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WHITE PAPER

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Work Trucks: The True Cost of Idling

Fuel and maintenance are major expenses for work truck fleets. While many fleets with work trucks use tracking software to optimize routes and limit unnecessary side trips, money is being wasted on idling. A recent study on idling calculates that a fleet of 100 trucks idling for two hours per day, 275 days per year, can cost up to $165,000 annually in wasted fuel. With some states spending as much as $272 million every year on winter maintenance, cost reduction is important.

Work Truck Idling Data

100 Trucks Waste up to $165,000 of Fuel Annually

57% Idle for One to Four Hours Daily

$9,472 Excess Maintenance Spent per Truck, per Year

Statistics show that 57 percent of government and municipal work trucks, such as snow plows and refuse trucks, idle between one and four hours daily. Many fleets stage their vehicles before plowing snow and idle at various times throughout the day, including warming up their trucks in the morning, 15-minute breaks and checking their cell phone or maps. It adds up.

Fuel consumption isn't the only factor impacting the bottom line. Idling increases engine wear, maintenance costs and downtime. Idling for one hour every day for one year is equivalent to 64,000 miles of engine wear. That results in excess annual maintenance costs of as much as $9,472 per truck.

One factor affecting maintenance costs is repair and replacement of diesel particulate filters (DPF). Tier 4-compliant engines are not designed to idle for extended periods of time. Idling causes buildup of particulates in the filters, which requires frequent cleaning. Particulates not burned off through the regeneration process can lead to poor fuel economy, reduced power output and costly engine damage. Replacement is expensive. Each DPF system can cost up to $10,000. Prolonging filter life by reducing idling reduces maintenance costs.

Why Are Trucks Idling?

Given all the benefits of reduced idling, why do drivers idle their vehicles? Comfort and safety are the primary reasons drivers idle their work trucks. Some may believe restarting the vehicle burns more fuel than leaving it idling. In reality, idling for 10 seconds wastes more fuel than restarting the engine. Some drivers won't shut off the vehicle until the work is completed. Others believe they need to keep the engine warm to reduce the wear and tear from starting and stopping the engine repeatedly. Staged attenuator trucks often rely on idling to keep safety lights and signage powered.

Key Solutions: Training and Equipment

A mix of equipment, policies and education is needed to reduce work truck idling. Driver training is a vital part of idle reduction. A written idle reduction policy allows fleet managers to review compliance policies with drivers. Some fleets offer incentives to drivers who reduce idling. Many trucks have automatic idle shutdown systems to shut the engine off when it would otherwise be idling. To reduce idling, training and equipment need to address power, comfort, safety, communication, startability and emission regulations.

Idle Free Flex Systems® / Automatic Start-Stop Systems

Designed specifically for work trucks, Idle Free Flex Systems® are "key off" idle reduction technologies trusted by department of transportation and municipal fleet managers throughout North America. Maintenance and fleet managers appreciate the cost savings of reduced maintenance and fuel. Drivers appreciate the six to eight hours of interior cab and engine heat the system provides. They can also run safety, interior and exterior lights and communication equipment when the vehicle is off.

A CARB-compliant technology, Flex Systems comply with all city, municipal and state idling laws. All system functions are accessed via a small touch screen user interface located near the driver. Circuits controlled by the system are protected with a low-voltage disconnect. A timer on the touch screen displays cumulative runtime for the system making return-on-investment calculations easy for fleet managers.

Automatic Start-Stop Systems can be added to Flex Systems or used as a stand alone solution to monitor truck battery state of charge and automatically start the truck at a predefined voltage. The system allows attenuator trucks to reduce idling while powering lights and signage unaccompanied.

In addition to fuel savings, major savings on DPF maintenance and replacement, and decreased wear on the engine, Idle Free Flex Systems lower noise, minimize downtime and extend the life of the engine and truck. Flex Systems also help fleets meet regulatory and environmental goals. The cabin engine heating components are SmartWay Verified. Reducing idle times by just one hour per week per truck can prevent the production of more than 500 pounds of carbon dioxide (CO_2) per year. More information about Flex Systems is available here: www.phillipsandtemro.com/solutions/idle-elimination/flex-system.

To learn more about Idle Free Flex Systems or Automatic Start-Stop Systems, contact Phillips & Temro at 1-800-328-6108 or email sales@phillipsandtemro.com.

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