

Low cost DIY digital readout for an X-Y-axis table

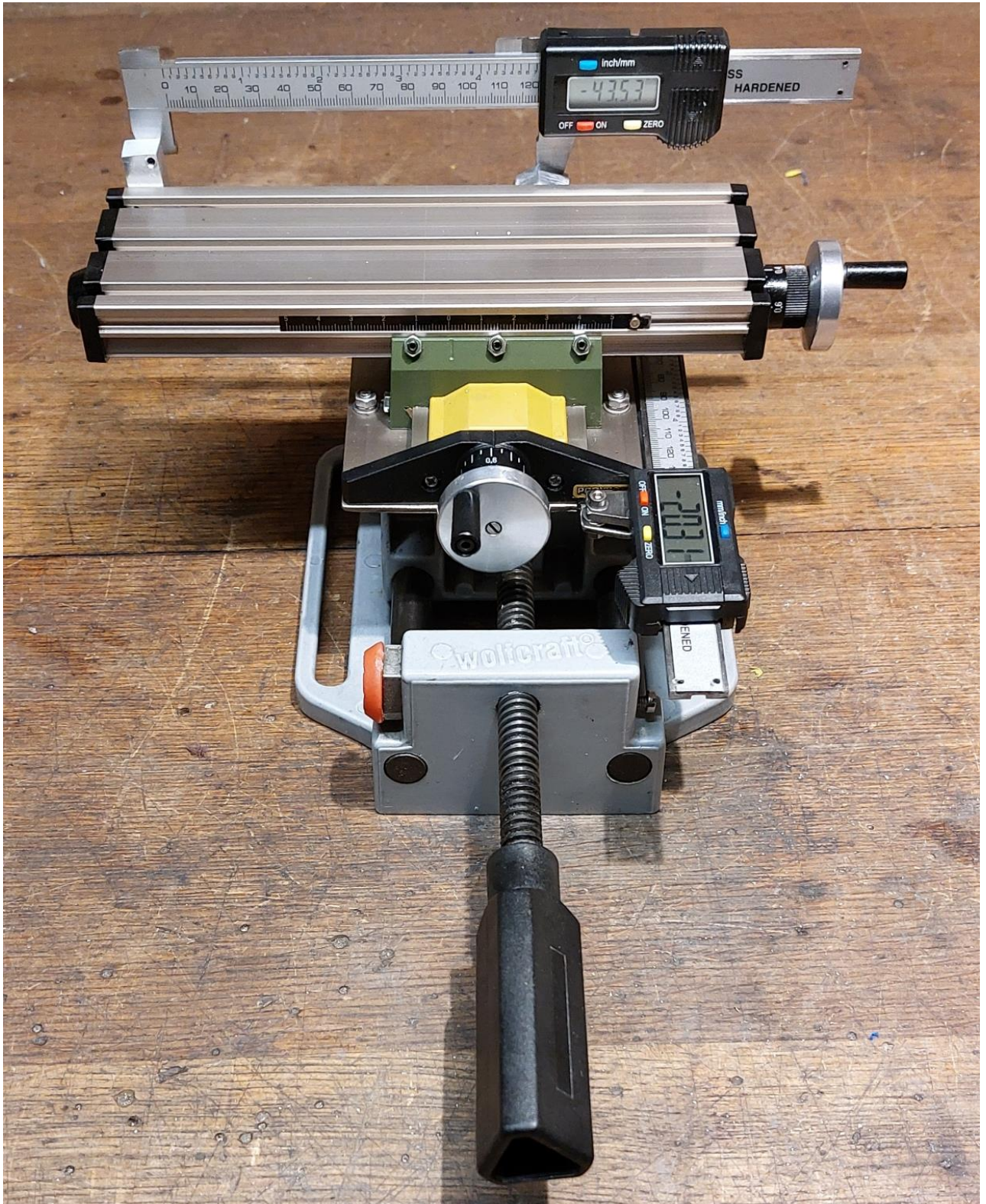
Matthias, DD1US, April 8th 2024

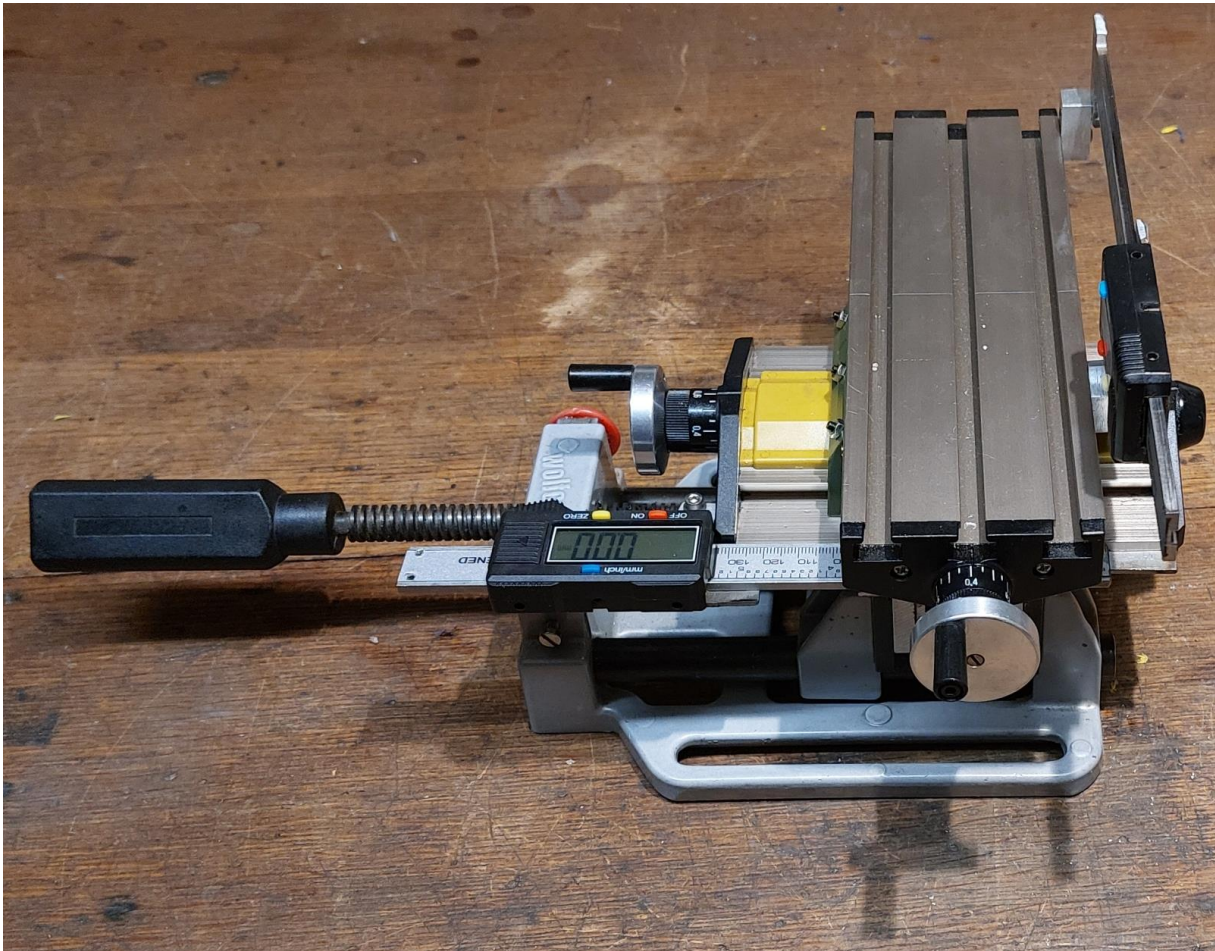
