

CAT FILTERS AND FLUIDS

We all used to think it...

Filters are filters and fluids are fluids. Then we had some realizations, like uptime is money made, and downtime is money spent. That's when we took a different spin on filters and fluids – made to help you work more and spend less. So, what's the actual difference? Come see for yourself. Explore product comparisons, customer results, and how every design element helps you do more. Ready to see the real difference? Let's take a closer look.

IT'S LIKE THE OLD SAYING,

"a picture saves a thousand dollars."

Okay, we didn't get the quote right. But we got the right filters and fluids for your Cat® equipment. You invested in a top-quality machine. Why choose filters and fluids that wear down its components? From power shift transmissions to clutches to brakes – no one knows your machine's friction devices better than the ones who engineered it. Let us show you.

Think oil is oil?

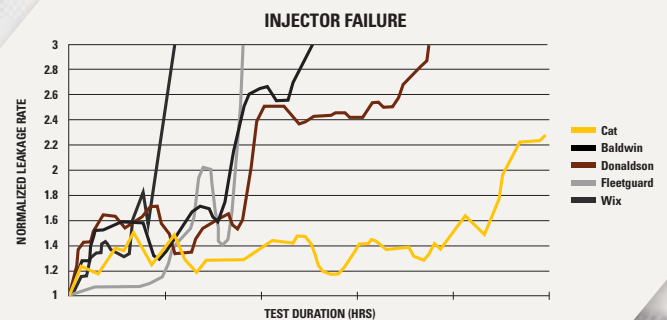
This destructive piston pump test shows the advanced formula in Cat oil performs beyond where competitors stop.



BEYOND THE IRON – LET'S TALK BUSINESS.

Some companies make filters to sell filters.

Caterpillar makes filters to protect your Cat machine. This performance study proved Cat filters can increase injector life by 45 percent. A customer trial backed it up, reporting a 41 percent longer injector life. It's a quick \$1,000 to replace an injector – and that's the low end. Pro-tip: Choose Cat filters to get up to 10,000 hours before replacing injectors, instead of replacing every 6,000 hours.



CAT FILTERS & FLUIDS: DIFFERENT BY DESIGN.

What's the Difference with Cat Filters?

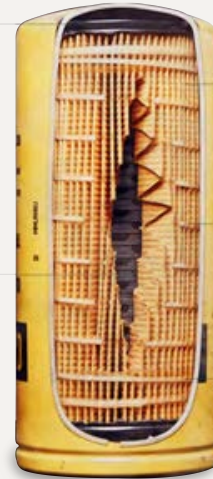
There's a resounding response, "Cut it open." Cat filters are simply designed to be different, so you get different outcomes. Unique features like the spiral roving and non-metallic centertube deliver you an edge that competitors simply can't replicate. Take a look at these unique features and what they do for your operation.

POLYURETHANE END CAPS

Keeps it all clean. Competitors glue on end caps – running the risk of bypass and additional contamination.

NYLON REINFORCED CENTER TUBE

Also known as, not metal. Why's that matter? Competitors use metal, which has been shown to be weaker – and worse — often leads to metal shavings in the filter. That's failure before the mission begins.



TOP GRADE MEDIA

It's your main line of defense. You want better media to stop contamination – and Cat Filters offer the best grade media.

SPIRAL ROVING

Holds the entire filter in place – a substantial edge versus competitors. We're talking less contaminant particles by 45 percent.

ACRYLIC BEADS

Keeps media spaced – the front-line stabilizer for media to hold in position.



It's not as easy to see the difference with fluids, but it's very real.

You often think of one thing when buying fluids, "Does it meet specifications?" Cat Fluids exceed industry specs, and go far beyond in performance testing and quality control. Formula experts work closely with component engineers to ensure the lifeblood of the equipment is in tune with friction thresholds.

Your Cat Dealer's Got It from Here.

Ready to start saving on repairs and stop putting your machine at risk? Talk to your local about a solution for your operation. From finding the right product to preventive maintenance plans, your expert dealers can help every step of the way.

For more information, visit cat.com/filtersandfluids

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THE DIFFERENCE

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LET'S SETTLE THE DEBATE

Are all filters the same? 30 years back, we asked the same question before creating Cat Filters. Today, the answer's clear. From customer studies, to test results, to simply cutting one open, it's easy to see the difference with Cat Filters. Your Cat equipment gets more protection and better performance. That means less repair work, more uptime and more money for your operation. Numbers back it up – and behind the numbers – there's the design.

