European Project Semester

PROJECT OUTLINE

Project dates: March – June 2023

Title:

New software for 3D printing paste extrusion

Project activity areas:
Additive manufacturing of low-tech systems, Research & Developments, Product testings

Keywords:
3D printing, additive manufacturing, low-tech equipment, Product testings

Tutor's name and coordinates
Client – End-user: *Infuse Design*
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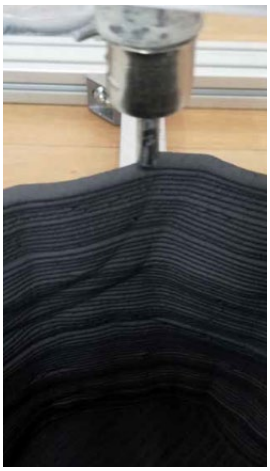
Project origin
Research, Innovation, Up-cycling, Circular Economy, Environment protection, Ceramics, biomaterial

Project technical background:

Infuse design is a start-up working on low-tech equipment such as "desert fridge" (clay cooling device using evaporation phenomenon) or "oyas" (watering device that uses the porosity of clay to dispense water underground).



Infuse design is developing a new software to pilot a 3D printer dedicated to paste material extrusion called Slicer™. This software has been specifically designed for topographic printing taking in account the specificity of the rheological behaviour of a paste material when it goes through the extruder of an extrusion additive manufacturing machine.

This project is the application of software skills to robotic on one side and material science on the other side.

Studied topics:

- Robotic
- Software
- Material engineering
- 3D printing