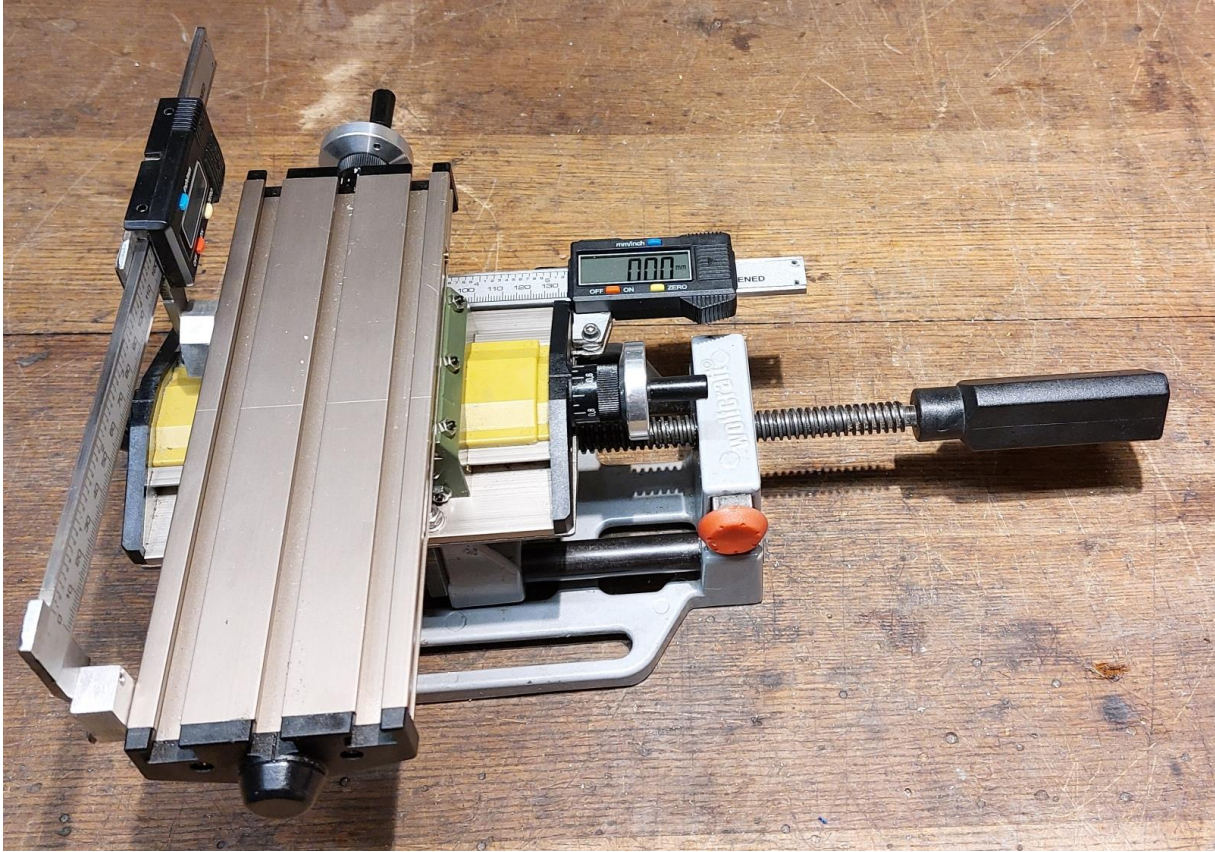
Inspired by a posting from Reginald Beardsley in the “Test Equipment & Construction” group in groups.io I added a digital readout (DRO) to my X-Y-axis table. This table is primary used with my drill press, which already features a DRO for the Z-axis. This setup is mostly for drilling PCBs and enclosure holes for switches, knobs, front panels etc.

