

6mm Marble Machine



87squirrels

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Summary

inspired by the great marble machine from tulio (<https://www.thingiverse.com/thing:1385312>) I wanted to create my own...

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Tags: [toy](#) [ball](#) [spiral](#) [machine](#) [marble](#) [nosupport](#)
[steelballs](#) [6mm](#) [marblerun](#) [marbletrack](#) [wormgear](#)

- inspired by the great marble machine from tulio (<https://www.thingiverse.com/thing:1385312>)
- I wanted to create my own marble machine using a pack of 6mm diameter steel balls (airsoft ammunition with the same diameter should work too)
- You will need around 50 steel balls to make it work!
- I wanted to try a different method of elevating the balls/marbles. I created a system where they are pushed into the vertical shaft one by one using a kind of geared wheel
- this pushwheel is connected to a wormgear to have it self-locked and with a high torque to push the tower of balls inside the elevating shaft
- the marble machine is separated into the base, with the elevating mechanism and the elevating shaft and the marble track itself with the nozzle on top

- It is a modular concept, to be able to have different track options with only one base
- the parts will need a little bit of glue during assembly, but don't glue track and nozzle if you plan to keep it modular
- I plan to release more track designs in the future
- all parts are designed to print without any support
- parts you need to print:
 - 1x base_bottom
 - 1x base_top
 - 1x pushwheel
 - 1x drivegear
 - 1x wormgear
 - 1x handle
 - 2x washer
 - 1x bushing
 - 1x nozzle
 - 1x track(4 revolutions) or track_slower (5 revolutions)
- model units are [mm]

Print instructions Category: Mechanical Toys Print Settings

Printer Brand: Prusa

Printer: [i3 MK2S]

Rafts: No

Supports: No

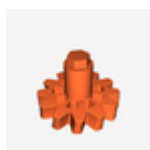
Resolution: 0.2

Infill: low

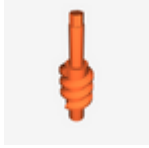
Notes:

printed in DasFilament PLA

Model files



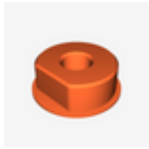
drivegear.stl



wormgear.stl



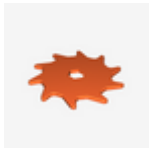
base_top.stl



bushing.stl



track_slower.stl



pushwheel.stl



base_bottom.stl



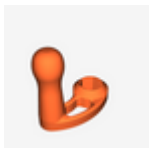
track.stl



nozzle.stl



washer.stl



handle.stl

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