Cat Filters are designed with robust engineering to maximize the Cat components around it – especially the engine and the fluids. And whether the crucial spiral roving or the 30 percent stronger nonmetal center tube, Cat Filters consist of game-changing features to significantly outperform other filter brands. Combine a system-based design with superior features, and you get a different filter that delivers different results. Take a look for yourself, then ask your dealer for more on The Proof and The Design of Cat Filters.



Ask your dealer about the difference or visit cat.com/filtersandfluids for the proof and the design.



THE PROOF

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THE PROOF'S IN THE DESIGN

Decisions should be backed with facts. So, what's the proof Cat Filters are different – and deliver different results? Let's tackle that question in two ways: the proof of better design and the proof of better performance.



PROOF OF DESIGN

"Cut it open."

– Joe Calvert, Operator, JAG Excavating Inc. –

We hear this one time and time again. If you want to see the difference, simply look at the side-by-side design. The filter media is superior. The spiral roving holds everything in place. The non-metal center tube eliminates harmful metal shavings. Plus, it's proven 30 percent stronger than competitive center tubes. Cat Filters are tested beyond industry standards, and the results show.

PROOF OF PERFORMANCE

"We've got extended run times on everything. Machines that are coming due by the book for a turbo replacement in 6,000 hours or whatever it may be, but we're getting 8,000 hours out of our sampling logs."

– Chris Johnson, Equipment Manager, Kaw Valley Companies –

A Picture Says a Thousand Words. Let's just use three:
Longer Injector Life.

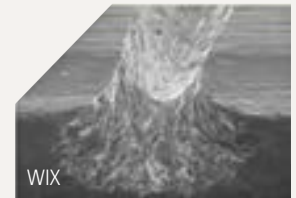
Injector Valve Seat Test Comparison



Cat



Baldwin



WIX

"Every product we make here exceeds the specification two or three times."

– Daniel Gieurgea, Reliability Engineer, Cat Filters –

After a series of lab tests, you can expect major results by using Cat Filters.

- **Decreased filter cost per hour by up to 80%**
- **3x less fuel injector leaks**
- **Longer fuel injector life by 45%**

Beyond the lab, a customer field test backed this up – reporting a 41 percent longer injector life. It's a lot more expensive to replace an injector than to use the right filter.

Pro-tip: Choose Cat Filters. The savings stack up quickly.

Customer Corner

Location: Chicago, IL **Profile:** Refinery company rebuilds after life use of Cat Filters & Fluids **Rebuild Timeframe:** 2nd rebuild at 46,226 hours on a 990 Wheel Loader

Projected Savings: Upon dealer inspection, hydraulic, transmission and final drive components were reusable, saving 40% on a full machine rebuild.

**Talk to your dealer about how Cat Filters can boost your operation.
Or for more information, visit cat.com/filtersandfluids.**



THE DESIGN



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CAT FILTERS: DESIGNED TO DO MORE.

All filters are not created equal. The key reason Cat Filters outperform competitors is their design. What's easiest to see are the clear design differences that competitors cannot match. Get to know the critical features that help get you the most protection and performance for your equipment.

Whether that's efficiency, whether that's life, whether that's new fluids that are coming into play on fuel or lube applications. Our products are specifically designed to meet those applications. They're not just a will fit, they're not just try this, but they are something that is designed specifically for the product and application.

— Wayne Weaver, Global Product Development Manager, Cat Filters —

POLYURETHANE END CAPS

Keeps it all clean. Competitors glue on end caps – running the risk of bypass and additional contamination.

NYLON REINFORCED CENTER TUBE

Also known as, not metal. Why's that matter? Competitors use metal, which has been shown to be weaker – and worse — often leads to metal shavings in the filter. That's failure before the mission begins.



TOP GRADE MEDIA

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Holds the entire filter in place – a substantial edge versus competitors. We're talking less contaminant particles by 45 percent.

ACRYLIC BEADS

Keeps media spaced – the front-line stabilizer for media to hold in position.

Just as important, but harder to see, is the application-based nature of the filter design. Where competitive filters create filters to general specifications, Cat Filters are designed alongside Cat equipment specifications, to ensure the entire system thrives. From flow rates, to efficiencies, to fuel grades, a great deal of design elements can shift depending on the equipment and its application. Caterpillar component engineers work with filter experts to design and test your filters for top quality and consistency. We call it the Cat System. You can call it "taken care of."



Talk to your dealer about Cat Filters, or visit cat.com/filtersandfluids for more on The Difference or The Proof.