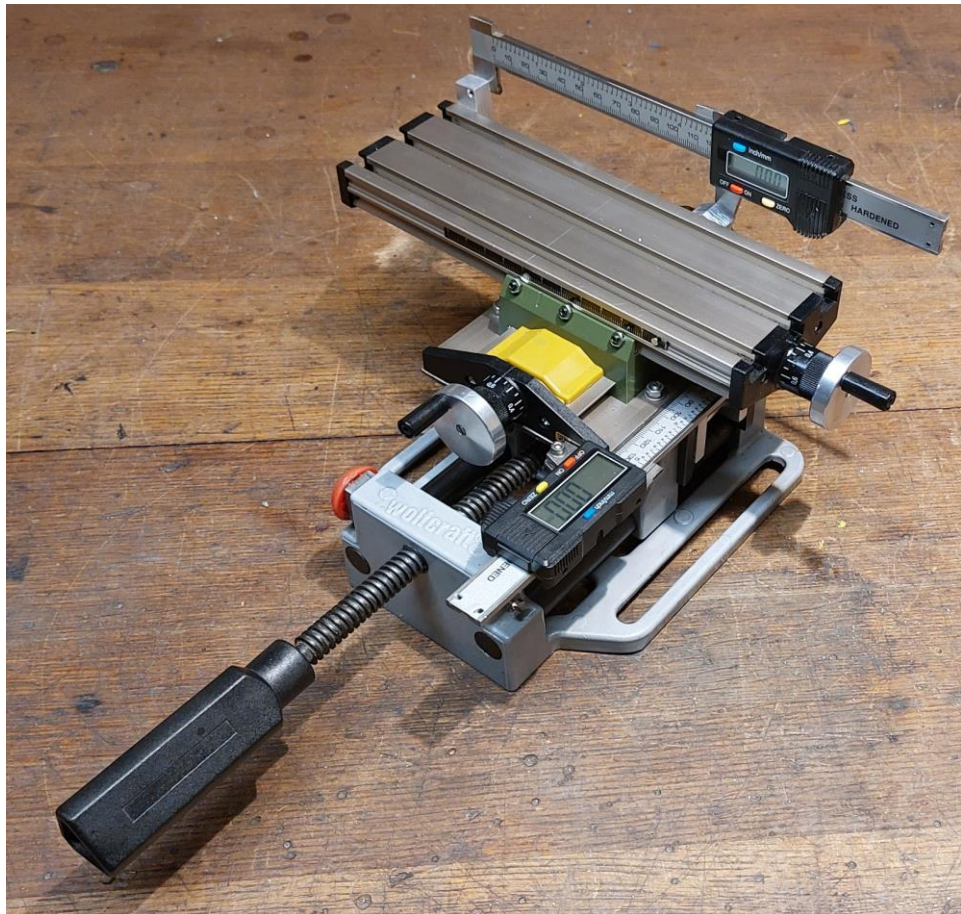
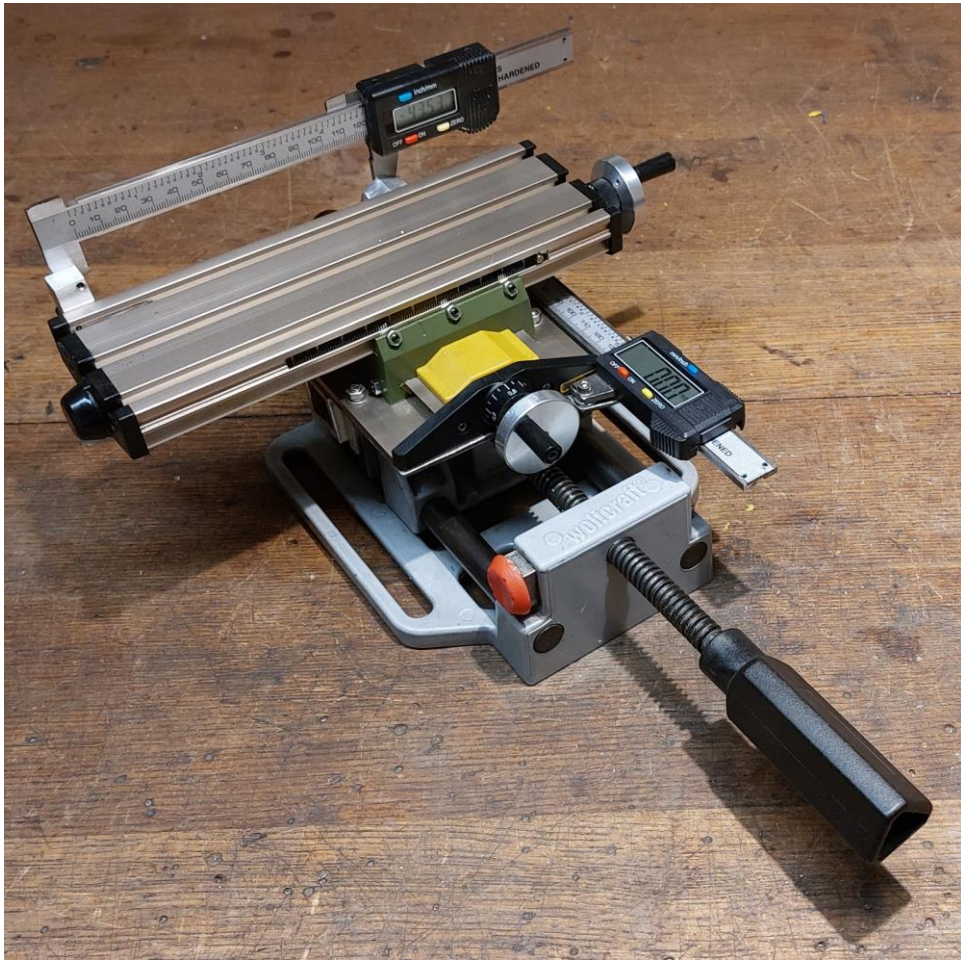


