

## Perfect Belt Generator | GT2 Timing Belts

**R**

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updated 7. 10. 2023 | published 7. 10. 2023

## Summary

FDM optimized GT2 timing belt generator for Fusion360 | TPU belts

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## Summary

This is a GT2 timing belt generator for Autodesk Fusion 360. Download this parametric Fusion 360 archive file to generate timing belts with arbitrary numbers of teeth, widths, and pitches.

## Parameters

width - width of belt (typically 6 mm)

pitch - pitch of teeth (typically 2 mm)

teeth - number of teeth

nozzle\_dia - diameter of FDM printer nozzle to be used

nozzle\_multiples - multiple of nozzle diameters to be used as belt thickness (3 or more)

## Design for FDM

TPU Is known for stringing. This behavior makes the printing of belts, including GT2 belts, difficult for desktop FDM machines. To solve this, belts were generated inside-out, meaning that all travel moves only pass through the non-essential exterior of the belt. This protects the teeth from stringing or blobbing artifacts, ensuring smooth operation.

## Future Customization

While the number of teeth, pitch, width, and thickness are easily customized with this Fusion 360 parametric file, there are still other features you may consider customizing further:

Belt surface features

Belt surface textures

Vehicle treads

Mounting points

Vase mode versions

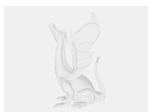
## Model files



**100-teeth-2-mm-pitch-6-mm-wide-perfect-gt2-belt-gen... .3mf**



**200-teeth-2-mm-pitch-6-mm-wide-perfect-gt2-belt-gen... .3mf**



**perfect-gt2-belt-generator.f3d**

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