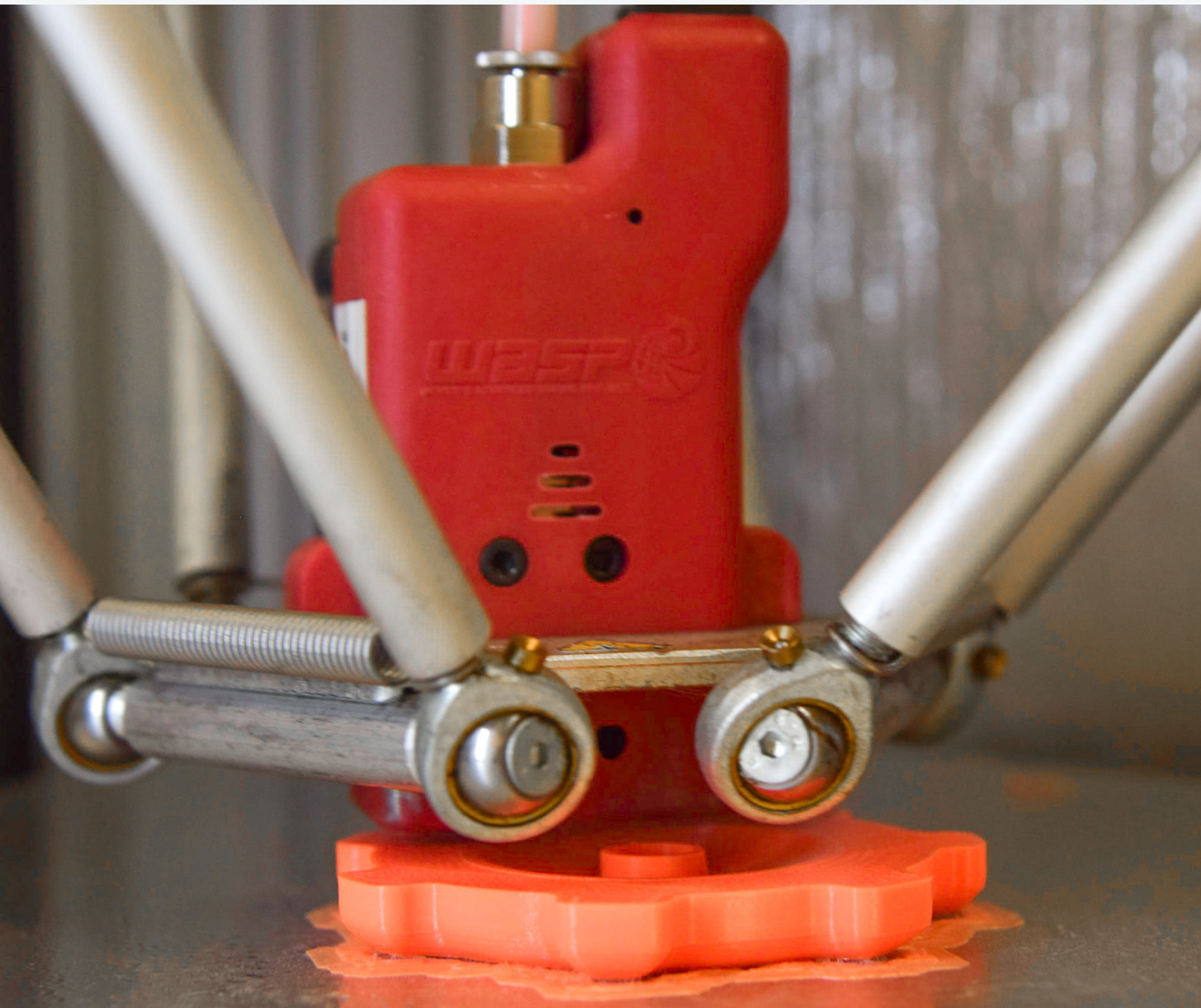




ROTADYNE

PROTOTYPING EXAMPLES

DESIGN CATALOGUE



PROJECTS

- 1. Steve's Drill Sleeve
- 2. ATS Door Handles
- 3. Liquip Jigs
- 4. Borris' Bike Clip



WELCOME TO OUR PROTOTYPE CATALOUGE FOR 2021

Prototyping is an important part of our design process. We use our in-house 3D printing capabilities to create preliminary versions of your product or individual components to test its strength, flexibility, function and ergonomics.

