



Print-in-place torque wrench PLA



Dog

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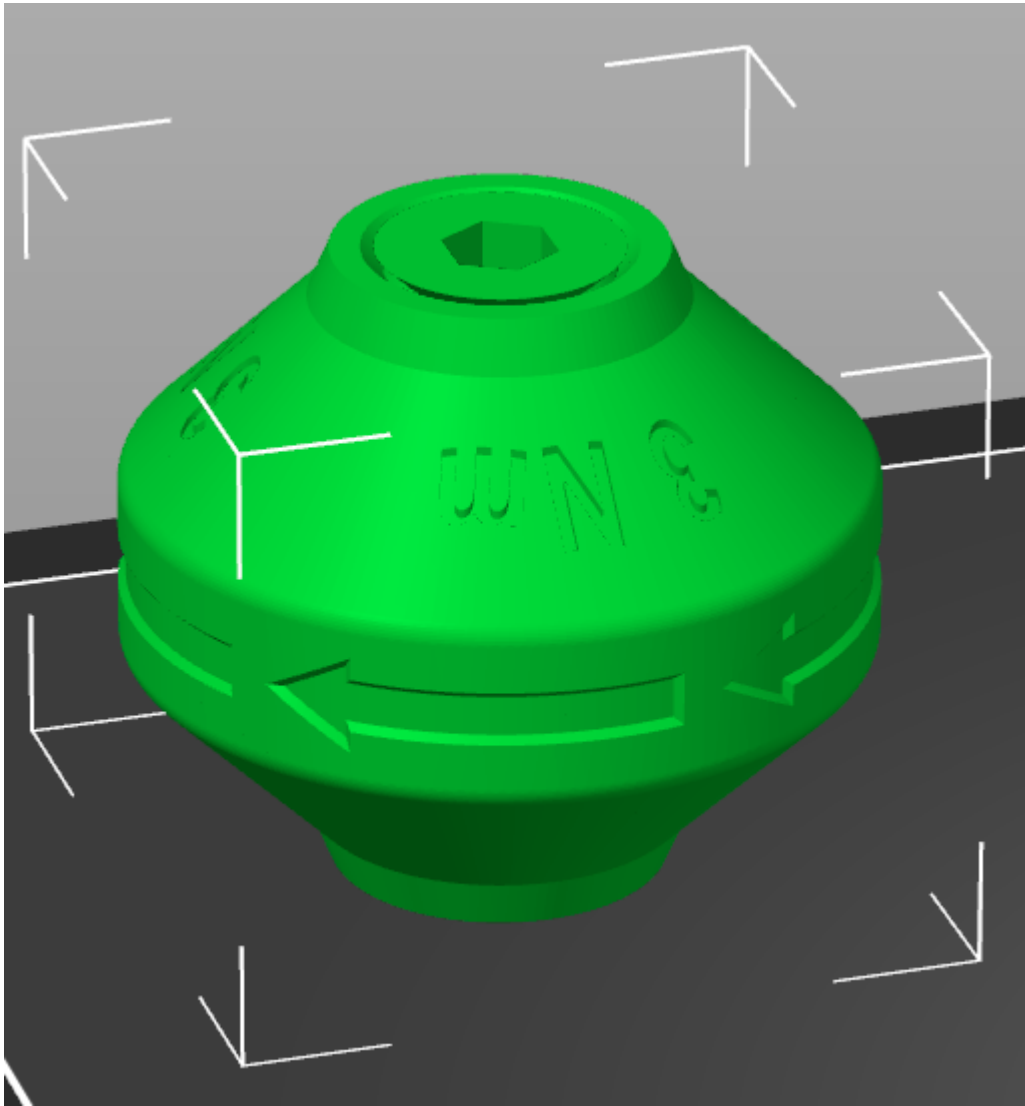
Summary

This is a print in place torque wrench for 1/4" hexbits designed to be printed in PLA. Can be used for nozzle changes.

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[torquewrench](#)

This is a print in place torque wrench for 1/4" hexbits. The torque values are confirmed using a torque wrench. These values are affected by material used, I designed these using Eryone White PLA. The print has decent tolerances, so should be easy to print on most machines. Arrows on the model indicate torquing direction. Can be used for left and right handed threads by swapping the bit from one end to the other. Print in orientation shown below, additional information after photo:



Wanted a simple torque wrench for nozzle swaps, and noticed there were no designs specified for PLA and no print-in-place options. Decided to design one with these restrictions in mind, as I like print-in-place designs and PLA is by far the most common material used by hobbyists.

Testing methodology was as follows

- 1.Design and print a prototype.
- 2.Measure using torque wrench.
- 3.Repeat iterating until the desired torque is found.

Decided on 1,5 Nm as a good torque for nozzle swaps, as it is recommended by slice engineering. Works like a charm and can also be used to loosen the nozzle, as the mechanism inside is stronger when loosening and gives the desired torque when tightening. 3 Nm is the highest i could get without the 1/4" bit slipping so decided to also give that option, even tho i dont find much use for it myself.

Model files



troquewrench15nm.stl



troquewrench3nm.stl

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