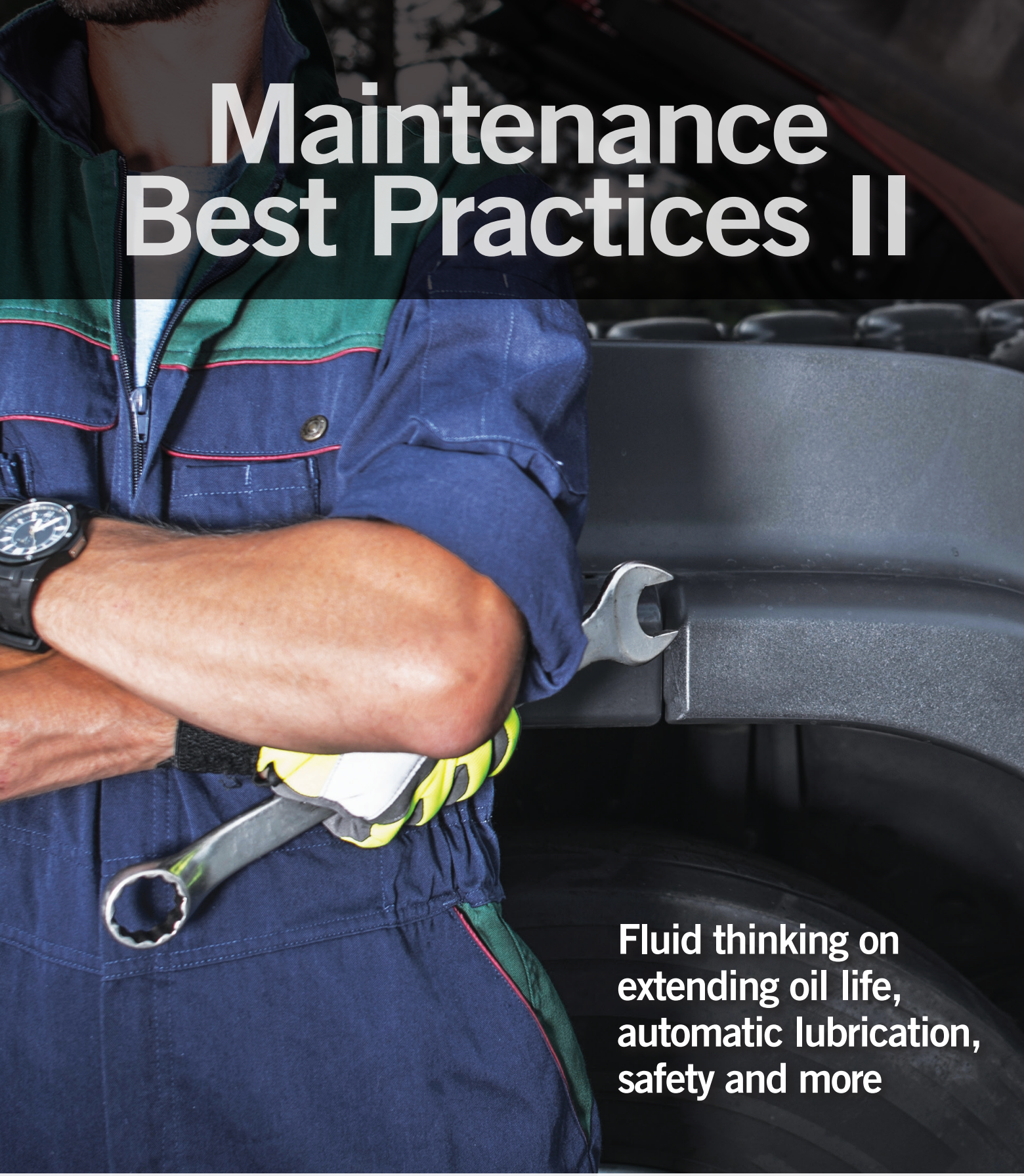

Maintenance Best Practices II

Fluid thinking on extending oil life, automatic lubrication, safety and more

Chevron

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In this issue

Welcome to Maintenance Best Practices II

Downtime during a growth economy comes at a premium. With trucking services in high demand, fleets who are best at keeping their trucks on the road seize the most opportunities. But what happens on the road is shaped long in advance by the decisions and actions taken in the maintenance shop. The maintenance strategies put in place drive profitability by driving uptime.

It's with that in mind that we partnered once again wirh Chevron to bring you this special digital supplement Maintenance Best Practices II: Fluid thinking on extending oil life, automatic lubrication, safety and more.

I hope the expert advice you find on the following pages helps you keep your vehicles on the road, your drivers behind the wheel and your revenues growing. As always, we welcome your feedback.

