



Nozzle torque wrench



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Summary

3D Printed torque wrench for easy nozzle changes

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This is a 3D printed torque wrench for tightening your nozzle and prevent overtightening, stripping the thread or damaging the head break. The torque at which the wrench slips depends on the the material of the rotor so it is recommend to test the the wrench before using it on the nozzle. I have included 3 different rotors with different thicknesses of the fins so you can adjust the torque. For my torque wrench I used the rotor 1.0 printed with eSun PLA+ and lubricated the fins with an assembly grease.

The wrench ist meant to be used with an hex to 1/4" adapter like this one <https://www.amazon.com/dp/B0000225P4/>.

To secure the 1/4" adapter a magnet can be placed at the end of the rotor. I designed an adapter plate for Ø5x2 mm magnet but i also included an adapter plate template so it can be adapted to other magnet sizes. the magnet and the adapter plate are meant to be press fitted but if it is to loose you can also glue it in place.

Model files



nozzle-torque-wrench.3mf



adapter-plate-template.3mf



adapter-plate.3mf



cap.3mf



rotor-10.3mf



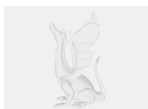
rotor-11.3mf



rotor-12.3mf



case.3mf



nozzle-torque-wrench-v3.f3d



nozzle-torque-wrench-v3.step

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