



Niche Zero custom flow control discs for slower bean flow

 **benno1337**

[VIEW IN BROWSER](#)

updated 25. 2. 2024 | published 25. 2. 2024

Summary

These discs greatly reduce the flow rate of beans into the Niche Zero, improving the distribution of coffee grinds

[Household](#) > [Kitchen](#)

Tags: [espresso](#) [coffee](#) [beans](#) [niche](#)

Slowing down the rate of beans entering your coffee grinder has been shown to improve uniformity of grind distribution, and hence subsequent coffee quality.

To avoid having to stand around manually feeding your Niche zero grinder one bean at a time, I created a few different versions of the existing Niche flow control disc that reduces the opening to such an extent that beans take much longer to enter the grinder.

I made a few different versions of the disc, defined by the [width(mm), length(mm)] of the opening in the disc. Larger opening means faster flow.

Here are the results, in terms of time taken to grind 15g of beans:

- [Stock Niche disc]: 15 seconds
- [10,10]: 26 seconds

- [10,9]: 43 seconds
- [9,10]: 50 seconds
- [9,9]: 2 min 20 seconds

As you can see, [10,10] didn't make enough difference, and [9,9] took longer than is necessary. The sweet spot is probably [10,9] or [9,10]. I have been using [9,10] personally for all my coffees since and have been getting great results.

I have attached the Fusion 360 file if you want to make custom edits and dial the size in further.

Results will vary to some extent with differently sized beans, but all 3-4 of the different types of beans I tried behaved similarly.

Model files



10-10.stl

☐ Quite large, didn't reduce things much beyond stock Niche disk (26 seconds per 15g grind)



9-10.stl

☐ This is what i've started using (50 seconds per 15g grind)



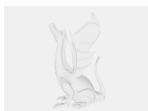
10-9.stl

☐ This one is also worth trying (43 seconds for 15g grind)



9-9.stl

☐ This works, but is a little too slow (2min 20 seconds for 15g grind)



niche-flow-reducer-v3.f3d

☐ attached the model file if you want to make your own adjustments

License

This work is licensed under a
GNU



General Public License v2.0

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Meets Open Definition
- i | Share under the same license