Lou Smyrlis
Managing Director, Newcom Trucking and Supply Chain Group

8 Secrets to Longer Oil Life

KEEP ENGINES CLEAN, COOL AND YOUR MIND OPEN

BY ERIC BERARD

A weight lifter doesn't have the same training routine as a marathoner. So unless your fleet is made up of trucks that are all the same brand and model-year with the exact same specs and all travel the exact same route every day, there's no such thing as a "best" drain interval program. On the other hand, there are oil management practices that can help extend these intervals and maximize the return on every dollar invested in oil purchase and related maintenance.

1. Play it safe

The top golden rule when it comes to oil drain intervals is following the OEM recommendations. If the engine manufacturer says to change the oil at a given amount of kilometers, comply with this recommendation and make sure you document each oil change for warranty protection. Each engine maker uses its own blend of metal alloys, decides its own tolerances between moving parts and makes aftertreatment systems design decisions that can have an effect on oil grade choice and oil life.

Buying quality motor oil from quality base stock never goes out of style. The value of premium oil needs to be measured not only by the purchase price but also by the savings it will generate down the road.

Equally important is the choice of the appropriate oil filter. There are different filter categories and filtering media types on the market. Take the time to discuss with your preferred supplier which fits best on your trucks and applications. Remember that contaminants will find their way to your oil sump sooner or later. The right filter will allow it to be later.

As a general rule of thumb, it's safe to say that what's good for fuel economy is also usually good for oil life. Fuel economy is mostly the result of the complete combustion of a quality fuel inside the cylinders and, under such conditions, soot contamination in the oil is less likely to happen, thus extending its life.

2. "Good old" might be too old

Playing safe doesn't mean following the same old paths over and over again. Oil formulations have changed along the years and the "good old" rule of changing the oil each, let's say, 40,000 kilometers might not be relevant anymore. Since December of 2016, the American Petroleum Institute (API) has certified new oil categories called CK-4 and FA-4 that replace the old CJ-4. These new oils are known to allow much longer draining intervals with no risk to mechanical components; up to 60% longer depending on the engine OEM. Don't apply old habits to new oil generations and waste money in the process.

3. Be flexible

If some of your trucks are used in applications where PTOs are widely used and idling is necessary, don't apply to them the same "oil needs to be changed each 'x' number of kilometers" policy for long haul highway units. Calculating the oil wear by the number of hours would probably be more appropriate.

Idling is one of the factors that degrades oil prematurely because even if the truck doesn't move an inch, the moment the engine is running, the pistons travel into the cylinders, using lubricant to avoid metal to metal scuffing, creating heat and degrading oil additives.

Driving in congested traffic in urban or road work areas can well be considered as idling. Whether in 10th or 1st gear, 1,200 RPM represents the same number of strokes inside the engine and requires the same lubrication work. Take that factor into account when establishing different draining intervals for trucks that travel different routes.

Flexibility is also an asset when assessing new trucks' draining intervals during their break-in period. It's perfectly normal that a brand new engine leaves more metal particles in the oil until each moving part has adapted to the next. Adapt your oil change policies accordingly. Extending an oil drain interval for the sake of it won't get you far if worn out oil stops protecting a brand new engine worth thousands of dollars.

Buying quality motor oil from quality base stock never goes out of style. The value of premium oil needs to be measured not only by the purchase price but also by the savings it will generate down the road.

4. Viscosity is key

New generation oils such as CK-4 and FA-4 are thinner and offer better performance than the former CJ-4. But that certainly doesn't mean that one could or should decide to use a different grade of oil than the one recommended in an attempt to "compensate" for the new oils' thinness.

When it comes to oil and oil life, thicker is not always better. If an engine was designed for, let's say, a 10W30 grade, that's what you need to feed it. That's what it expects, that's what it has an appetite for.

Don't forget that new oils, even if thinner, offer better shear stability, which is a measure of the resistance of an oil to change in viscosity, caused by the oil being subjected to mechanical stress.

Outside temperature can have an effect on oil viscosity and life as well, especially on cold Canadian winter mornings. The use of an appropriate block heater with a timer to avoid electric power waste is a good way to mitigate cold start stress during winter. Slowly driving the truck as it warms up to allow the oil to circulate in every engine component and reach the desired viscosity level will extend oil life compared to long idling periods.

5. Monitor your oil

Oil analyses are a precious tool when it comes to establishing the right draining interval for a given engine in a given application. The content of the oil sample could reveal traces of leaking coolant, metal particles, soot or fuel, which can all contribute to faster oil degradation. Obtaining your oil Total Base Number (TBN) will help you assess its abilities to fight acidity and how close it is to the end of its useful life.

Between oil changes, encourage drivers to use the dipstick on a regular basis

Monitor the engine oil even if the trucks don't belong to you, if they are leased for example. You probably won't pay for the engine if it blows, but you'll pay the extra fuel for all the time that it ran impaired because of a lack of appropriate lubrication.

to make sure the oil level is full. The more oil with additives there is in an engine, the less concentrated the contaminants are, which contributes to extended draining intervals.

Drivers should also be reminded to keep an eye on oil pressure and temperature gauges, as those are two more parameters that can influence drain intervals.