THE DECISION

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THE RIGHT FILTERS – RIGHT THIS WAY.

Talk to your dealer about a solution to keep saving money with Cat Filters over time. Whether you need advice, answers, or details to order – your expert dealer can help every step of the way.



Hydraulic & Transmission Filters

Longer component life thanks to less contamination.



Engine Oil Filters

Say hello to efficiency and goodbye to system failures.



Air Filters

The right way to deal with dirt and contaminants.



Fuel Filters

The small stuff does damage. Be sure to stop it.

Concerned about cost?

You may be surprised how competitively priced Cat Filters are next to other brands. What's no competition is the long-term cost. Cat Filters protect your investment and its most critical components, whether turbos, injectors, cams or bearings. It comes down to a negligible price difference up front, for better protection and performance that could save you thousands in the long run.



FORGET THE HASSLE. INCLUDE CAT FILTERS AS PART OF A
CUSTOMER VALUE AGREEMENT (CVA).



There's no solution growing quicker than getting filters and fluids as part of a Cat CVA. Ask your dealer about a flexible plan for hassle-free maintenance. Whether you prefer to handle service, choose to work with your dealer, or let them handle everything – customers across the world take advantage of CVAs. It's a stress-free solution for easy ownership, peace of mind, and ensuring your equipment makes the most for your operation.

Talk to your Cat Dealer about Cat Filters for your equipment — or visit cat.com/filtersandfluids for more on The Difference, The Proof or The Design.



THE DIFFERENCE

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HERE'S THE THING...

It's hard to see the design differences between Cat Fluids and other brands of fluids. You can look at molecule diagrams or talk sheer stability and oxidation resistance. But let's focus on what matters most: the performance difference of Cat Fluids and how it makes a difference for your operation. Lab tests prove it, customer studies support it and fluid experts help you understand it.

SEE IT

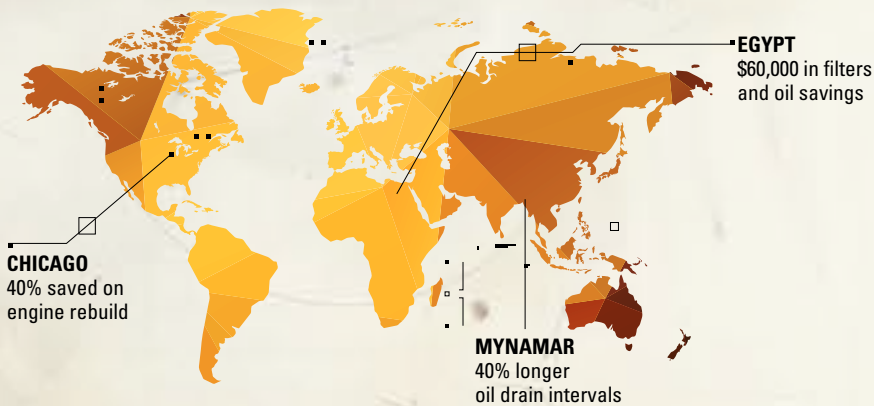


BELIEVE IT

"We can extend our drain times and get more life out of the engines and you don't have to worry about it."

— Chris Johnson, Equipment Manager, Kaw Valley Companies —

RESULTS THAT MAKE A DIFFERENCE



UNDERSTAND IT

Cat fluids stand alone in understanding the equipment it protects. Why does that matter? The more a fluid knows its surrounding components, the better it protects them. Not only are the fluids designed for Cat equipment, Cat equipment is designed to perform at its best when using Cat Fluids. With industry-leading quality and reliability — you get results that make the difference easy to see.

Ask your dealer about the difference or visit cat.com/filtersandfluids for the proof and the design.



THE PROOF



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IT'S LIKE THAT OLD SAYING,

"A Picture Saves a Thousand Dollars."

Okay, we didn't get the quote right. But we have proof that Cat Fluids perform best for your Cat equipment. The best fluids know the ins and outs of the components it protects. And from brakes to clutches to power shift transmissions – no one knows Cat equipment's friction devices better than those who engineered it. When you add in the most robust endurance testing in the industry — the results show.

THINK OIL IS OIL? TAKE A CLOSER LOOK.



This destructive piston pump test shows Cat hydraulic oil in great condition after 200 hours, and the industry standard which failed at 178 hours.

That's just the piston ring wear.

You should see the other guy — meaning the actual oil...

So what's happening here?

