

Case Study

With its debut at the Nagano Olympics in 1998, competitive snowboarding has taken off. This is a sport not for the faint hearted, but for the adrenaline junkies among us. Whether it's Boardercross, Slalom, Slopestyle, Big Air or Half Pipe the action is wild and the manoeuvres each year become increasingly difficult.

ogle models+prototypes

www.oglemodels.com info@oglemodels.com +44 (0)1462 682 661 For those who like to carve it up on the pistes the snowboarding season is fast approaching. And, with competitive snowboarders continuously pushing the limits, the challenge to produce equipment to aid these dare devils is ever growing.

One company keeping up with the change is RuRoC; they produce technically advanced headwear to protect the snowboarders on the circuit. Their latest design of helmet provides the safety, flexibility and style competitors demand. The paint on the outer shell of the headgear can stand up to -40°C; this is the equivalent of being outside in the Antarctic in the dead of winter. But if the riders are in far warmer climates and don't require the full mask on the helmet, it is detachable. This provides the flexibility they want.

In order to bring this cutting edge design to life, a prototype had to be produced. So, RuRoC approached Ogle Models and Prototypes; as a company that always produce exceptional models, which can be mistaken for the real thing, why would they go anywhere else.



The helmet required a series of parts to be made, including goggles, lower maverick, lower shell and left and right mask clip. Ogle completed the project using Selective Laser Sintering (SLS) for the hard parts and Stereolithography (SLA) then Vacuum Casting, using silicon tools, for the clips and softer parts.

Both SLA and SLS are 3D manufacturing processes. SLS uses an Argon laser to draw the part, one slice at a time onto finely powdered nylon, whilst melting the layers together to form a solid component. The process is fully self-supporting, allowing for parts to be built within other parts with complex geometry that simply couldn't be built any other way, giving you complete freedom of design.

SLA uses a solid state laser to draw the model one layer at a time onto a resin. Once the complete part is formed by this process the part is cleaned of excess resin by immersion in a chemical bath and then cured in a specialist oven. Once the project had been machined, dimensional checks were carried out. When Ogle was satisfied with the accuracy the parts went through to their on-site paint shop.

Now, being known as one of the best finishers in the industry, Ogle has a reputation to keep. So, after lots of hard, hand finishing, they applied a high gloss paint finish and then a durable lacquer to produce the perfect model.

This helmet is set to take the snowboarding world by 'snow' storm and the next time you see it, it'll no doubt be accompanied by a snowy backdrop and an adrenaline junkie's head.

Both models were finished to Ogle Models + Prototypes' usual high standards. The fine detail on the models extended to deck furniture, such as cleats and handrails, as well as the seats, screens and steering wheel inside the cabin. The job was done over a period of three weeks.

The smaller model was mounted on a clear base and the text and logos were laser engraved onto the base.

FOR MORE INFORMATION PLEASE CONTACT:

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