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6. Limit oil contamination

The cleaner your oil is, the longer it can stay in the engine and give you paying mileage.

Consider having an auto shutdown device installed or programmed to limit idling and the related soot contamination.

Check all engine seals on a regular basis, looking for cracks that could allow coolant to leak in the oil, damaging its protecting additives.

Also check for bad injectors or any other defect that could lead to diesel fuel presence in the oil, as fuel also affects negatively the oil's performance.

7. Cool down

Excessive heat is among oil's worst enemies. And though the abovementioned new generation oils have better heat dispersion properties than ever, there are limits to what oil can do by itself without its additives degrading, thus the need to keep the cooling system in top shape.

That starts with an adequate cooling liquid that's also replaced according to the manufacturer's recommendations. You also want to keep your radiator's fins free of bugs, dust and dirt that could block the airflow, thus the cooling capacity.

8. Spec trucks right

The way you spec your trucks also has an effect on oil performance and life. The engine of an aerodynamic truck that flows through the wind instead of hitting it like a brick will work less hard to pull the same weight in the same conditions. Once again, fuel economy equals longer oil life.

Automated transmissions also help save oil, as they're less likely to make the engine over-rev than a driver with a manual, thus preserving the oil.

Still in the specs department, some will opt for the largest engine oil sump available, with the perspective that a greater quantity of oil and additives will take longer to get contaminated, allowing longer drain intervals. This is true but you might need to verify if the big sump is available with the most reliable engine and how much of a drawback the additional oil weight will represent in terms of payload and fuel economy.

Q&A

CHEVRON'S **JAMES BOOTH** TACKLES QUESTIONS FROM CK-4 IMPLEMENTATION TO ISOCLEAN

Chevron continued to offer CJ-4 engine oils to customers after CK-4 and FA-4 categories were released -- even though CK-4 is backwards compatible. Why was this strategy so important?

We changed all our premium synthetic-blend and synthetic products from API CJ-4 to CK-4. We also launched a new CK-4 premium conventional oil, and continued to make one CJ-4 product available. We had an uncharacteristically long period between API CJ-4 and CK-4 first licenses, so our premium conventional CJ-4 product was entwined into the fabric of people's minds and operations – so there has been sustained demand for a Chevron CJ-4 product.

How would you characterize the fleets that decided to stick with CJ-4?

The majority of OEMs extended their oil drain interval for on-highway applications, as a result of improved oxidation performance demonstrated by API CK-4 oils. However, oil drain intervals didn't really change for off-highway applications, so the benefit of API CK-4 was not as immediately apparent to these customers. At Chevron, our role has been to help off-highway customers understand the benefits of products developed as part of the upgrade to API CK-4.

Have you seen growth in the number of fleets and power units running on CK-4?

The education of API CK-4 benefits, and transition went very well, especially for on-highway fleets. For the products we made a hard change from API CJ-4 to CK-4 we saw no drop-off. In fact, we saw growth with API CK-4 synthetic-blend and synthetic products. We have continued to see strong adoption of our API CK-4 premium conventional product, and will monitor the market as to the appropriate time to sunset the remaining API CJ-4 product.

Most suppliers report a modest adoption of FA-4 oils. What will be the tipping point to convince more fleets to embrace the fuel-economy advantages of these formulas?

Engine oils have the ability to impact fleet asset-life, uptime and cost per mile. As such, fleet managers are cautious about making changes to their preventative maintenance program. If we look at the example of OEMs and fleets transitioning from SAE 15W-40 to 10W-30, all OEMs factory filled HD engines with SAE 10W-30 five years ago, or longer. We estimate over 45% of the heavy-duty engines on the road today were factory filled with SAE 10W-30, yet this viscosity grade only represents about 14% of heavy duty engine oil consumed in the market.

Detroit Diesel approves the use of API FA-4 for HD engines from 2010 onwards, and Cummins approves API FA-4 for HD engines from 2017. By our estimate, 25% of the HD engines on the road are approved for API FA-4 use. However, very few fleets have 100% of their trucks with 2010+ Detroit Diesel engines, and/or 2017+ Cummins engines. Most fleets want a one oil solution, which means they typically choose the oil approved for use in all their trucks: API CK-4. Just as Chevron leads the growth of SAE 10W-30, so we are looking at ways to help fleet managers realize the benefits of API FA-4.

Do you think most fleets understand the differences between the two categories? Is more outreach required?

The industry did a decent job communicating that API FA-4 was not backward compatible. Many fleets don't fully understand which engines are API FA-4 approved, and what the benefits are. At Chevron we have spent time bringing fleet managers insights to these questions.

Chevron also certifies lubricants as "ISOCLEAN". What does this designation certify, and what does it deliver?

Particle contamination is the number one cause of lubricant related failures. Any type of contamination in the lubricant will cause wear on components as well as prevent the lubricant from performing as originally designed. Many OEM's understand the damage contamination can have on their components and will set cleanliness specifications for the lubricant used in their equipment. The challenge is many end users only focus on the lubricant performance specifications and not the cleanliness specifications.

