize efficiency and capacity.

One-Piece Canister

provides strength and anti-rupture protection.

Self-Lubricating, Free-Rotating Seal

prevents bunching, eliminates leaks.

One-Piece Urethane End Caps

bond tightly with filter media for greater strength.

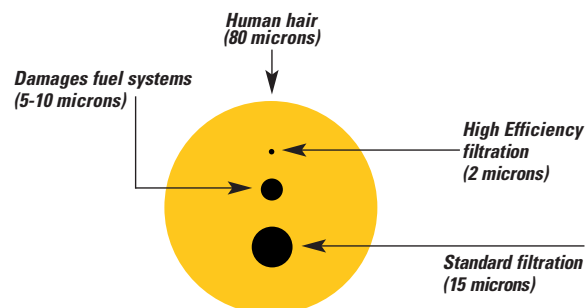
Non-Metallic Center Tube

prevents metal contamination and is stronger than metal to prevent collapsing.



Out of sight is not out of mind

The most controllable contaminants are abrasive particulates, which can vary greatly in size, hardness and abrasion. The comparison illustrated here demonstrates the very tight clearances in your fuel system and the size of visible particles. As you can see, even particles that aren't visible can wear away at your fuel system and reduce performance.



Keep it clean, and keep running at peak efficiency

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 such as 183-3873 or 207-5997.
- 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.
- Maximize filtration protection by using Cat High Efficiency Fuel Filters.

When performing engine service

- Clean debris from the engine compartment before removing filters and other fuel system components.
- On earthmoving equipment use a high pressure wash to blast built-up grime off the engine 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.

Stop Contamination before it stops you.

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.

Injector Family	Engine Family	High Efficiency Fuel Filter 2 Microns Absolute
Direct Injector Fuel Nozzle (pump & line)	3208	1R-0750
	3300	1R0750
	3400	1R-0749
Mechanical Unit Injector (mechanical) (stationary)	3114	1R-0759/1R-0751
	3116	1R-0751
	3500	1R-0755
	3500	1R-0756
	3600	1R-0766
Electronic Unit Injector (electronic) (stationary)	C10	1R-0749
	C12	1R-0749
	3176	1R-0749
	3406	1R-0749
	3500B	1R-0755
	3500	1R-0756
	3600	1R-0766
Hydraulic Electronic Unit Injector	3126	1R-0751
	3408	1R-0749
	3412	1R-0749

Depend on the experts for cost-cutting maintenance products

Preventive maintenance is one of the easiest and most cost-effective steps you can take to get maximum performance and value from your Cat machines and engines. Cat High Efficiency Fuel Filters are just one of the maintenance products we offer to keep costs under control.



Cat Fluids: Engine and Hydraulic Oil, Coolant and other fluids formulated to provide higher standards in performance and life.

Cat Filters: For oil, fuel, air and other systems, Cat Filters are system engineered for optimum performance and protection.

S-O-SSM Services: The ultimate detection and diagnosis tool for your equipment.

Maintenance Software: Trend Analysis Module (TAM) for S-O-S Services results, Maintenance Control System (MCS) for scheduling and record keeping and Preventive Maintenance Planner for comprehensive maintenance checklists.

Ask about Customer Support Agreements (CSA) and other customized programs designed to put all or part of your maintenance, service and repairs in the hands of our expert technicians. You'll save time and resources, improve machine availability and have more time to manage your business. Stop by or call us about how we can help you get more from your Cat engines and machines.

Learn more about fuel systems

For more detailed information, consider obtaining a CD-ROM on Cat fuel systems. The following CDs employ animation, narration and graphics to explain basic system operation and troubleshooting of the fuel systems and related electronics:

- **EUI Fuel Systems CD** (All EUI engines) – RENR1391-01
- **HEUI HI300 Fuel Systems CD** (3126B engines) – RENR1390-01
- **3500B MEUI Fuel Systems CD** (3500B MEUI engines) – RENR1395

Also available is publication SENR9620, *Improving Fuel System Durability*, and companion CD, PEXT9044 (Power-Point presentation and animation graphics).

To order any of these materials, please contact us and ask for the appropriate media number listed above.

