

It's a given that sharp tools can be dangerous, but dull tooling can cause injuries as well. Keeping edges sharp—and operators protected—is central to workplace safety.

I have to admit it, I'm a Food Channel junkie. The reason I bring this up is that the other day, while I was watching TV, I saw an episode concerning knife sharpening which had a graphic stating that dull knives are the leading cause of accidents in the kitchen. This reminded me of my column for this month's issue, which contains a feature on cutting tools. Of course, dull cutting tools are a leading cause of accidents in the shop. In previous columns I've discussed the inherent safety issues concerning sharp cutting tools, so I thought that it was time that we discussed dull tools. Not only do dull cutting tools contribute mightily to accidents, but they are also a leading cause of scrap, which we all strive to eliminate. I have actually seen a hob explode while in use on a machine due to the hob being extremely dull. This failure caused some very serious injuries to the operator, as well as to some fellow workers who happened to be in the path of the flying debris. It's often difficult to take the time to send a hob or cutter for sharpening when it's the only tool available, so we tend to try to get just a few more parts out of it to complete the order: This is a recipe for disaster, so please don't do it. We all need to consider the safety of our employees, and even if it means the order will be delayed, have the hob or cutter sharpened as soon as it is needed.


While I am on this topic, if you have your hobs sharpened outside, make sure that they are being sharpened on a hob

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sharpening machine rather than a tool & cutter grinder. It truly isn't possible to get all of the configurations needed for a hob correct on a tool & cutter sharpener. You would be amazed by the number of hobbing machines that can be “fixed” simply by having the hobs sharpened correctly on a hob sharpening machine.

It really is important that we maintain our cutting tools in order to ensure safe operations. A good “rule of thumb” is to have your cutters sharpened when the wear on the tool reaches .015” or it no longer produces good parts. Many of my customers request that we sharpen their tools sooner than that and only remove the wear. Often this means just “dusting” the cutting edge. They get consistently good parts and justifiable tool life by this practice. I recommend, from a safety

standpoint, that you establish a tool maintenance program in your shop. You may be surprised by the benefits you will realize.

Another topic in this issue is workholding. In terms of safety, where do I begin? Obviously, if the workholding tooling on your machines fail, major injuries can occur. Even if you are lucky and no one is hurt, there will be damage to the tooling, cutters and, possibly, the machine. We must realize that all workholding tooling have some inherent dangers. It can be anything from not holding the workpiece properly to requiring the operator to engage in uncomfortable contortions when having to load and/or unload the part. It is also usually easy to create pinch points when designing workholding tooling. Of course, automatic load and unload relieves us of many of the hazards associated with the workholding tooling. However, our industry is often involved in short run jobs, which don't lend themselves to this concept. So what can we do? A very important part of your workholding tooling strategy must be properly training your operators. The people running the machines must understand the methods and proper practices involved in loading and unloading parts, and we must do everything possible to eliminate distractions for the operators. As we all know, distractions can cause the most accidents in our shops, so if any of you have suggestions as to how we can eliminate them I would love to hear from you. You'll find my contact information listed below. 

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