This allows us to identify areas of concern or of improvement, accomodate for arising requirements, and adjust necessary elements to include newly inspired desig elements.

Prototyping also helps us establish lead times, cost estimates, and appropriate strategies for production.

You don't want good, you want great. Test before you commit with the leaders in plastic manufacturing.



STEVE'S DRILL SLEEVE

This drill sleeve was one of our first rapid prototyping applications we have undergone in 2021. Used mostly by our production supervisor Steve and his team in post-op, it helps to trim excess plastic off with an electronic drill by improving accuracy. It also redirects the spray of plastic shards from the worker to prevent injury.

Ublīcaē fur. Iīnverum essiliame nulīnc te haelus, quam. Habēniti sensiciptic omnestr atīaet et, nemo.

Size: 120 ml

This was designed by our Production Development Manager, Igor Silva, and was printed on our smaller 3D Printer WASP by our Intern Industrial Designer, Jessica Pani.



LIQUIP JIGS

Jigs are another tool we at Rotadyne have developed to help our workers in post processing with accuracy in drilling and post-production efforts. Jigs can also be used during the cooling process to help control warpage and maintain the product's features intact.

Ublīcaē fur. Iīnverum essiliame nulīnc te haelus, quam. Habēniti sensiciptic omnestr atīaet et, nemo.

Size: 120 ml

This jig was designed and printed by our Product Development Manager Igor Silva, and printed on our large 3D Printed WASP by our Intern Industrial Designer, Jessica Pani.



ATS DOOR KNOBS

These knobs are a component of a larger project undertaken by our long-time clients, ATS. Part of their modular wall system and room facade equipment, we attach print the door knobs separately and they are easily removable and attached. This allows for flexible usage and assembly and reflects our understanding of accomodating for user needs and industry requirements.

Ublīcaē fur. Iīnverum essiliame nulīnc te haelus, quam. Habēniti sensiciptic omnestr atīaet et, nemo.

Size: 120 ml

This part was designed by our Product Development Manager, Igor Silva. He and our intern Industrial Designer, Jessica Pani, prototyped and printed these knobs over a trial and error process.



