

Bio-based Lubricants: An Environmental Solution for Fleets

Industry professionals can ensure they have a positive impact on the environments in which their clientele live and work on a daily basis when they select bio-based hydraulic fluids, greases and other lubricants.

The waste industry and municipal leaders continue to be pacesetters in regards to environmental stewardship, with many organizations having converted some or all of their fleets to clean burning natural gas engine technologies and hybrid-electric vehicles. The net result is a significantly reduced environmental impact from these power units due to a capital equipment investment proven to lower carbon and NO_x emissions. With fleets operating in both urban and rural settings, the health and wellbeing benefits to citizens in the operating areas of these progressive fleets are notable indeed.

Refuse fleets are known for operating in a number of different areas and terrains, including near waterways and certainly over soil. The potential damage to the environment as a result of an inadvertent lubricant leak, which could potentially im-



impact both water and soil quality, suggests that responsible equipment owners/operators consider additional pro-environmental

steps in regard to their overall maintenance program.

A lubrication strategy to minimize the risks associated with potential environmental exposure is to integrate the use of readily biodegradable, minimally toxic, non-bioaccumulative lubricants into fleet operations. Grueling stop and go driving, intermittent highway driving, and even some off-road driving encountered in rural areas is a daily occurrence that is tough on equipment and componentry and the potential for lubricant leaks is high, which makes the advantages of integrating the use of high performing bio-based lubricants quite compelling.

POTENTIAL DAMAGE

Hydraulic systems have a particularly high risk of potential physical damage due to the exposed hoses of the system, and the likelihood of a busted hose resulting in a hydraulic oil spill is extremely high. Bearings, U-joints and other grease-lubricated

Stoltz Redesigns, Strengthens Heavy-Duty Site Spreader

Stoltz Mfg., LLC has redesigned its rugged, versatile 36,287 kg GVWR floater trailer for the 24.5 t pull-type soil stabilization spreader model SS-2518, making it 40% stronger than the previous model.

Featuring a fully welded structural tubular steel frame, the Stoltz floater trailer also has a robust walking beam suspension and 710/50-30.5 floatation tires. Each pneumatically loadable SS-2518 is equipped with a self-contained hydraulic system powered by a tractor's power take off (PTO). It can also be used with vehicles without a PTO using the optional auxiliary engine.

The SS-2518 is a convenient and cost-effective alternative to a truck mounted cement spreader, said Stoltz president Bernard Hershberger. "Our pull-type spreaders give customers with off-road site work the ability to use scraper tractors they already have in their fleet as the prime mover, saving both time and money."

Another important advantage of the redesigned SS-2518 spreader is that it can go where trucks often cannot, added Mr. Hershberger. "Large floatation tires on the



spreader and powerful tractors work well in soft conditions."

Typical cement spreader applications include cold in-place recycling, full depth reclamation and soil stabilization projects used in road building, public works, airport projects, construction sites and remote construction locations. Spreaders can disperse all dry binding agents such as Portland cement, quicklime, fly ash and bentonite.

Like the 24.5 t truck-mounted spreader, the SS-2518 version is computer controlled with the Stoltz Controller, which continuously monitors vehicle ground speed and

automatically adjusts the spreader's output to maintain a constant spread rate, up to an industry-leading 21.7 kgf/m² at 3.2 km/h. The pull-type Stoltz Site Spreader is also available in a 13.6 t model SS-1516.

Headquartered in Morgantown, Pennsylvania, Stoltz has been producing lime spreaders for agricultural markets since 1945 and soil stabilization binding agent application equipment since 1995. Sold under the Site Spreader® brand name, cement spreaders are available in both truck mounted and pull-type configurations.

Source: Stoltz Mfg., LLC

applications also have the potential of releasing lubricant into the environment.

The monetary ramifications of an unintentional lubricant spill may include expensive cleanup and remediation costs due to environmental damage, not to mention the negative impact a spill could have on an organization's brand and reputation. A conversion to readily biodegradable, minimally toxic and non-bioaccumulative lubricants is easily done, with no changes to established PM programs, and absolutely no decrease in lubricant performance when used in accordance with manufacturer recommendations. A conversion to bio-based lubricants is a viable alternative available to fleet owners to mitigate the negative impacts resulting from an inadvertent release of conventional petroleum and synthetic lubricants to the environment.

Once the value of converting to biodegradable lubricants that perform in service and also eliminate or minimize



the negative monetary and environmental effects of an unintended release is realized, the process of choosing a viable option can be intimidating due to a lack of insight into the proper selection for these types of lubricants.

By partnering with a reputable bio-based lubricants supplier that has a proven track record of supplying high performing products, industry professionals can be sure

they are choosing lubricants that protect their costly capital equipment investments, while at the same time expanding their already significant environmental accomplishments. It is time to make the easy transition to bio-based lubricants and eliminate the risks completely.

Source: BioBlend Renewable Resources, Crevier Lubricants Inc.

 booth 1721

McLaren Industries Expands Popular Nu-Air Solid Cushion Tires to Include Backhoes

Backhoe owners and operators can finally experience the unparalleled durability, comfort and traction of McLaren's Nu-Air solid cushion tires – now for both front and rear backhoe tires.

Two Nu-Air versions are available for backhoes. The Dirt Terrain (DT) tire excels in off-road applications where aggressive traction and high stability are important. Their deep tread lugs ensure a solid grip on sand, rocks or deep mud. The All Terrain (AT) tire is a good option for mixed-purpose vehicles. The zigzag tread pattern provides a smoother ride with less wear on asphalt, concrete and other hard surfaces, yet still delivers good traction when going off road.

McLaren already manufactured backhoe front tires, and their latest offerings cover the larger rear tires. Backhoes can now be completely fitted with the Nu-Air series tires, which utilize 3 layers of unique rubber compounds and multiple shock-absorbing relief holes to create a smooth ride and unrivaled durability. Flat-proof

technology eliminates the need for tire protection, while the extra weight of the tires lowers the backhoe's center of gravity and provides crucial stability on harsh terrain.

With more than a decade of research and development, this innovative product integrates the strength of a solid tire with the smooth, cushioned ride of a pneumatic tire. Featuring a lower cost per hour, the solid cushion Nu-Air tire series has become widely known as the economically smart alternative to foam-filled or conventional pneumatic tires.

"McLaren's solid cushion tires have become hugely popular among owners and operators of skid steer loaders, telehandlers, wheel loaders and forklifts, so it was only natural to add backhoe tires in the mix," said George Zafirov, marketing manager for McLaren Industries.



"It makes practical sense, too, given the typical rugged, unforgiving work environment backhoes experience on a regular basis. For instance, they don't use an axle-mounted suspension and are vulnerable to vibrations from the ground. But because our solid cushion tires lower the center of gravity and reduce equipment bouncing, backhoe safety and performance are significantly improved. Plus, with zero chance to get a flat, Nu-Air Tires are the preferred choice for safely increasing productivity."

Source: McLaren Industries, Inc.