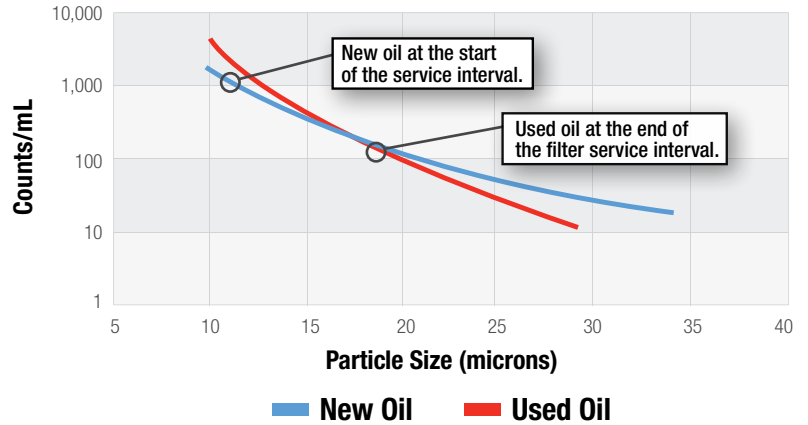


Longer Engine Life.

The Fleetguard LF14000NN (with 2-in-1 media technology) has been optimized for efficiency at both initial clean filter conditions and throughout the life of the filter

By using the LF14000NN on your engine, the condition of **oil remains cleaner than new oil at and above the critical particle size throughout the oil drain interval**, for engine health and longevity.

Particle Count Data



Fleetguard Award-Winning Design

The American Filtration & Separation Society named the Cummins Filtration LF14000NN lube filter its 2015 New Product of the Year, specifically for our NanoNet® technology, a patented polymeric nanotechnology-based media.

Built by the Best Name

The LF14000NN is designed by engineers at Cummins Filtration, the only filter company that's part of an engine company. We know what it takes to maximize your investment in your equipment. In fact, it's the only filter engineered and validated by Cummins to meet their stringent engine test requirements.

Backed by the Best Warranty

Unlike our competitors who offer pro-rated coverage, our full warranty protection extends from the point of purchase throughout the recommended service life of the product.

Nothing Guards Like Fleetguard!



For more information, visit CumminsFiltration.com

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Cummins® Heavy Duty Engines Lube Filter Comparison Fleetguard® vs. Baldwin®

There is no substitute for patented Fleetguard solutions with NanoNet® advanced media.

It's All About Total Cost of Ownership

As engine oils have evolved to stay on track with engine development, Fleetguard filters have also evolved to help maximize engine life, improve fuel economy and reduce downtime. Other filters may be less expensive, but our **superior 2-in-1 media design** delivers the lowest cost of ownership of any filter on the market.

Here's how we stack up against Baldwin filters.

1) StrataPore® Media

Removes larger particles upon engine start-up for immediate protection.

2) NanoNet® Media

Removes smaller, fine particles to prevent long-term engine wear.



Comparison 1:

Better Fuel Economy with Fleetguard

Through our unique relationship with Cummins, we are able to analyze proprietary engine data to fine-tune filter design and fuel economy. Cummins Filtration developed the LF14000NN to be the least restrictive and most fuel economy efficient lube filter for a typical duty cycle while still meeting OEM requirements.



Fuel Economy Savings Per Year

For a fleet of 1,000 trucks



Fleetguard LF14000NN filters vs. Baldwin BD7154/BD50000 filters

Fleetguard LF14000NN Genuine Filtration Means:

- Cummins Recommended & Warranted
- Industry Leading 2-in-1 Media Design
- Low Total Cost of Ownership

Comparison 2:


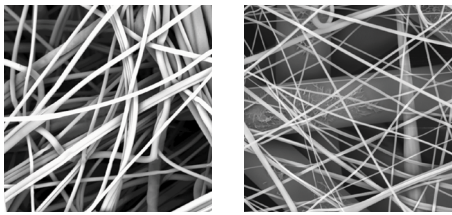
Fleetguard Design Makes the Difference



Baldwin BD7154



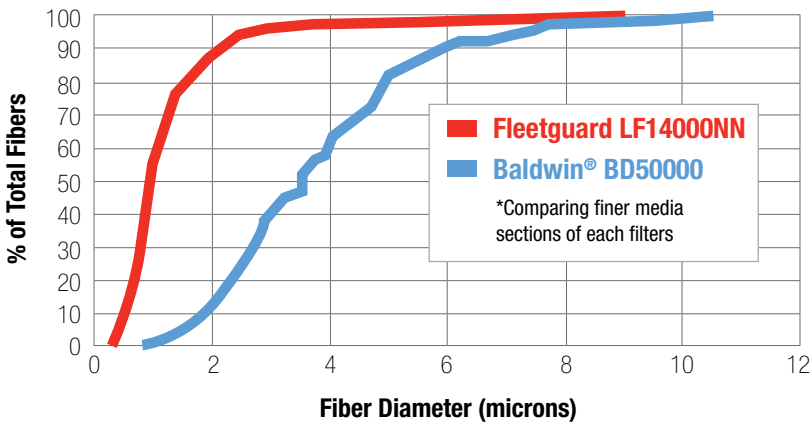
Fleetguard LF14000NN

Media	<p>Baldwin BD7154 filters are produced using inorganic, glass fiber media. Many of the materials used in today's diesel engines are softer than these abrasive glass fibers.</p>	<p>Industry-leading composite polymeric media developed in-house pairs StrataPore® and NanoNet® media grades for optimum balance of particle removal, capacity and flow restriction.</p>
Filtration	<p>Brittle glass fibers are chopped and attached using resin. Fibers can be released from filter and pass downstream causing premature engine wear.</p>	<p>NanoNet media insures required level of particle retention with minimal flow restriction.</p>
Construction	<p>Loose fibers may release contamination under dynamic conditions such as vibration and flow surge.</p>	<p>2-in-1 NanoNet media is bonded together and does not move under vibration or flow surges to keep wear particles secure.</p>
Cross Section	<p>Section 1</p> 	<p>Full Flow Section Bypass Section</p> 
Results	<p>Many Broken Fibers Visible</p>	<p>All Fibers Continuously Bonded, Uniform Structure</p>

Comparison 3:

Fleetguard's Optimal Particle Removal and Flow Restriction

Fiber Diameter vs Fiber Count

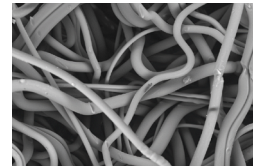


Compared with the Baldwin® BD50000, the finer NanoNet fibers in the Fleetguard LF14000NN ensure high particle removal efficiency and minimal fluid flow restriction.

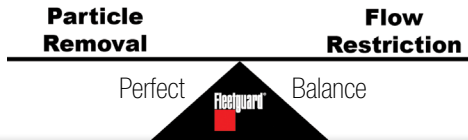
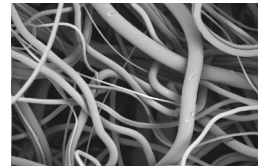


Baldwin® BD50000 = Larger Fiber Sizes

Section 2



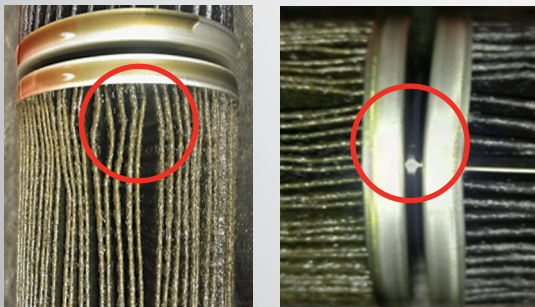
Section 1



Comparison 4:

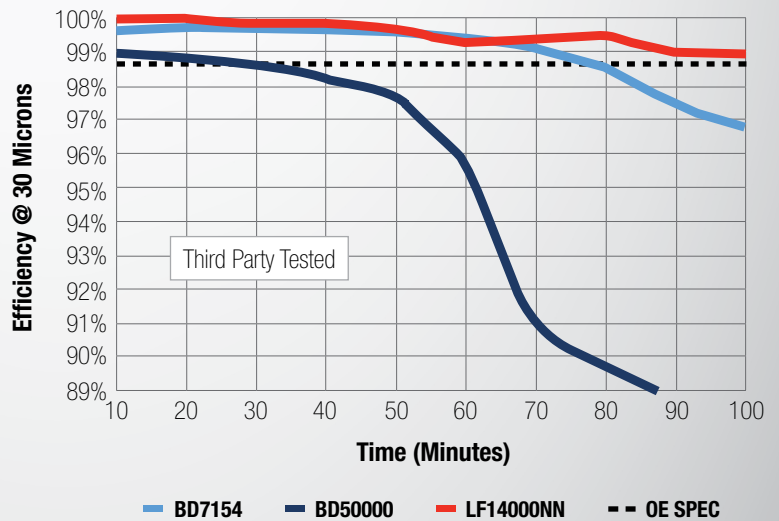
Fleetguard Won't Warp Under Pressure

The LF14000NN performs under higher pressures to protect the engine components like the fuel pump, removing particles as fine as 10-15 microns within the first few minutes of engine operation to prevent long-term wear. Baldwin filters exhibit, which exhibit a sharp efficiency drop at higher pressures that could damage the engine and oil lubricated components. In fact, the BD7154 nor the BD5000 meet the Cummins OE efficiency requirement.



Baldwin lube filters become distorted and bent under high-differential pressure conditions.

Particle Removal Efficiency with Increasing Oil Pressure



Test Spec Based on ISO 4548-12