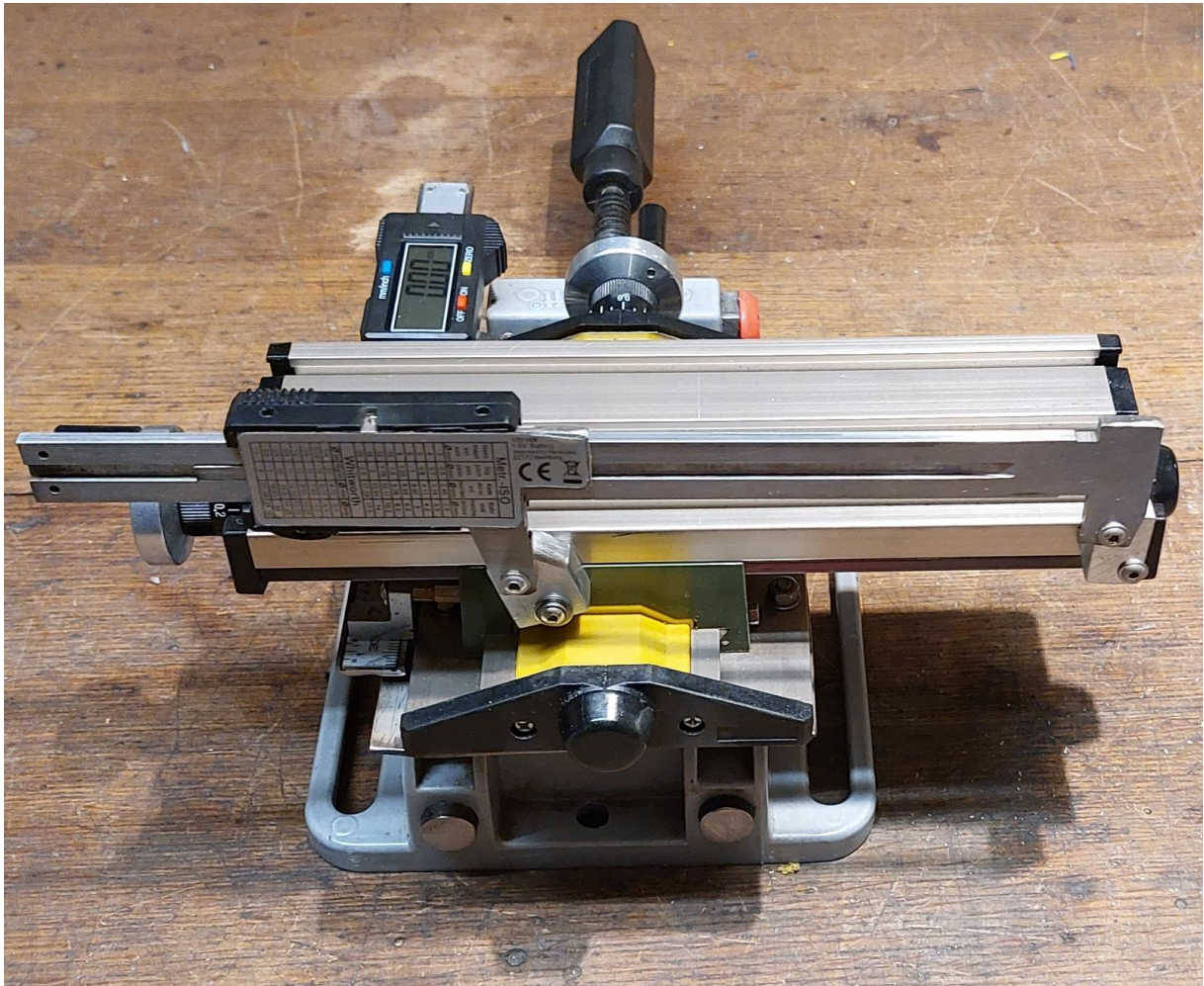
The digital readouts are based on digital calipers with a measurement range of 150mm and a resolution of 0.01mm. The calipers are from hardened stainless steel and they were slightly modified and attached to the X-Y axis table with some aluminum adapters. When they go into standby to save power they store the last measured value and they will simply switch on when you are moving the table and resume measurements with the previous value. Of course, you can also set them to zero at any position and then make alignment relative to that reset position. The cost per caliper is about 10 Euros.

A picture is worth a thousand words and thus you will find the “visual description” below:









I am always grateful to get feedback and will be happy to answer questions.

Please direct them to the Email address, which you will find at the end of this page.

Best regards

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