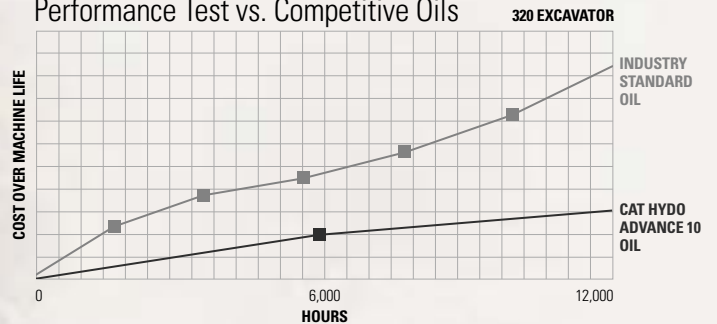
Advanced oil disperses more water and has superior filtration properties for less risk of contamination – that's why the coloration is lighter, which is better. The impact? Less rust and less corrosion. The outcome? Longer component life and less maintenance. The real outcome? You make more money working more and spend less money on repairs.

When you pair Cat Fluids with S-O-S™ analysis, this study proved the ability to extend oil drain intervals by 300 percent. That means *three* oil changes with a competitor, compared to *one* with Cat Fluids and S-O-S analysis.

Beyond the lab, customers all over experience longer drain intervals that translate to bottom line savings.



Performance Test vs. Competitive Oils



Myanmar Bus Company

Profile: Bus company switches eight buses to Cat DEO 15W-40 with S-O-S™ Services
Savings by Percent: 40% longer oil drain intervals, 1.3% saved on its total fuel bill
Savings by Dollars: \$5,000 saved per year

Egyptian Contractor

Profile: 84-machine fleet switches to Cat Fluids with S-O-S Services
Oil Cost Savings: \$21,000
Filter Cost Savings: \$42,000

Ask your dealer about Cat Fluids for your equipment. Or check out cat.com/filtersandfluids for more information on The Difference and The Design of Cat Fluids.



THE DESIGN



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DESIGNED DIFFERENT— TO MAKE THE DIFFERENCE

It's not always easy to see design differences of fluids, but they're very real. The first question when buying fluids, "Does it meet specifications?" Cat Fluids meet industry specs, then go far beyond in performance testing and quality control.

As the lifeblood of healthy equipment, all Cat Fluids are tailored specifically to optimize Cat equipment and components. Formula experts work in lockstep with component engineers to optimize the fluids' relationship with friction thresholds. We're talking working temperatures, air release points, viscosity, seal swelling. It's designed to specs then rigorously tested, from labs to field trials.

**"I can show them that it's not all the same.
They're just not made the same."**

— Terry, Lead Greasemaker —

**"No other OEM in the world goes to the amount of extensive
testing and endurance testing that Cat Fluid does."**

— Alex, Global Fluids Advisor —



- ✓ Superior oxidation stability
- ✓ Enhanced shear stability
- ✓ Improved oil aeration
- ✓ Backwards compatible
- ✓ More viscosity control in high-temperature

The point is – with today's engines doing more work with less emissions – we're a long time away from that old adage, "oil is oil." The good news is this: Cat experts have already done the work. Some oils undergo years of development, all to ensure Cat Fluids protect your Cat equipment like no other brand in the world. That's why tests show extended oil drain intervals and customers around the world can experience savings in the thousands.

Talk to your dealer about Cat Fluids, or visit cat.com/filtersandfluids for more on The Difference or The Proof.



THE DECISION

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YOUR BOTTOM LINE WILL THANK YOU LATER

We're not talking pennies of savings. Cat® Fluids deliver extended oil drains, less unplanned downtime and longer component life. Those are benefits that can save you thousands in owning and operating costs. When you consider your investment in top-performing Cat equipment, there's no better way to protect that investment. Talk to your Cat dealer about how these fluids solutions can protect your machine and your bottom line.



Scheduled Oil Sampling Analysis

See problems to avoid. See chances to save.



Cat Greases

Extreme environments meet unbeatable performance.



Cat Oils

Already tested. Ready to work.



Cat Coolants

Full line. Full protection.



SET IT. FORGET IT. AND SAVE.
THAT'S A CVA.



There's no solution growing quicker than getting fluids as part of a **Cat Customer Value Agreement (CVA)**. Ask your dealer about a flexible plan for hassle-free maintenance. Whether you prefer to handle maintenance or take advantage of dealer service — customers across the world are seeing the payoff with CVAs. It's a stress-free solution for easy ownership, peace of mind, and ensuring your machine makes the most for your operation.

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