To help customers combat the negative effects of contamination in new lubricants, Chevron has developed the ISOCLEAN Certified Lubricants Program. This program enables Chevron to certify the cleanliness level of new lubricants delivered to end customers helping them meet OEM lubricant ISO Cleanliness codes. Chevron provides an ISOCLEAN Certificate of Analysis on every delivery of Chevron Lubricants that have been ISOCLEAN Certified. This enables end users to have the proof and confidence that every lubricant meets both the OEM performance specification as well the cleanliness specification. The customers benefit from increased component life, which leads to increased equipment performance and uptime.

***James Booth**, is the Commercial Sector Manager, Lubricants, North America, at Chevron*

Automatic Applications

AUTOMATIC LUBRICATION SYSTEMS SHARE A LOT IN COMMON, BUT THERE ARE SOME KEY DIFFERENCES

BY HARRY RUDOLFS

PHOTO COURTESY OF FLO COMPONENTS

Proper lubrication is essential to the life and performance of all rolling stock. Early pioneers knew this and hung grease buckets over the rear axles of their covered wagons. And as long as 3,000 years ago, Egyptians used a mixture derived from olive oil to lubricate chariot spindles.

With the widespread introduction of the steam locomotive, greasing became a full-time vocation for maintenance crews. So it's not surprising that the first mechanical systems used to perform the task were developed for trains over 100 years ago.

But automatic lubrication systems (ALS) have been slow to catch on in the trucking sector, especially in North America.

Jan Eisses, now the president of Lubecore International, was an intern automotive engineer back in 1988, and recalls lying on his back with a grease gun at a garage in Smithville, Ont. "I was familiar with ALS in Holland, where 90% of the new trucks had them. So I couldn't understand why they were so rare here. Besides, you need three hands to grease a truck," he says.

A widely cited study suggests that 53% of bearing failures are due to a lack of lubrication. And as equipment continues to become more specialized, automatic lubrication systems are increasingly becoming a necessity rather than an option. This is especially true in the waste management sector, where equipment has a plethora of moving parts and is subject to severe duty cycles. A municipal refuse truck, with automated side-lifting arms, can complete 2,000 operations each shift.

But there are still some truck and fleet owners who seem to prefer applying the grease themselves. "If someone hasn't felt the pain of a costly overhaul or an expensive bearing failure, it's hard to sell them insurance," according to Mike Deckert, vice-president of Flo Components in Mississauga, Ont.

But the fleets that have installed ALS have done so because they work. Kevin Garretson, fleet manager of Peter Hodge Transport of Milton, Ont., has

seen first-hand that auto greasers are cost-effective. His company installed systems on all its equipment, including tankers and tri-axle dump trailers. "A few trucks didn't have them and at 20,000-mile [32,000-km] intervals we noticed some kingpin, tie rod and drag link wear that would eventually become problems."

Did you know that a steerable axle trailer with six or seven axles, might have more than 60 lubrication points? And that a vac truck also has about 60 points? Without ALS, the technician servicing these trucks could easily miss a few.

The fundamentals

ALS units supply lubricants to multiple service points from a pump and reservoir located in a centralized location. Most important, they deliver precise, measured amounts of lubricant to suspension and brake parts while the vehicle is in motion -- something else that a technician can't do.

One can get an aftermarket ALS on any truck from a Class 3 curbside van to a two-story off-road behemoth. The delivery systems and configurations may vary, but every auto lube system has the same basic components: controller/timer, pump/reservoir, supply lines, metering valves and feeder lines.

Simply put, the controller activates the system and initiates the lubrication cycle, while the pump/reservoir stores and provides the lubricant to the system. The supply line carries the lubricant to the metering valves, which measure and dispense the product into the feeder lines and, in turn, supply the lubricant to the specific components.

Auto greasers can use either electric or pneumatic power sources. Electric timers initiate the cycle based on preset intervals, applying lubricant after each hour or two of running time. But trailer greasing systems may also be mechanically operated, using brake application counters to dispense a shot of lube to the slack adjusters and brake cams after every 20 or so brake applications.

