

Make it Real Part Explanation

We made this part to improve the functionality of a claw bot. We designed this mainly to expand upon the already existing functionality of a traditional claw. Using this part one may be able to have a modular claw that is mainly to be used for box shaped items. The claw can be used to have an adjustable distance, or a preset one for sturdier objects.

When using this part with a bot, the user may replace the old claw part with the new one, or the user may create an entirely new claw design with this part in mind. The recommended way to use this part is to do the latter. When creating a new claw design the user will notice that this part is much wider than the old claw, this is because it supports the usage of beams. One may run a beam through the bottom of the part to achieve a larger claw. This part comes in two pieces, the back end, and the front end. The back end is what attaches itself to the claw, while the front end attaches itself to the back end, or the beam that is run through the back end. Overall, this part is designed to promote the usage of a larger claw for larger objects, allowing it to be modular and powerful.

I created this part using the older one as a base. All I did was add new geometry and separate the old part into two pieces. I then added holes to accommodate a connection for the two pieces. Overall, I used mainly the Extrusion, Hole, and Trim tools to edit my design of the part. Afterwards I exported my part as an STL file which is used for printing. I used the Version 2.0.9313 of Autodesk Fusion 360, Student.

In the end I learned that the camera controls for Autodesk is a bit iffy and that measurements are much more important for 3d printing. I will use 3d Software in the future as I have before this as well. However, I might stay with my previous program, Blender. The main reason being that Blender is Free and I have much more experience using it. The pros of Autodesk however are that Autodesk revolves around measurements, which is very useful for making models that will be 3d printed. When I continue with 3d Software it won't be for Printing, it will be for mainly digital 3D models that can be used in media and games. Learning this has already helped me a lot, as I already knew how since before. It will help me as I will need to have it for my main career in Computer Science.