

Fusionlänk

Whistle - <https://a360.co/39aZskl>

Skull - <https://a360.co/2LwofqR>

Bilder

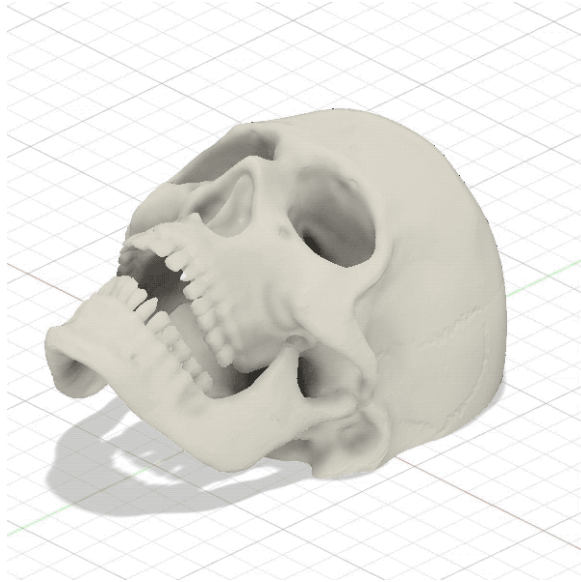


Fig 2. Animated gif of the jaw joint in motion.
Own work. Screen capture Fusion 360.



Fig 1. Thingiverse whistle with
"V29" removed. Own work.
Screenshot Fusion 360



Fig 3. Hanger closeup. Own work.
Rendered in Fusion 360.

Fritext

It is very clear that Fusion360 is extremely limited when working with .stl files and meshes. When working in Meshmixer a scaling adjustment is fast and smooth but with Fusion, at least what I have discovered thus far, this is clearly not the case.

The little whistle (Fig 1) surprisingly had over ten thousand more triangles in its mesh than the skull but it was less computationally demanding to adjust.

I wanted to preserve as much detail as possible on the skull so I avoided reducing the mesh with the exception of removing the posterior section of the skull to create a flat side. It seemed to be just as easy to slice the posterior section in Fusion as it was in Meshmixer and fusion had a much neater result creating less facets.

When importing the skull The dimensions from ear to ear measured 0.03mm. I scaled up the skull to measure 140 mm from chin to top of the head which will easily fit on my print bed. (Fig 2)

I did some work to add a workable joint that clicks into the closed position. These joints are to be printed in place in the closed position so I created a cutaway of the joints to test print. (Fig 4) By the second iteration the joint was functional after printing and I am currently

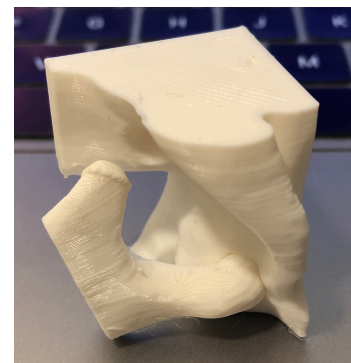


Fig 4. Second jaw joint test
print.



Fig 5.

Printing the final result. Note trident mark on left temple. Infill reduction below top, variable layer height, three walls and tree supports. 78 g PLA, 13 hours print duration.

printing the finished skull. (Fig 5)