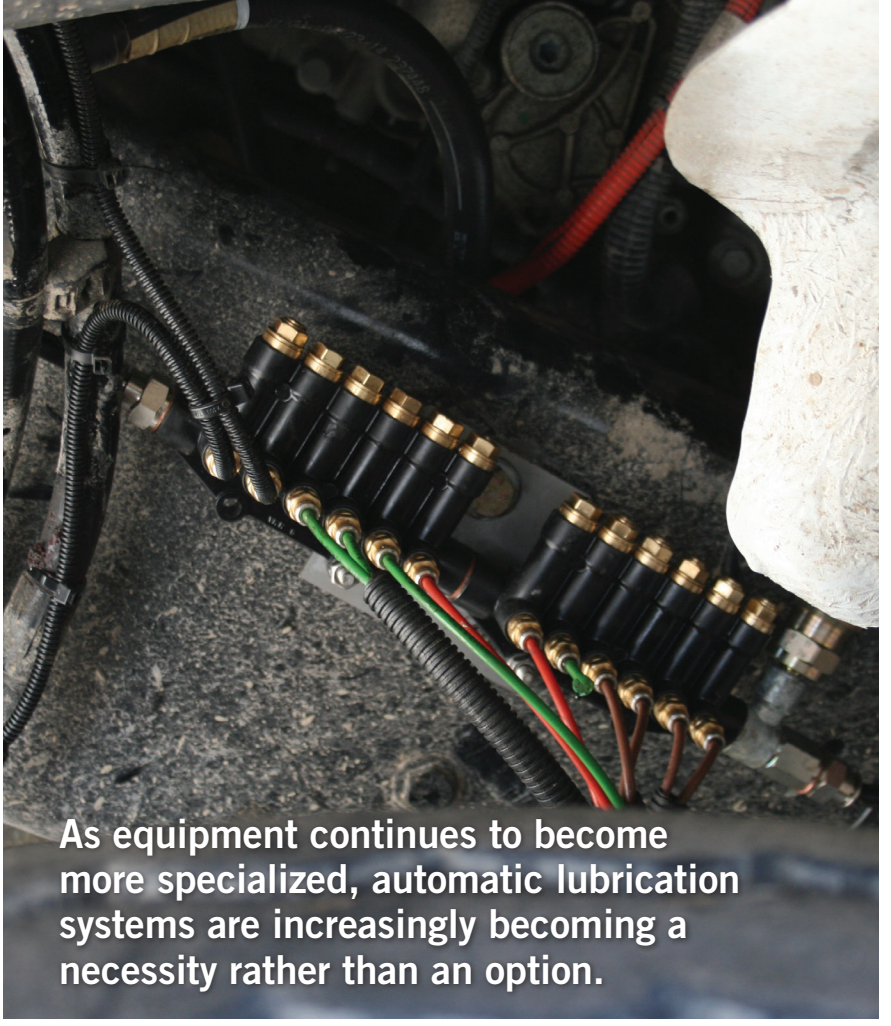


PHOTO COURTESY OF FLO COMPONENTS

As equipment continues to become more specialized, automatic lubrication systems are increasingly becoming a necessity rather than an option.

Parallel or progressive

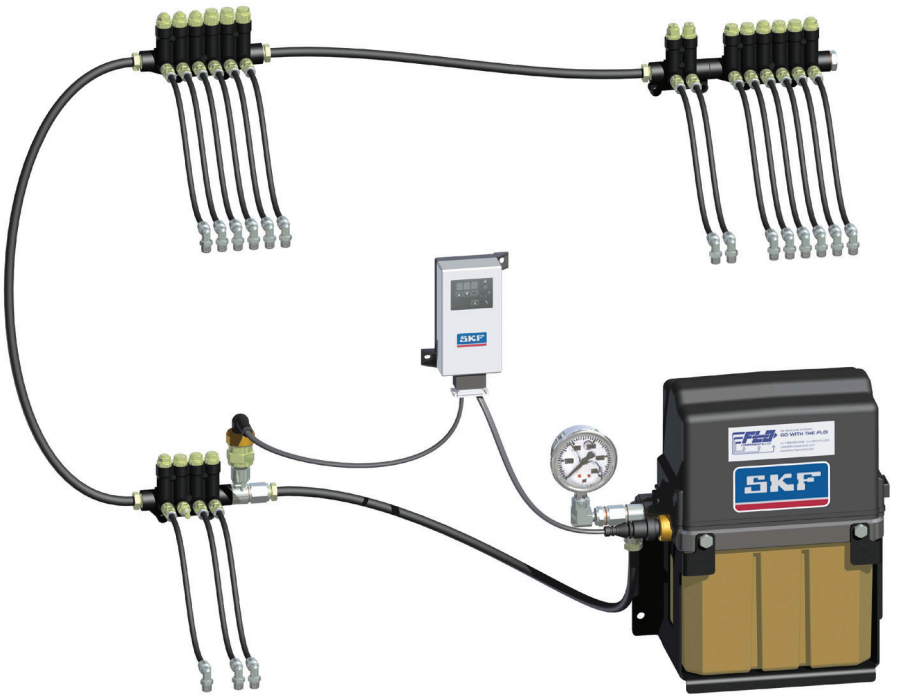
Auto greasing systems come in two basic types—parallel and progressive. According to Deckert, "The parallel system works like the brake system on the car, creating a hydraulic pressure that pumps grease through the supply lines, but the progressive is more like a waterfall -- the lubricant is dispensed through one-way valves."

The parallel system can further be divided into multi-line and single-line styles. The multi-line type pumps the product directly from the reservoir into a number of lines that service the grease points. The single-line option, on the other hand, is effective when a greater number of lubrication points have to be reached. A single main line from the reservoir feeds into branches of injectors contained in manifold blocks. Each injector services one application point and can be adjusted according to the amount of lubricant required at that point. The injectors operate simultaneously but are independent of each other.

