

On a properly tensioned saw on a proper mill, does the saw sometimes take awhile to saw straight after being straightened?

Absolutely not. If it really is a properly tensioned saw on a proper mill, it should saw properly. Of course, we are assuming that properly tensioned saw on a proper mill was sharpened properly and that the saw was manufactured properly so that there are no defects in the centrality of the vee groove and that the teeth were manufactured properly and sharpened properly.

Those are a lot of assumptions. Too many assumptions.

If the saw takes awhile to saw straight, chances are it is heating and actually being helped by the heat, which would mean to me that it was not tensioned properly. If the saw is heating in the body and that helps it to saw better, then there wasn't enough tension (or stretch) in the body of the saw to begin with. On the other hand, if it is heating at the rim and that is making it saw better, then there must have been too much tension in the body. When the rim gets hot, it stretches, which is essentially the same as taking some of the stretch out of the body.

Remember that tension is just the amount of stretch in the body in relation to the rim of the saw. So adding stretch in one is like decreasing the amount of stretch in the other.

We started out by assuming the saw and the mill are properly set up and maintained. What are the chances of that? If all is right with the world, your saw will perform properly from the start. What happens after that will depend on whether or not changes—often subtle changes--have taken place.

If the saw isn't performing properly from the start, it is safe to say that something is wrong somewhere. It could be as simple as the combination of a saw that is shy on tension in the body, with a bearing that has been over greased to the point where it is heating just enough to stretch the center of the saw to make it run properly. There are many situations where two wrongs can conspire to sort of make one right, but the reality is that when things aren't right, they usually don't get better from there. Even if you are lucky enough to have one problem compensate for another problem, sooner or later one of them is going to get the best of the other one and then all you will have to show for it will be some mis-manufactured lumber.

I also hear from sawyers who say the saw ran fine when they first put it on, but after a few hours it started to run poorly. That is almost the same situation as a saw that starts by running poorly and then straightens itself out in a few hours.

The fact in both cases is that something changed if the performance of the saw changed after it sawed for awhile. Certainly, heat in a bearing is the kind of thing that can happen after a couple of hours of run time. And let's not overlook the possibility that after a few hours of sawing the saw hit something in the log that caused it to lose all of the corners on one side of the bits, which would of course cause the saw to run off line quite a bit. Another example would be if your saw, which seems to be sawing okay, is actually taking on a very small amount of heat and after a few hours, that small amount of heat has grown enough to make the saw run poorly. In that case, although it seemed like the saw started out fine, the reality is that if it was taking on any heat, it really wasn't running properly. Instead, it was running just well enough that you didn't notice the problem at first.

The more you learn about how to measure the condition of your saw and your mill in real numbers, the easier it is to spot problems before your load of lumber gets rejected.

Questions about sawmills and their operation should be sent to Forum, The Northern Logger, P.O. Box 69, Old Forge, NY 13420, FAX #315-369-3736.

The author is a saw doctor and president of Seneca Saw Works, Inc., P.O. Box 681, Burdett, NY 14818, tel. (607) 546-5887, email casey@senecasaw.com.