

## Samuilt Folow



BY CASEY CREAMER

## I have a vertical edger. Do those saws ever need to get hammered?

ost saws need to be hammered at one time or another. This means that every type of saw that I can think of needs to be hammered, at least during the manufacturing process. Even hand saws have to be straightened during the manufacturing process and if you put a kink in one during use, it will certainly need to be straightened again.

Wide band saws generally get benched every time they are sharpened, which, in some mills, is every six hours or so. One difference between wide band saws and inserted tooth circular saws is that the bands will tend to need to be hammered every time they are sharpened, while the circular saws only need to be hammered when they stop performing properly. The reason for this difference is that you can sharpen inserted tooth saws until the bits are ready to be replaced and then change the bits without causing any change to the saw, as long as it is running properly.

When you sharpen a band saw, you grind the cutting face of the tooth, then the gullet surface, and then the back of the next tooth. So you are removing metal from the entire outside edge of the saw. That metal removal affects the tension in the saw in the same way that stretching the rim would. So, after you sharpen it, you now have to put some more tension (stretch) back into the body of the saw. With a circular saw, all you did was remove metal from the replaceable bit, so you haven't changed the tension in the saw with the sharpening process.

When it comes to the small, narrow band saws, like 2" bands and such, it seems that some mills sharpen them when they are dull, while others just treat them as disposable blades and throw them away. I have heard from many who sharpen them that each time you sharpen them, you can count on a little bit shorter run time. My assumption is that they don't perform as well because nobody is tensioning them to compensate for the tension change caused by the metal removal at the rim.

As for edger saws: Yes, they need to be hammered occasionally. Vertical edger saws tend to be under more stress than a horizontal edger blade because they are buried in the cut and have the potential to be set while getting back into the next cut. That can put a pretty severe bend in them. Whether vertical or horizontal, eventually you will replace the shanks, and just like the larger inserted tooth head saws, when you replace the shanks you are stretching the rim. This creates the need to have the body of the saw stretched a little more to compensate for the stretch at the rim.

And then there are the thin kerf guided gang saws with the splined bore that should really be inspected each time they are sharpened to see if they need to be hammered. These saws are also under a lot of stress and need to be straightened and tensioned properly with very close tolerances. Although the floating bore buys them some forgiveness, the fact that they are a relatively thin kerf makes them fairly unforgiving. And the best way to deal with unforgiving saws in a stressful situation is to drastically tighten up the running tolerance on how you put up that saw.

A note for our regular readers: Sawmill forum will now run every other month, rather than monthly. Questions about sawmills and their operation can be sent to Casey Creamer, saw doctor and president of Seneca Saw Works, Inc., PO Box 681, Burdett, NY 14818, (607) 546-5887. You can also reach out by email: casey@ senecasaw.com.