



WinDIY - A (mostly) 3D printable wind-turbine



Nerdiy.de

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updated 27. 2. 2024 | published 27. 2. 2024

Summary

WinDIY is a wind turbine made of mostly 3D printed parts.

[Learning](#) > [Engineering](#)

Tags: [window](#) [energy](#) [physics](#) [wind](#) [windmill](#) [thingiverse](#)
[electrical](#) [renewableenergy](#) [windturbine](#)

Please note: This is a proof of concept and not a finished design. WinDIY - 3d printable wind turbine

WinDIY is a wind turbine made of mostly 3D printed parts.

Features

- Wind turbine build from 3D printed parts
- HAWT design
- Rotor diameters from 0.5 to 1.2m possible
- 3D printed wings
- Uses a 3D printed disk generator for energy generation
- Safety functions through active pitch adjustment of the wings, mechanical brake and electronic brake function via the disk generator
- Can be printed using any "normal" (20x20cm bed size) FDM Printer

Pictures Build instructions

You can find detailed instructions on Nerdiy.de.

- General information: <https://nerdiy.de/en/windiy-die-wind-turbine-aus-dem-3d-drucker/>
- Build the wings: <https://nerdiy.de/howto-windiy-fluegel-der-windturbine-aufbauen/>
- Build the wind vane: <https://nerdiy.de/howto-windiy-windfahne-zusammenbauen/>
- Build hub: <https://nerdiy.de/howto-windiy-nabe-inkl-mechanik-aufbauen/>
- Build the rotating tower: <https://nerdiy.de/howto-windiy-drehturm-aufbauen/>
- Build main axis: <https://nerdiy.de/howto-windiy-montage-der-hauptachse/>
- Build pitch actuator: <https://nerdiy.de/howto-windiy-pitch-aktor-zusammenbauen/>

License

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You can find additional infos here: <https://nerdiy.de/en/lizenz/>

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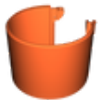
Model files



hubbasev16.stl



mainshaftbearingmountcoverv11.stl



covergeneratorv10.stl



hubbasebearingclamp_v10.stl



pitcharmnutsecuringv11.stl



hubbearingcapv10.stl



pitchleverv11.stl



pitcharmv11.stl



hubstabilizerringv11.stl



pitchleverdiskv12.stl



hubbasev16.stl



mainshaftbearingmountbearingclampv10.stl



baseplatemainshaftv10.stl



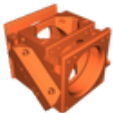
shaftcouplerv10.stl



mainshaftbearingmountbaseconnectorv10.stl



mainshaftv11.stl



mainshaftbearingmountv10.stl



gearbigdisktop.stl



biggearguidediskv10.stl



biggearsecurediskv10.stl



shaftv10.stl



nutcoverv11.stl



slideradapterv10.stl



pitchcontrolbasev14.stl



turretbearingtopmountclampv10.stl



gearsmallv12.stl



mountv10.stl



gearbigv10.stl



turretbearingbasemountclampv11.stl



vanesheetcorner742degv10.stl



vanesheetcorner90degv10.stl



vanesheetcorner1058degv10.stl



vanebackcornerbracketv10.stl



vanefrontcornerbracketv10.stl



vanebasemountv10.stl



vaneangledmountv10.stl



vaneverticalmountv10.stl



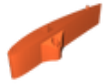
raftersv10.stl



basesocketv13.stl



rafterstipv10.stl



baseplugv10.stl

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

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