

Pifpafpiste is an amateur track racing team that promotes and encourages the practice of motorcycling by women and beginners during gatherings or training sessions on circuit. The association also prepare motorbikes for the race and has used eMotion Tech's 3D printing services to make protective parts for a Yamaha R1 that are not commercially available.



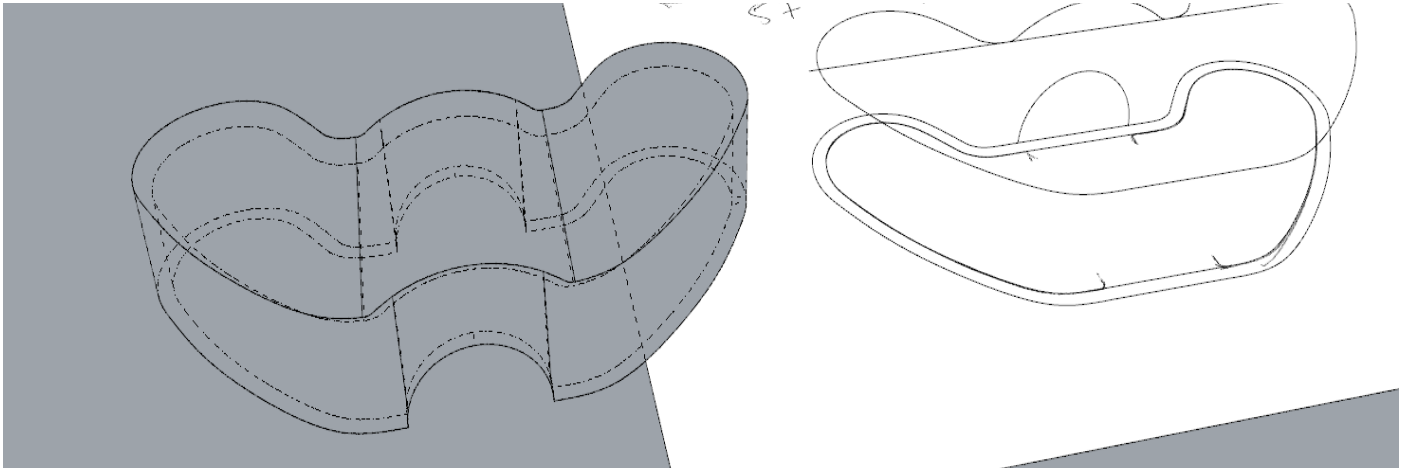
- WHAT WAS YOUR FIRST NEED?

We first wanted to make a protective fairing for a GPS beacon system on one of our racing bikes. Then, seeing the very satisfactory results, we also wanted to print protections for the handlebar switches of this same motorbike.



- HOW DID YOU MODEL THIS TOOL (SOFTWARE)?

The parts were modelled on the Rhinoceros software after taking precise measurements of the actual parts we wanted to protect.



- WHAT MATERIAL WAS USED TO PRINT THE TOOL, AND FOR WHICH REASON?

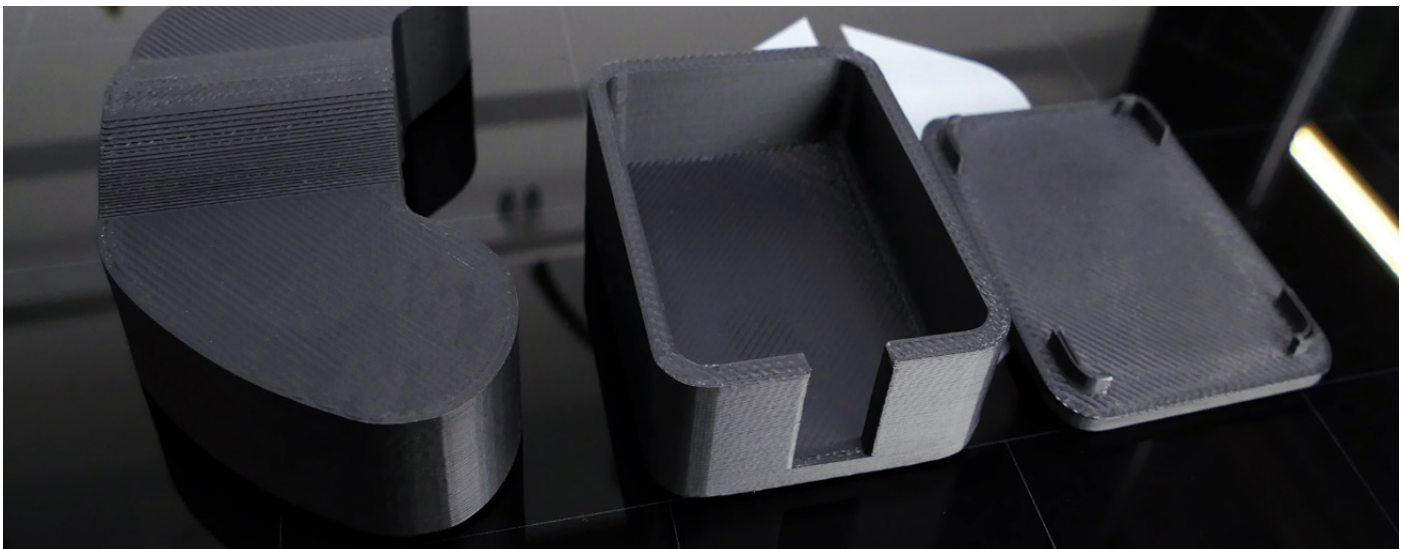
We used ASA to make the prototype following advice from eMotion Tech, so that our parts would be resistant to UV exposure, in addition to its resistance to abrasion and impact.

- HOW DID YOU DETERMINE THE VARIOUS MANUFACTURING SETTINGS (LAYER THICKNESS, POSITIONNING, FILL RATE, ETC...)?

We left the choice of the different printing settings to eMotion Tech who finally chose to print the parts with layer thickness of 0.2 mm and a fill rate of 50%.

- DID THE PART HAVE TO BE PRINTED IN SEVERAL PARTS? IF SO, HOW MANY? WAS IT PRINTED ALL AT ONCE ON THE SAME BED OR SEVERAL PRINTS?

The protective housing for the GPS is made up of two parts, a base and a cover, while the commodo protection was clipped directly over the part itself.





- HOW MUCH TIME DID THE PRINT LAST?
The printing of all the parts took about 8 hours.

- WHAT BENEFITS DID YOU SEE IN USING THE STRATEO3D DUAL600 TO PRINT THIS PART?
The speed of execution as well as the ease of reproducing the parts. These are so-called "drop" parts, so they are likely to be broken/damaged if dropped. The reproduction criterion is therefore important.

- COULD YOU COMPARE IT WITH ANOTHER MANUFACTURING METHOD (TIME, COST, ETC...)?
This method is by far the fastest and cheapest. It also avoids influencing the weight of the vehicle, which is an important competitive criterion.

- ARE YOU CONSIDERING OTHER USES OF THE MACHINE/REQUEST TO THE PRINTING SERVICE?
It is very likely that we will ask for this technology again because it can meet many needs in the context of motorbike racing. Indeed, we have been able to identify other possible uses for 3D printing within our team, but this remains a secret for the moment (smile)

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