The progressive system is slightly more complicated but arguably more foolproof. This is a two-step operation that first delivers the lubricant to a primary metering valve that, in turn, redirects the product to secondary valves, allowing for progressive metering to each application point. Another difference is that the parallel system experiences a pressure drop between each application, while the progressive system remains charged by using one-way check valves.

It means the parallel system will continue to deliver lubricant to a feeder line even if a component is not accepting it, while the progressive system will shut itself off if that happens, possibly saving an expensive repair should a bearing run dry. On most ALS equipment, a visual or audio warning will let the operator know if there is a malfunction and the system is not operating.

Deckert thinks that the jury is still out which system is superior. "I've had technicians in the same training seminar arguing about which is better. It all depends upon your requirements and what you want for a final outcome," he says.



PHOTOS COURTESY OF FLO COMPONENTS

"Some of our trucks might be out for two or three weeks at a time, so it's nice to know they're getting lubricated during that time. We haven't really had any problem with them. Broken lines sometimes, that's all.

– Peter Hodge, Transport's Garretson

Eisses agrees that each method has its pros and cons. "The multi-line (parallel system) is the cheapest because there are no manifold blocks," he said. "We can install one on a tandem trailer in less than an hour."

On the other hand, the single-line (parallel system) is more accommodating when there are multiple grease points. Eisses explains: "The municipal world runs on single line. It has more flexibility because each manifold block has four to 18 outlets. Municipal equipment is by tender, so they could be getting a Mack or a Freightliner or an International, and somebody else is bidding on the box. So you don't know how many grease points you're going to have until the tender is awarded. A municipal garbage truck with side-loading arms typically has 60 or so grease points, or they may [have] five more or five less. So you can just add or subtract injectors and/or put plugs in. But with a progressive system, to add more points you'd have to redesign the whole system."

Eisses goes on to provide an example of a progressive system that he designed for roll-off trucks. The client was concerned about bins becoming hung up on the rails while they were being tipped. Apparently, this can be a chronic problem with roll-offs. A hung-up bin can be stuck on a dirty or corroded rail and damage the winch when it falls, and could be a potential safety hazard to anyone standing on the ground.

To solve this problem, Lubecore drilled and tapped seven holes in the top of each of the rail beds, as well as a small drainage hole at the end of each rail — creating 49 grease points in total for each truck. The customer is a heavy equipment rental dealer with branches throughout North America, so they wanted all their units to run on standard EP 2 grease. Eisses selected a progressive system for this order, since the pressurized system will deliver the heavier grease to moving parts, even in extreme cold conditions.

Hooklifts, which pick up and drop containers flat on the ground, have different lubrication needs than roll-offs. according to Eisses. On a recent order, Lubecore installed a multi-line system to 27 grease points to a fleet in Mississauga. In this case, the customer also went with the heavier EP 2 grease, but it's not uncommon these days for clients to prefer the lighter EP 0 grease, especially in northern climes.

Deckert adds that installing auto greasers on trucks doesn't mean that the devices are maintenance-free. "What we're doing is taking the grease gun out of the technician's hand and giving him some wrenches and a flashlight," he said. "And there is still handheld greasing to be done when the truck arrives back in the shop."

For the most part, ALS users understand that the units pay for themselves in a few years. Peter Hodge Transport's Garretson is a believer. "Some of our trucks might be out for two or three weeks at a time, so it's nice to know they're getting lubricated during that time. We haven't really had any problem with them. Broken lines sometimes, that's all. We get them installed when we buy the truck new and five years later, when we sell it, they're still working."

Maintenance Best Practices

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Safety First

THREATS TO HEALTH AND SAFETY AREN'T LIMITED TO COLLISIONS

BY ELIZABETH BATE

Trucking can be a dangerous career path. On-the-job injury rates for those in the transportation sector are double the numbers experienced by the general workforce – even after accounting for collisions, according to WorkSafeBC.

Workplace inspections over a five-year period in B.C. show that 75% of inspected trucking industry workplaces received some kind of notice, warning or violation. And over the same five-year period, the provincial insurer processed more than 4,000 claims for sprains, strains and fractures.

Whether on the road or in the shop, these seemingly minor incidents -- which add up to big dollars in premiums, lost time, and lost wages – could often be prevented by adopting just a few changes in common behaviors.

Proper lifting techniques tend to be drilled into us from the moment we are hired for our first jobs, for example. But Mark Samber, the health and safety manager for Cervus Equipment shops, says workers on the shop floor often skip recommended procedures in the name of saving time.

Samber says lifting something safely is about changing mindsets; rather than looking to save a few minutes now, the focus should be on saving headaches and lengthy downtime later.

WorkSafeBC has developed posters for fleets, drivers and shops, offering quick tips and reminders on how to stay safe at work. Although some of it may read like common sense, the advice is often overlooked.

