

The biggest lube problems

Automatic systems can solve many of the issues related to manual lubrication methods.

BY BILL ROEBUCK

The biggest problems regarding industrial lubrication were identified in a recent interview with Mike Deckert, vice-president at Flo Components Ltd., Mississauga, ON, an automatic greasing systems specialist and a supplier of lubrication solutions to major manufacturers in Ontario.

Deckert, a member of the Society of Tribologists and Lubrication Engineers (STLE) who has taught part-time at the Lubrication School at Mohawk College in Hamilton, ON, for the past 15 years, has witnessed an increase in the number of 'lubricators' employed by forward-thinking companies, from steel mills to food plants to large aggregates firms. Despite this, he says, many companies don't give lubrication the respect it deserves.

According to Deckert, lack of knowledge about lubrication, lack of knowledge about lubricants, and a lack of concern among companies about the importance of lubrication issues are the top three problems with industrial lubrication today.

"In North America, lubrication is like a necessary evil," he says. For example, in Europe, automatic lubrication systems are much more accepted than here. Deckert estimates 85% of lubrication systems in use in North America are still manual.

He hears about concerns that automatic systems will put people out of work, but says that isn't the case. "It doesn't replace somebody, it just replaces the grease gun." Automatic systems solve the problem with manual methods, for example, of using too much grease in bearings, and the uneven and irregular application of the correct amount of grease. This can result in early bearing failures.

"With manual methods, you get peaks and valleys of lubricant in a bearing. Manual lubrication can mean feast or famine conditions, especially when lubrication is done only 'when there's time'. As soon as there's a void, heat builds up and problems start.

"Automatic systems put in smaller, measured amounts of lubricant at frequent intervals while the equipment is operating, maintaining the correct amount of grease in bearings at all times. As well, contamination is constantly being moved out."

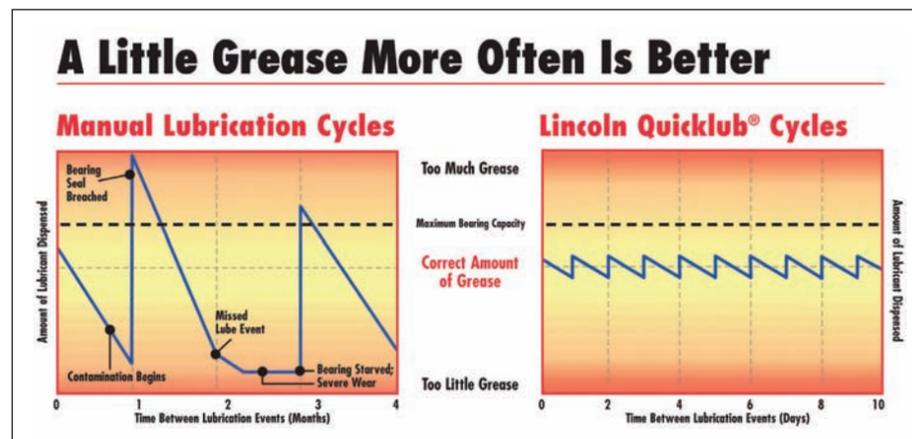
However, there is a disadvantage to an automatic system, Deckert points out. "People think that it looks after itself. But no, it's just another tool. Somebody still has to check the lines and look for leaks. It's not a total solution. Someone needs to take ownership of the system."

The lack of knowledge about lubricant products, and oil and grease compatibility in particular, is another major problem Deckert sees. "If incompatible lubricants are used, you can get plugged lines, sticking metering valves, and so on. These problems can shut down a whole series system. And in a parallel setup, the system will work around the problem until it's too late."

Lubrication is an afterthought in many companies, Deckert has noted. "They don't recognize the significance lubrication plays. Even in some schools, it doesn't get the attention it deserves. For example, a millwright training program might only discuss lubrication for one day, and that generally is about using a grease gun and grease fittings. Lubrication typically isn't given relevance."

Deckert suggests that employers should talk to government officials responsible for skills training and apprenticeships to encourage better training in lubrication.

Suppliers can help companies justify the cost of automatic systems by showing the return



on investment, through reduced downtime and energy savings, he notes.

Deckert cites a study that showed improper

lubrication accounted for 53% of all bearing failures for a major component manufacturer.

The majority of failures were determined to

be caused by contamination of bushings by dust, dirt and moisture, inadequate amounts of lubricant applied to bearings, or over-lubrication of key pivot points.

Direct costs from inadequate lubrication include replacement bearings, labour to repair or replace bearings, and unscheduled downtime. Indirect costs include work safety and housekeeping issues, wasted lube, environmental issues, and higher labour costs related to inefficient manual lubrication practices.

"An automatic lubrication system helps eliminate these unplanned and unnecessary expenses," says Deckert. **IL**

Bill Roebuck is the editor of Industrial Lubrication. For further information, visit flocomponents.com. Reader Service Card No. 426