

An Electronic Edge Finder - Simple Mechanical and Relatively Complex Electronic for use on a Mill

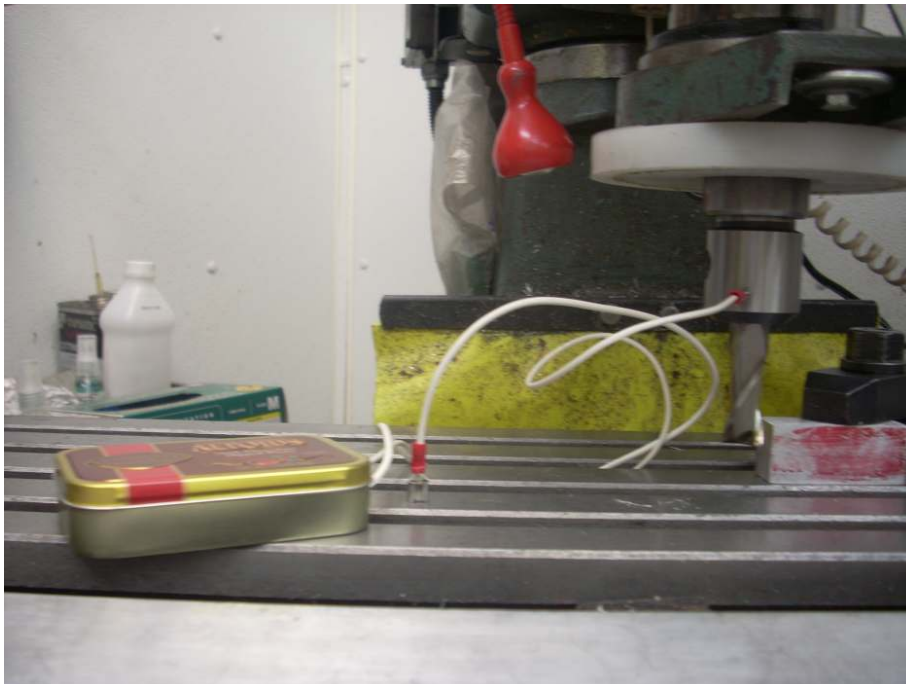
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I have developed an Electronic Edge Finder for use on a lathe:

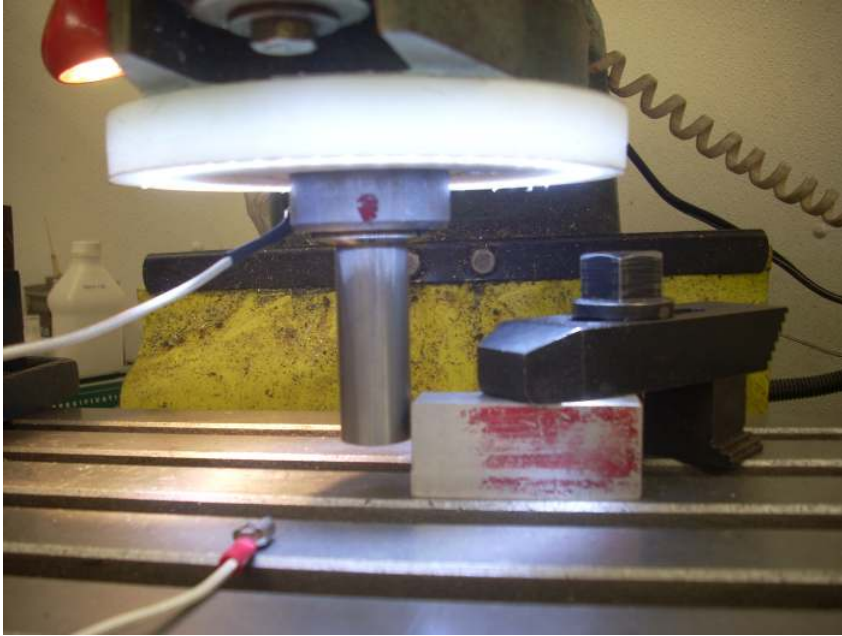
<http://rick.sparber.org/rctf.pdf>

I don't mean to scare off anyone from the electronics. It uses one integrated circuit, one transistor, one diode, 6 resistors, a piezoelectric beeper, and a 9V battery. All parts can be bought at Radio Shack[®]. If you can solder, you can make this circuit. It is more complicated than a simple continuity checker, but it does a lot more too.



This instrument does not work well on a mill fitted with any common cutter. Mill cutters do not present a single point of contact. Instead, the needed contact point rotates. Only when the spindle is in exactly the right angular position do I get the correct point of contact.

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But all is not lost. If I am willing to remove the cutter and substitute a piece of drill rod of known diameter, I get a decent edge finder. A major benefit of this arrangement is that the drill rod is solidly attached to the spindle. No weak, insulating material is in the way.

The cost of the electronics is less than the cost of a commercially made EEF and is at least as accurate. Plus you can use it on your lathe too.

I welcome your comments and questions.

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