BEST PRACTICES

Idle Reduction

saving fuel is not the only benefit

By Justin Smith

Ever wondered why the reduction of idle time is always a hot topic? Have you ever asked yourself what else outside of fuel savings is a big deal?

First, let's define what Idling is. Idling is when a piece of equipment or a vehicle is running but not actually working to increase production. People find themselves idling for many reasons such as heating or cooling down a vehicle for passenger comfort, waiting in line to pick up your kids from school, or waiting for a crew member to finish the last part of his job before everyone leaves for the day. It's estimated that the average time construction equipment spends idling is 30-40 percent, while Best in Class companies spend closer to 12-18 percent.

IDLE REDUCTION BENEFITS

Here's the big deal. Reducing the time your equipment spends idling has many benefits we don't necessarily think about. Some of these include fuel savings, reduced preventive maintenance cost, reduced pollution, energy conservation, and many more. Did you know that idling of five vehicles cost approximately $20 in fuel a day and that the average transfer truck cost roughly $5.30 on the conservative side in idling? This doesn't seem like much because of the truck size, but you're looking at more than $1,000 a year spent on idling, and that is just on one piece. When you multiply that by your entire fleet count, it's a big chunk of change that goes directly to the bottom line. While the reduced consumption of fuel is the obvious savings, it's not the only one.

Now, you're probably salivating and asking yourself, what is this list of other benefits I'm speaking of? Here are quite a few:

- Reduced fuel consumption
- Reduced wear on components
- Optimized vehicle performance
- Decreased chance of possible loss of diesel particulate filter (DPF) life due to additional soot
- Less depreciation
- Warranty hours do not expire prematurely
- Machine needs to be serviced less frequently
- Environmental concerns are often reduced and possibly remediated
- Decrease in state penalties (excessive idling is against the law in many states)
- Increased residual or trade-in value at the end of ownership
- Decrease in ownership and operating cost

IDLE REDUCTION PROGRAM

Are you wondering how to capitalize on all of these opportunities? The answer is simple—create an idle reduction program. While the answer is simple, the method, not so much. If not thought out and implemented the correct way, you could end up with a not-so-desirable outcome.

A great way to have a successful implementation of an idling program is to educate the operators on the equipment they are using. Most people believe frequently starting and stopping an engine uses more gas and causes additional wear and tear on the vehicle; in reality, with today's fuel injection engines, starting systems are more efficient and don't require as much fuel to start an engine.

Idling, whether at a jobsite or pulling off the road to make a call, consumes gas that could be saved by simply turning off the engine. The worst mileage a vehicle can get is zero miles per gallon, which occurs when it idles.

Here are some tips for reducing idle time:

- Limit idle time at shutoff; older engines need 2 minutes; newer engines, almost none
- Turn off equipment that is waiting more than 5 minutes to perform its next work cycle
- Restrict morning warm-ups to 3 to 5 minutes

- Turn off equipment during lunchtime breaks and other periods when not in service
- Use the automatic shutdown feature when available
- Create a policy and make it a major initiative for the organization
- Educate why (the purpose and benefits) and consider a reward structure for those with the most improvement

To some, it's hard to think about improving in an area in which you don't necessarily see yourself or catch yourself making a mistake. Some people don't even realize they have their equipment idling. Some are also unaware of the high costs the company incurs because of it, so it's imperative not only to inform but also to train your personnel. Inform them on not only the negative but positive effects they can have while giving them examples of the negative effects idling has on your equipment and company when we don't reduce and monitor the idle time. Be open and show your employees the numbers; show them how they stack up, not only against other employees but also other companies that have been successful with implementing an idling reduction program. Ensure your people have the proper training by providing informative workshops or classes.

You may be surprised by what you thought wouldn't have a significant effect on an operator's decision to continue idling or to shut a piece of equipment down. Often, potential incentives will increase cooperation among staff. Let's just say you discover you spend $60,000 a year on idling in one area of your company. Inform your personnel on how excessive idling harms the equipment and how it causes the company to spend excess money on its fleet. Iterate to them that there could be prospective raises or bonus pay if their idling improves and if it stays below a certain percent; this gives employees an incentive to want to pay more attention to the small things that could benefit them in the near future.

It would also be wise to install real-time alerting systems that detect unproductive idling that sends notifications to drivers or managers who can correct the problematic behavior immediately.

CLOSING THOUGHT

Information on the benefits of an idling policy needs to be shared, not regulated. Businesses will easily see the advantages without the cost of enforcement or inspections. ■

about the author

Justin Smith has multiple years of training in Total Process Reliability (TPR) and Total Productive Maintenance (TPM). He has been affiliated with TBR Strategies for more than 10 years with the last year and a half serving as the director of operations.