

Leveling a hand drill

I like to mount bowl blanks on a screw chuck, but I don't have a drill press. I use a 35-year old B&D hand drill (which, I might add, is still going strong – hand tools used to be made to last). In the beginning, I would drill the hole “by eye”, and I had a couple I could have done better in terms of orientation. Using a square adjacent to the blank helped provide some visual perspective, but I felt that I would be more confident (and more successful) if I knew when the drill bit was vertical.

I figured a bubble level would be a good idea. I tried to find a small, omni-direction type, but came home from the box store with an inexpensive 2-axis version. I glued it on the back of the drill handle with CA ⁽¹⁾ and, presto, I have a drill level (see pic.). When the bubbles are centered, the bit is vertical. Since every drill is different, I'll leave it to you to figure out how to mount the level straight on your drill. In my case, I was lucky enough to have a drill with an area on the back of the handle perpendicular to the bit, so I only had to worry about calibrating one other direction. I did that by just holding the fully open chuck flat on a flat, level surface. That's good enough for this application.

In use, now I just have to make sure that the face of the blank is supported level on the floor or work bench (or whatever part of the blank you want level) before centering the bubbles and making the hole for the screw chuck. Perhaps not as good as a drill press, but much better than guessing.

(1) If you have a plastic drill case, you would be wise to put the line of CA on the drill and spritz the back of the level with the accelerator, because the accelerator can badly damage some plastics.



Always use common sense. Things that work in one situation may not work in another. Follow all Safety Rules. If it feels wrong, it probably is; stop and rethink.

Your Mileage May Vary