



3D SYSTEMS SUCCESS STORY

Accura® Xtreme and 3Dproparts™ - Born to Ride



Mobility goes 'e'. This is a trend that Craig Bramscher foresaw as he founded the e-motorbike think-tank Brammo, Inc. in Oregon a few years ago. This start-up develops and manufactures affordable 100% electric motorbikes, focusing on increasing speeds and extending the range of the electric battery. Brammo's 'e' race bikes serve as a development platform for their street bikes.

“Compared to traditional fiberglass or carbon fiber panels which require tooling, we saw a time saving of weeks. Using SLA® technology through 3Dproparts™ gives us a full body kit in a week. This can make all the difference in the world when you're under a tight deadline.”

Brian Wismann
Director of Product Development
Brammo, Inc.
Ashland, Oregon



As a start-up Brammo is always under pressure - especially relative to time. Therefore, when it came to the production of the Empulse RR race bike, Brian Wismann, Director of Product Development, needed to find a faster way to iterate on the design. He also needed a reliable and capable additive manufacturing partner to work with so Brian chose 3Dproparts™, 3D Systems' parts service group.

Brian studied the material properties of Accura® Xtreme plastic, a strong and robust stereolithography (SLA®) material with mechanical properties between ABS and Polypropylene. With its combination of tensile strength, modulus and elongation, Brian decided that this plastic material was just right for leveraging additive manufacturing to 'print' the race fairings directly from CAD data.

3Dproparts™ delivered the SLA® fairings to Brammo on time and ready for the next steps. The smooth surface quality of stereolithography parts allows for fast, effortless painting and coating after which the body panels were mounted directly to the bike. Months later the Accura® Xtreme fairings continue to perform, withstanding the stress of racing including the abuse from riders and debris on the race track.

Brammo's use of rapid manufacturing technologies from 3D Systems does not stop at the bodywork. Recently the air duct of the fluid and air cooled motor were produced overnight with SLS® technology in DuraForm® PA plastic and is now running on the bike. And Brian Wismann is taking the next logical step, investigating the opportunity to directly manufacture stereolithography connectors for the production bike.

