Bookshelf with headphone holder

26.04.21

For the final project of the manufacturing processes course in HÍ we chose to design a bookshelf with a headphone holder.

The goal for the design was to create smooth curves gives elegant and modern look of the whole project.

The bookshelf was designed in Solidworks and prepared for milling in VCarve. Then it was milled out of 18 mm plywood using the Shop bot at Fablab Reykjavík and screwed together.

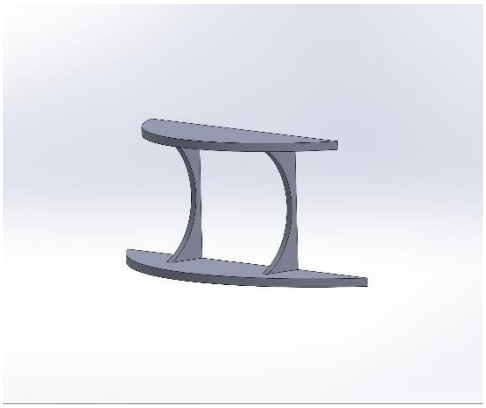

Figure 1: Model of the bookshelf from Solidworks

The headphone holder was designed in Fusion and prepared for molding by creating a negative mold and simulate toolpaths. The mold was supposed to be milled out with the same CNC machine and then casted with silicone creating a negative mold. Then the negative was supposed to be casted with resin to create the solid part. The idea was to be able to screw the headphone holder into the bottom of the lower shelf.

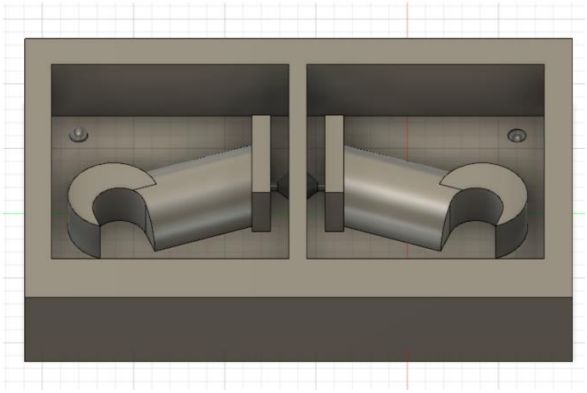

Figure 3: Design of the mold for the headphone holder in Fusion

Figure 2: The bookshelf after milling and postprocessing.

Arnór Breki Ásþórsson

Sverrir Kristinsson