

**It's obvious that lubricants can create safety challenges in an industrial environment, and the best way to ward off potential injury is to post clear-cut instructions regarding their usage—as well as the reasons for the rules.**


**C**an lubrication be a safety issue? Sure, because the right lubricant and the correct amount of lubrication in your machinery must be carefully monitored. If a machine is not properly lubricated, it can lead to catastrophic failure of the machine which can, in fact, lead to all sorts of unpleasant results, including such things as parts and pieces flying off of the machine. This is, of course, an extreme case, but it is also an extreme hazard. Another safety issue relating to lubricants is the excess lubrication that is sometimes spilled during the process of filling the machine. Lubricating fluids, whether they be liquid or grease, are by their very nature a slippery substance and can not only cause a falling hazard, but if they get on the operator's hands or contaminate the parts or cutters it can lead to serious injury. Another safety issue to consider is that many of the older hobbing and shaping equipment still being used today allowed for used lubricating fluid to drain into the coolant. This did not seem to be much of a problem as long as our coolants were the older oil-based fluids, but these days synthetic lubricants—whether they are oil- or water-based—can be quickly contaminated by the lubricating fluids. This can lead to various health hazards, as well as a deterioration of surface finish and quicker hob wear.

Now, how do we combat these problems? First and foremost we should have a formal preventative maintenance program in place that establishes a checking and filling procedure for all lubrication

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requirements on all of our machines. It is also a good idea for the procedure to keep track of the amount of lubrication used at each filling. This will establish a “normal usage amount” and point out any unusual requirements. Anything that either exceeds the norm, or if the requirement lessens, should call for immediate attention. The procedure must also allow for the cleanup of spills caused by carelessness or overfilling. This is a real problem that I see in many shops, as the machine operator is often the one adding the lubricant—and their priority is production, not cleaning up oil spills. We need to make sure that the procedure specifies that any and all oil spills must be taken care of immediately.

We also must establish a procedure to require that the machine coolant be checked at frequent intervals for contamination from lubricating oils, and flushed and cleaned if necessary. Of course, just establishing these procedures is only part of the solution. If the procedures aren't actually practiced, then it's just a waste of time and effort. It all boils down to the old communication problem: When we just post a safety procedure and fail to communicate the reasons for it, then we're just asking for it to be ignored. We must be sure that everyone involved understands the reasons for the procedures. How we communicate this urgency will have to be the subject of a future column, so stay tuned.

Earlier this month I had the occasion to meet with some interesting people. They were representatives of a company called International Management Systems Marketing. This company offers help in establishing your company as a registered member of the International Standards. What interested me the most is that they have a program called “Managing the Risks through OHSAS 18001.” This is an international standard that works on the same principal as the ISO standards ISO9001:2000 and ISO14001. Insurance companies recognize the standard as a means of reducing risk and, hence, premiums. I would recommend that you take the time to look into this international standard as a possible way of improving your company's safety program. 

### ABOUT THE AUTHOR:

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