



Belt Deflection Tester for conveyor-belt printers



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Summary

This is designed to test how hard it is to lift up or bend part of a belt on a belt printer.

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Print this part in any material that sticks strongly to your printer's belt. Infill and layer height do not matter - I printed mine as fast as I could to get the tests out quicker. This is not designed to test belt adhesion - it's designed to stick well to the belt so that you can pull the top of the part and measure how much the belt bends.

To use, I recommend a 50N digital force gauge - but any force gauge should work. The maximum force your belt can take before deflection is the number I'm trying to measure.

I will be comparing my various beltprinters and also new ones coming out, while working on ways to lower belt deflection and make beltprinters even more awesome!

I made a video partly on the design and usage of this part - skip to 10:19, the previous chunk is on belting out my large belt ejector:

This work is part of the PrintShift project, trying to add part ejection to 3D Printers.

Model files



belt-deflection-tester.stl

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