



European Project Semester

PROJECT OUTLINE

Project dates: March 2019 - June 2019

Title: Design and realization of an extrusion die for artistic ceramics

Project activity areas:
Mechanical design, 3D Printing

Keywords: Design, ALM, Ceramic Extrusion, Artist

Tutor's name and coordinates
Client – End-user: ESA (Ecole Supérieure d'Art de Tarbes) : Nicolas Daubanes
ENIT Technical Supervisor + contact:
Francois GRIZET : francois.grizet@enit.fr
Lionel ARNAUD : lionel.arnaud@enit.fr

Project origin
Project for the creation of extruded ceramic objects for an exhibition of ESA Tarbes.
ESA does not have the skills or the technical means to carry out this tool

Project technical background:



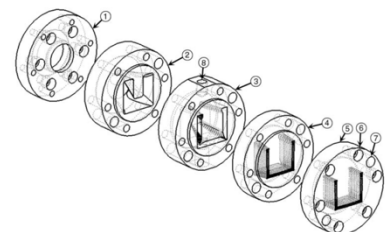
The Art School of Ceramics “ESA” is planning an exhibition of ceramic objects, that will have to be produced in large number. The chosen technique is extrusion, and as illustrated here it requires an extrusion die, whose complex shape generate the protruded bar.



This extrusion technique leads to produce profiles of constant sections that can be cut into desired lengths directly at the output of the extrusion machine. At the exit of the extruded material, it is possible to define an additional transformation, mechanical or manual, that would make the shape of each object unique.

The object to be created will have to be defined in collaboration with the artists, i.e. students and professor, of the ESA and the EPS team, according to the ideas and the technical possibilities of the extrusion process.

Design of Extrusion Dies



Project dates: March 2019 - June 2019

Title: Design and realization of an extrusion die for artistic ceramics

Project activity areas:
Mechanical design, 3D Printing

Keywords: Design, ALM, Ceramic Extrusion, Artist

Studied topics:

After having defined the shape to be created, in collaboration with the ESA artists, the objective of this project is to completely define the tool capable of producing it.

Tests will be made with prototypes designed and defined in CAD softwares, and then produced in 3D polymer printing.

Following these first tests, the production tool will be defined and 3D printed in metal, to be used by at full scale and publically displayed by ESA.



(3D metal printer used)