Rolling grinder (Rollschleifer)

AMacG

VIEW IN BROWSER

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Summary

A rolling grinder for sharpening knifes - if you have seen the Horl sharpening system, you know the principle :-)

Household > Kitchen

Tags: rolling knife sharpener knifesharpener horl rollinggrinder

Rolling grinder a la Horl. Holder has angles for 15 and 20 degrees (afaik 15 is recommended for higher-quality knifes, 20 for softer steel). I bought discs with 400 and 1000 grit (one for getting the basig angle, the other for actual sharpening); after testing, I'd probably go even higher (600 and 1000).

Non-printed parts

- 2x O-Ring R32 (50 mm inner diam.)
- 2x 608zz/608 ball bearings
- 2x Diamond whetstone discs (I bought mine here: https://www.aliexpress.com/item/1005005816085556.html)
- 4x magnets 10 mm diam, 3 mm thick
- Optional: 4x magnets 6 mm diam, 3 mm thick
- Optional: Thin rubber mat to glue over the knife holder (to avoid scratching the knife)

Printed parts

- 1x knife holder
- 1x rolling body
- 2x disc holders

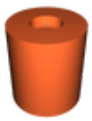
Print with supports as oriented; I used 20 % infill.

Assembly

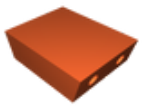
All parts are press-fitted. The disc holders' mount for the bearings might be a bit tight and require some sanding. The magnets most likely require a drop of superglue.
In my print, the grinding disks are held in place just by pressing them in. If they are to loose, you can insert magnets into the holes.

Model files

disc-holder.stl



rolling-body.stl



knife-holder.stl

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