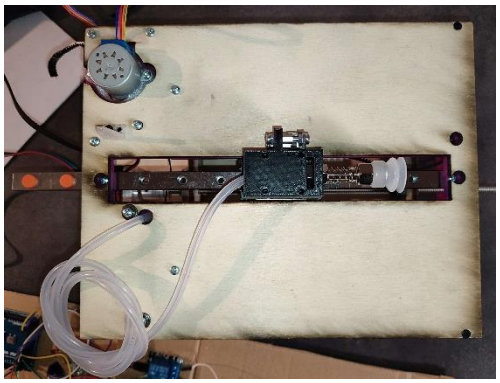
HENDRIKSE Jérémy

Session report

Between the last session and this one, nothing new has been done.

During this session I had for objective to build the platform, I first retrieved the front half of the platform whose impression was finished, I then added 4 holes to the rear part of the platform to be able to screw the plate on it. When done I started the impression wit a low filling because it is only a prototype. During the impression I used the laser cutter to make the plate that would be used to assemble the two 3D printed parts. I made this plate out of wood to avoid wasting plexiglass for a prototype.

When can see on the image above the platform already attached to the lifting system laying on its left side. On the left made of multiple colors we can see the rear part of the platform and on the left the front part of the platform. Most of the components are already on their definitive place. We have under the black 3D printed cap the vacuum pump and the electro valve, just under it the rail for the suction cup and the belt with its wheels. Also, on the rail in black we have a part that is used to fix the belt.



On the image above we can see the top of the platform, the wood plate used to hold the platform together. Fully on the left in grey there is the stepper used to move the suction cup via the belt. Finally in the center, in black there is the suction cup holder and the suction cup.

In addition, during the impression of the second half of the platform I did some test to find out what is the perfect diameter for the roller bearings to fit perfectly in a laser cutted wood plate. I've found out that for a 13mm bearing I needed a 12.75mm hole. So, smaller than the piece itself. These bearings will be used in the lattice to enable less friction. On the image bellow we can see the parts resulting from these tests. The 4 lattice I then made are already mounted on the final assembly that we can see right under. The final assembly was done at home.