Lifting and bending

The strains and sprains that come from improper lifting and bending may not seem like a big deal, but claims for those injuries alone totaled more than $70 million over a five-year period in B.C. Add lost productivity to that equation and those small mistakes can turn into a big pain in the back.

You know the drill. If you need to pick something off the ground, shelf or counter below you, always bend your

knees instead of bending at the waist, which could lead to back injuries. Lift with both hands on either side of the item, too. And if the item is big or heavy, use two people to lift it. Lifting something yourself or lifting more than one item at a time could lead to overexertion or overextension.

Meanwhile, if you remember adults yelling "watch where you're going!" when you were young, you'll know the importance of being able to see in front of you. The advice holds true even when carrying large items. Making sure the path is clear will prevent slips or falls.

When thinking about the threat of a slip or fall, a contact injury might be the first thing that comes to mind. But slips and trips also lead to strains and sprains because the body tends to try to correct its position when put off balance. This is why it's so important to maintain three points of contact when getting in or out of a truck.

Simply jumping off a truck, trailer or any other raised position can cause trouble.

Repetitive strain injuries

But muscle and back injuries don't just result from quick, jerking motions. In fact, long-term muscle injuries can come from not moving at all.

Whether driving in the truck or working under it, employees are susceptible to the injuries that come from repeating the same motions or sitting in the same position for a significant period of time – and the littlest things can make the biggest difference.

WorkSafeBC reminds drivers and mechanics to take items out of their pocket before getting behind the wheel or onto a creeper. While keys may not seem like much, anything that makes someone shift to one side instead of sitting or lying with a straight back could mean an injury over time.

To help keep backs from being rounded for long periods of time, lumbar support is also recommended. If there's no purpose-designed padded accessory available, WorkSafeBC suggests placing a rolled towel behind the lower back.

Regular breaks are recommended, too. Getting up and walking around will help stretch muscles and keep them functioning. Even changing positions by a few degrees once every 20 to 30 minutes will help.

Exercising core muscles in a gym will do even more, helping to improve posture and maintaining a healthy back.

Whether it's lifting weights in the gym or lifting boxes at work, objects should never be lifted or jerked suddenly, though. That advice is even more important when someone has been sitting, standing or lying in one place for awhile. Sudden jerking or twisting when muscles are stiff could mean injuries.

What goes up could come down

While working at heights or working underneath equipment, ensuring that everything is secure is vital.

Many of the 18 trucking industry workers killed in B.C. from 2013 to 2017 were injured due to something moving when it shouldn't -- an unsecured truck rolling over an unsuspecting driver who had exited the vehicle; an unsecured load of lumber rolling off a flatbed and crushing a worker; a loose jack moving and a truck falling on a technician.

The cautionary tales may be enough to make your blood run cold, but WorkSafe BC says falling objects are a very present concern.

When working on a vehicle, jacks or lifting devices must be properly attached before anyone gets under the truck. Jacks left for too long may become loose and need re-securing.

Proper training in lifting or locking out equipment is important to helping employees avoid those injuries. Samber remembers a lifting injury from a worker who followed the lifting and lockout procedure exactly as it was written. Unfortunately, the procedure had been enhanced, but not written down or passed on through training -- leaving the employee in the lurch when the cab came tumbling down. Luckily, that incident meant just a broken arm. It could have been much worse.

The cautionary tales may be enough to make your blood run cold, but WorkSafe BC says falling objects are a very present concern.

Read carefully

It isn't the only way that misinformation can present a threat.

Most provincial insurers classify workplace incidents based on the injury -- when they classify such incidents at all -- so it's hard to know how many incidents come from something like poorly worded labels. But shop lore is rife with anecdotes of workers accidently taking a sip of old oil because someone stored it in whatever bottle was handy. Properly labeling containers, and ensuring food and beverage containers are not repurposed, can help avoid potentially fatal mistakes like that one.

Reviewing things like approved shop safety policies and workplace safety data sheets should become a regular event for shops, too. Samber says even just a couple of minutes in a weekly staff meeting makes the difference, and reminds workers to keep safety top of mind.

Keeping safety upfront may also help to reduce the number of incidents caused by carelessness -- like kicking a tool box instead of lifting it, or jumping into a pit instead of using the stairs.

Good safety is a habit that needs to be practiced to get it right.

Recruiting More Women Drivers

ADDRESSING THE DRIVER SHORTAGE BY MAKING TRUCKING MORE APPEALING TO FEMALE DRIVERS MAKES SENSE. HERE'S HOW THE INDUSTRY IS TRYING TO MAKE THAT HAPPEN.

BY SONIA STRAFACE

It's one topic the trucking industry can't seem to talk about enough -- the driver shortage and how we are going to fix it before the situation becomes dire.

One common solution posed to the masses has involved hiring more women into the industry, because as statistics tell us, women represent half of Canada's workforce but only 3% of Canada's professional truck drivers.