BORRIS' BIKE CLIP

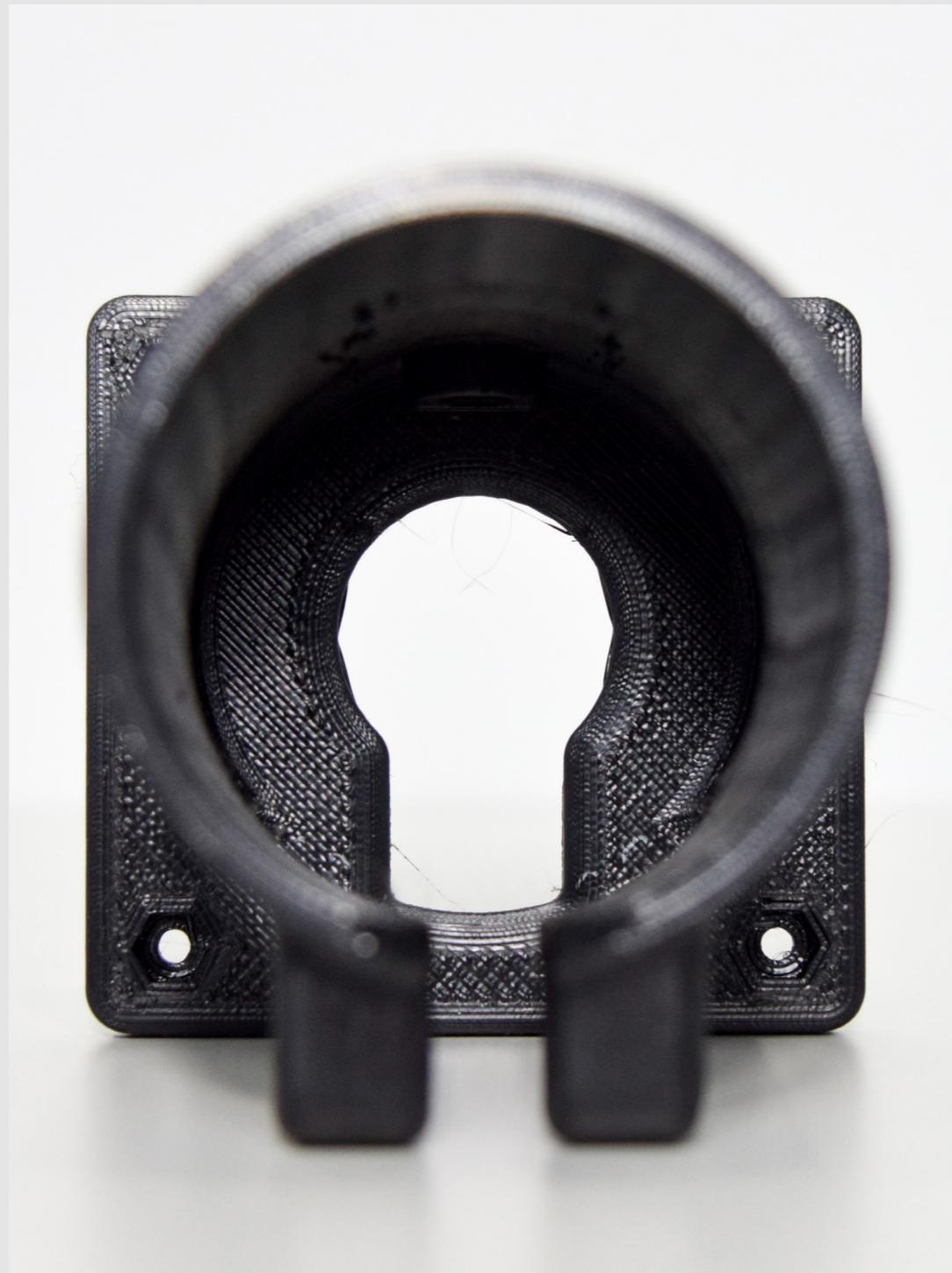
This project was a fun and casual experiment we conducted for one of our beloved staff members, Borris. Used to repair his nephew's tricycle, this clip holds together. ...

Ublīcaē fur. Iīnverum essiliame nulīnc te haelus, quam. Habēniti sensiciptic omnestr atīaet et, nemo.

Size: 120 ml

This clip was designed and printed by our Production Development Manager, Igor Silva, in our smaller 3D Printer WASP.

STEVE'S



DRILL SLEEVE

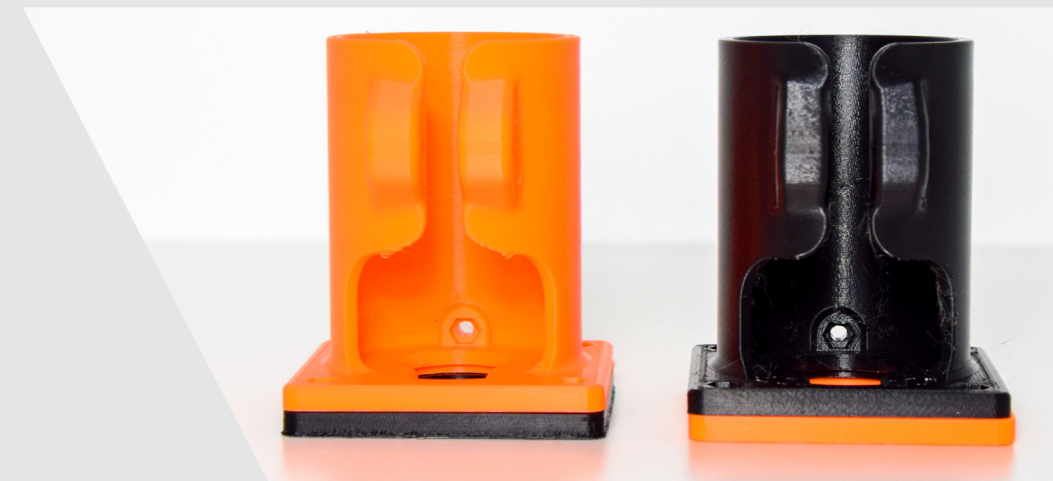
FEATURES + CONSIDERATIONS

- Complex curves and intricate shape
- Moulded-in through holes
- Made from durable (PLASTIC TYPE)
- Printed as two separate parts: the main sleeve, and the base.

