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Subject: Variomatic Gears by OSKAR

Posted by [Oskar\\_van\\_Deventer](#) on Sat, 04 Aug 2012 09:31:16 GMT

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Hi Non-Twisty Puzzles fans,

Variomatic Gears is the first of three experiments with non-circular gears. It is a set of gears with a varying gear ratio. At first, both gears make a quarter turn, which corresponds to a 1:1 gearing ratio. Then, one gear turns by 90 degrees, while the other turns by 180 degrees, corresponding to 1:2. Next the roles reverse to 180:90, which is 2:1. So this set of gears could be described as having a 1-1-2:1-2-1 gearing ratio. The total adds up to 360:360, so the two gears have a 1:1 gearing ratio at average.

This gearing mechanism was inspired by the Heart-Shaped Gears jewels by Guofeng Guan.

Watch the YouTube video.

Buy the puzzle at my Shapeways Shop.

Read more at the Non-Twisty Puzzles Forum.

Check out the photos below.

Enjoy!

Oskar

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### File Attachments

- 1) [Variomatic-Gears---view-01.jpg](#), downloaded 223 times
  - 2) [Variomatic-Gears---view-02.jpg](#), downloaded 224 times
  - 3) [Variomatic-Gears---view-05.jpg](#), downloaded 230 times
  - 4) [Variomatic Gears - gear curves - view 1.jpg](#), downloaded 223 times
  - 5) [Variomatic Gears - gear curves -view 2.jpg](#), downloaded 234 times
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