Add Real-Time Fuel Consumption Tracking for a Better Bottom Line

The Cat® Fuel Consumption Monitoring System makes it easy for you to accurately track fuel consumption in real time. When you add the cost-effective system to any diesel engine (mechanical or electronic), fuel data can be transmitted off board remotely with the use of a Product Link or Telematics solution to your desktop and/or mobile device. So you can immediately spot any issues, and then make adjustments to achieve better fuel economy—and increase profitability.
Take the Guesswork Out of Fuel Consumption

Fuel costs are one of the largest operating expenses impacting the bottom-line profitability of your business. With the Cat® Fuel Consumption Monitoring System, the system’s direct volume measurement calculates net fuel burn with better than 2% accuracy—eliminating other types of fuel consumption guesswork.

The result: better management of your fuel consumption that produces positive returns. The system also assists you in accurately bidding new projects. Because using actual engine fuel consumption information from system reports gives you a more accurate basis for estimating your bids—and for monitoring consumption after you land the jobs to ensure your fuel projections stay on track.

How it Works

The Cat Fuel Consumption Monitoring System can be installed on any Cat or other brand of diesel engine (12V or 24V), including engines with a 0.5 – 30 L/minute flow rate. The system’s compact, heavy-duty design is pressure spike and vibration tolerant to maintain its demonstrated fuel calculation accuracy, even when the engine operates at higher pressures and in the toughest terrain.

Its two robust fuel flow transducers, one on the supply side of the engine and the other on the return side, include two speed sensors to detect fuel flow in both directions. The Electronic Control Module (ECM) and application software accurately track and calculate the engine’s fuel consumption by subtracting Return Fuel Flow from Supply Fuel Flow. The transducers also feature a temperature sensor, allowing the system to apply temperature compensation, which will ensure accurate readings regardless of fuel and ambient temperatures.

To receive data, both wireless and wired options are available. For example, when paired with a Product Link™ remote monitoring solution, total fuel values are reported for display in the solution’s user interface. Cat Electronic Technician (Cat ET) can be used to retrieve data through a wired connection for equipment without remote monitoring capabilities.
For Use in a Variety of Applications

System Benefits

- **Calculates net fuel consumption with better than 2% accuracy**—eliminating fuel consumption estimates.
- **Maintains fuel calculation accuracy** regardless of fuel and ambient temperatures. The system is also pressure spike and vibration tolerant, meaning the system reports accurate data in any application.
- **Maximizes asset utilization** because you can see in real time any issues with equipment and/or equipment operation (e.g., excessive idling time), giving you the information you need to make adjustments to increase fuel economy, such as additional operator training focused on conserving fuel.
- **Provides a full fleet solution for all your diesel engines**, including mechanical engines that lack any fuel consumption data.
- **Maintains accuracy regardless of fuel quality**, providing a global solution for those operating in lesser-regulated and non-regulated countries (LRCs/NRCs). Fuel filters are still recommended.
- **Indicates fuel loss** from slow leaks, punctured or ruptured fuel tanks, or fuel theft, so you can quickly address the issue.
- **Offers different options for back-office data management reporting** of fuel related data, such as via Product Link, Cat Electronic Technician (Cat ET).
Dealer Installed with Precise Engine Fittings

The Cat Fuel Consumption Monitoring System's compact design makes it easy for Cat dealers to install quickly. Since the system can be installed on any diesel engine, there is no universal fitting in the kit. Your Cat dealer will select the exact fittings required for your specific engine’s inlet and outlet connections.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>KIT CONTENTS</th>
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<tr>
<td>442-2377</td>
<td>1 Electric Control Module (ECM) with J1939 and Cat Data Link for Data Communication</td>
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<td>2 Flow Transducers</td>
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<tr>
<td></td>
<td>1 System Harness</td>
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<td>Parts Required for Mounting and Assembly</td>
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**CAT DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.**

We offer you the right parts and service solutions, when and where you need them.

The Cat dealer network of highly trained experts are built to help you maximize your equipment investment.

**BUILT FOR IT.**