



Screw Tolerance Test Kit + STEP FILE

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updated 7. 4. 2023 | published 7. 4. 2023

Summary

Screw Tolerance Tester Test how tight your tolerances are for screws. Can test from 0.0 - 0.2. The screws and nuts are...

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Screw Tolerance Tester

Test how tight your tolerances are for screws. Can test from 0.0 - 0.2.

The screws and nuts are M10 1.5.

Update 22 February 2022

Added a second generation of files, the originals text was too small to print . The G2 pieces are slightly bigger and take a little longer to print (by

minutes) but you can see what the tolerance that has been applied to each piece.

Guide to Models Screws

Print one or both..

Screw - 0.1mm Tolerance

Screw - 0.0 Tolerance

NutPlates

You can either print the 5 in 1 test, or the individual torances you require. I think the 5-in-1 is a good place to start, then you can print the individual nutplates as you callibrate your machine.

NutPlate - 0.0 - 0.10 Tolerances

Nut- 0.0

Nut - 0.0125

Nut - 0.025

Nut - 0.05

Nut - 0.10

Tolerances

A tolerance has been applied to each of the 4 faces of a screw and also the threads. The total tolerance will be the sum of the tolerance on the screw + the tolerance of the nut. Therefore if you are using the screw 0.10 and the nut 0.10 the total tolerande is 0.20.

Getting tighter tolerances

If you are having trouble with tolerances not been great enough, i suggest doing both Silcer Flow and E-Step calibration for each filament you print with. Use the really useful guide from Teaching Tech, the link is below.

Teaching Tech Callibration Guide

<https://teachingtechyt.github.io/calibration.html>

Category: 3D Printing Tests

Model files

g2-screw-010.stl

nut-010.stl

nut-0000.stl

screw-010.stl



tolerancetests_v21.step

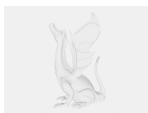
nut-0025.stl

g2-nut-00125.stl

nut-0050.stl

g2-screw-0000.stl

g2-nut-0025.stl



tolerancetests_v17.step

nutplate-5in1.stl

nut-00125.stl

g2-nut-01.stl

g2-nut-0000.stl



tolerancetests_v21.f3d



tolerancetests_v17.f3d

g2-nutplate-5in1.stl

g2-nut-005.stl

screw-0000.stl

[Find source .stl files on Thingiverse.com](#)

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