Simply put, a drill sleeve is a hollow shaft which fits onto cutting or trimming tools which facilitates post-processing. Made from (PLASTIC TYPE), the material provides the tool with a superior durability suited for its often rough usage. Usually seen in our factory's Second-Ops room, it is used most often on our larger rotationally moulded parts such as roof canopies and outdoor furniture.

Strength is a key factor of the success of this component.

The product to which it attaches to is specifically intended to be handled harshly, every component needed to exhibit the same durability, capable of being kicked or hit with significant force.



The knobs are screwed into the larger, rotationally moulded doors, and can be easily removed or attached as required. This is ideal as the room facade equipment is designed to be customizable, capable of being reassembled in various dynamic layouts to reflect the different settings in which trainees will be exposed to.

You can read more about the ATS modular wall system on our website under our Case Study media page.



LIQUIP

JIG

FEATURES + CONSIDERATIONS

- Screw-on capabilities + easy assembly
- Made from durable (PLASTIC TYPE)
- Threaded holes
- Printed as three separate parts: two knobs and a thread.

Jigs can serve many purposes in manufacturing, however they are mostly used to improve uniformity of parts which require drilling or other features which are applied post-moulding. It can also be used to help maintain the moulded parts shape during cooling, preventing significant warpage or cracking. This jig is specifically used for our client Liquip's Hatch Weather Cover.

The Hatch Weather Cover took a total of 9 trials before we were able to optimize its design and production.

This specific jig is a cutting jig, used to cut out several variations. The original jig developed did not function as intended, as the cutout angle left a sharp edge.

The second jig was too loose, which was a potential safety issue in use, and also had incorrect cutout placements. Luckily, three times was the charm for this part, and finally we were able to develop and modify it to perfection.





ATS

DOOR KNOBS

FEATURES + CONSIDERATIONS

- Screw-on capabilities + easy assembly
- Made from durable (PLASTIC TYPE)
- Threaded holes in knobs
- Printed as three separate parts: two knobs and a thread.

Custom components is where our prototyping and 3D printing abilities truly shine. Adding both functionality and a simple aesthetic which helps simulate general urban environments, these door knobs are made from durable (PLASTIC TYPE). Used as part of ATS' modular room equipment, it is intended to be used for target practice purposes in which trainees practice combative techniques within a simulated urban environment.

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BORRIS'

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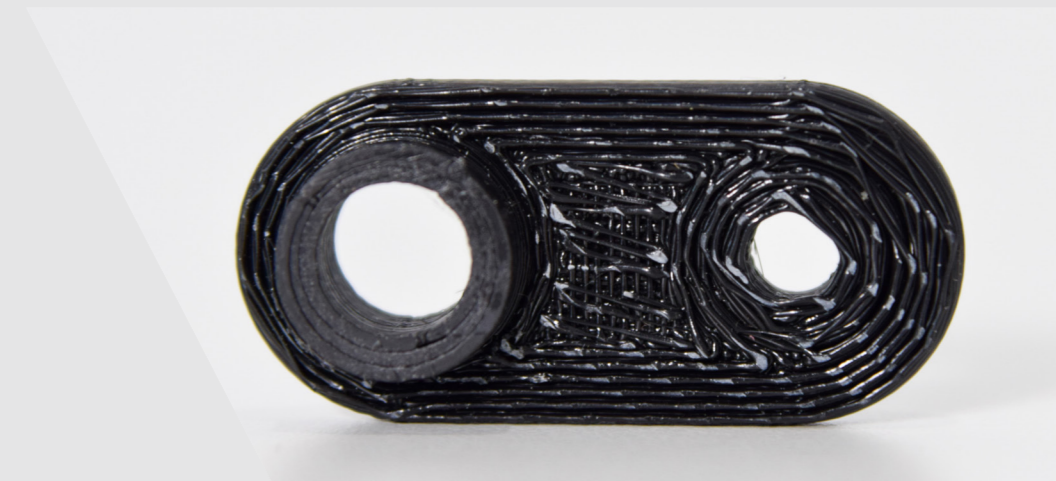
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