This is a huge gap that needs fixing, and to some, hiring more women is the ideal solution to heal the driver shortage.

There are a number of programs and best practices that fleets and associations alike are executing to help make equal representation in trucking a reality.

One example is Women Building Futures (WBF). This organization is dedicated to helping prepare women to secure economically prosperous careers in industries where the gender is under-represented. The goal is to help as many women as possible find careers they love, leading to economic freedom, personal confidence, and growth.

"At WBF we train for employment because our mission is economic propensity for women through training and employment," said Megan Bates, manager of industry relations at WBF. "We know there have been barriers for them to get into industries like construction and transportation, and some of that is a lack of education and awareness. So number one, why we exist is to help women become economically stable. From pre-program to first employment with us…the average increase in income is 158%. We are significantly changing lives. We want to make sure women everywhere can be employed in any industry they wish."

Paid training

In 2017, WBF launched a pilot program specifically for Class 1 drivers.

"We pulled together a panel of industry experts to help us build it…We really wanted to create something that was of true value to industry and would include things that would ensure success. So it

took about a year of development until we launched," she said.

The program is an eight-week, tuition-paid training program that helps students enter the commercial transportation industry as a Class 1 professional driver. It is officially endorsed by the Alberta Motor Transport Association (AMTA) and to date has put 20 of its 22 graduates to work in the industry.

"It is a very well-rounded program," added Bates, who said the learning components include industry guest speakers, ridealongs, scale visits, lessons on how to talk to your mechanic, driver math, fitness and nutrition, as well as 56 hours of in-truck driver training.

"The goal is to really have them understand the industry through and through," she said.

Caron Transportation is one of the carriers that has benefited from the WBF program. In fact, the fleet helped the organization shape the program into what it is today.

"Transportation as a whole industry…there's no driver pool," said Mikayla Kesseler, the HR generalist for Caron. "Nobody is getting into the industry. People don't know it's a great industry to be a part of. So when WBF came to us, we thought this is great, women are an untapped market in trucking.

"The program has been really good for us. Seven of the 22 graduates of the program currently work for us. And we have two more trying to work for us. So by the end of 2018 we should have upwards of 10 women from the program working for us," she said. "The program really prepares women for entry into this industry. They learn all facets of trucking."

Kesseler said WBF's efforts with this program has opened a lot of eyes in the trucking community that has exhausted traditional hiring routes.

"They've really spearheaded the market and said that it's OK to get into those untapped markets, like women, people with disabilities, etc.… They are saying it's OK to our industry leaders. I think it really opened the doors and showed how accepting our current pool of employees are. We were so scared that drivers weren't going to accept it and they are so supportive of it. My drivers say, 'Where were these programs 30 years ago?' Seeing how supportive our current drivers are of this is super enlightening."

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– Shelley Uvanile-Hesch, CEO of the Women's Trucking Federation of Canada

Visible promotion

Shelley Uvanile-Hesch, the CEO of the Women's Trucking Federation of Canada, has another tactic for recruiting more women into trucking. It comes in the form of an eye-catching purple and white truck.

Earlier this year, Uvanile-Hesch revealed her new ride, a Western Star 5700 XE wrapped with photos of the women that are a part of her organization.

"The truck is a big eye-catcher," she said. "I've been hitting a lot of truck shows and job fairs, especially this summer. What we're trying to do with the truck is promote dialogue for women in the transportation industry."

Uvanile-Hesch said that the federation's Facebook page works as a dual program for recruiting and retaining drivers.

"We find a lot of women reach out to us through our Facebook page asking us how they can get started in the industry," she said. "They ask us for training schools, carriers, recommendations…for new women, they are really focused on company culture and safe equipment."

When it comes to retention, Uvanile-Hesch said that the community WTFC has on its Facebook group is unrivalled.

"We have a mentors group where we all share ideas and help guide others," she said. "It's such an open atmosphere there. We answer any and all questions posed to us truthfully and realistically. Because we know not all recruiters do this with their employees.

"Our major goal is to promote and encourage women into the industry. It doesn't matter whether they're in the office, under the hood, or behind the wheel. We feel strongly that the industry would benefit with more women in it, in all the roles that are there. We believe working and socializing together at all levels will make us stronger as an industry. We need to start working together, instead of against each other. We can all learn from everyone."

Making connections

According to Jane Jazrawy, co-founder and CEO of CarriersEdge -- which administers the Best Fleets to Drive For contest -- when it comes to promoting more women in the workplace, many carriers are turning to associations for guidance. For example, she has noticed that more and more carriers are attending the Trucking HR Canada Women with Drive conference to see how they tap into this market.

"They're also looking at causes," she said. "Such as wrapped trucks for breast cancer. As well as ads."

Jazrawy said ads that depict women in trucking-related roles such as drivers and mechanics are crucial for fleets looking to recruit more women.

"We find ads that target women are becoming more used and they are a powerful method in the recruitment of women," she said. "When women see themselves in that role, they believe they can succeed."

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