



#### **CHALLENGES**

CPG wanted to compress the time to deliver usable parts to their 270 engineers, scientists and technicians who needed them, while ensuring the safety of their AM lab operators.

#### **SUMMARY**

CPG uses Rize<sup>™</sup> One for functional and visual prototypes due its unique part strength and ink marking capability.

#### **RESULTS**

- Parts produced 50% faster for half the cost vs. their existing FDM printers
- Build 5-10 parts per week, and up to 20 parts per week during peak periods
- Diverts jobs from FDM printer
- Resolved companies safety concerns

They play to win. That's why this global CPG (consumer packaged goods) manufacturer only partners with the very best providers of the most innovative technologies - for the ultimate benefit of their consumers.

Their commitment to disruptive innovation and excellence, combined with a dedication to safety and sustainability, permeates everything they do at all levels of the company, which is why the Rize One industrial-class 3D printer caught the attention of the company's R&D leader. After learning about it at a conference, he was convinced that Rize's unique near zero-post-processing and safe process would be an ideal fit for the company. He said,

We are an innovative tech company and Rize is an innovative tech company.

It's a no-brainer that we should work together.

## **Solving Speed and Safety Concerns**

Despite the six 3D printing technologies in the company's additive manufacturing lab that differ widely in size, cost

and capabilities, the increasingly competitive CPG market demands that the lab continue to compress the time to deliver usable parts to their 270 engineers, scientists and technicians who need them. Said the company's additive manufacturing lab manager,

Innovation requires iteration Iteration is the key to engineering. If you can speed that up, your time to market accelerates.

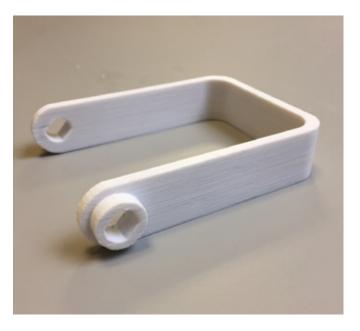
Equally important are management's concerns about the acid bath method of support removal required by one of the lab's 3D printers and the safety of employees using this system.



# **Solving Speed and Safety Concerns**

Following a comprehensive assessment of Rize's patented Augmented Deposition technology, this leading-edge and beloved CPG manufacturer purchased Rize One for their lab, certain that Rize's breakthrough near zero-post-processing 3D printing system and clean, safe and environmentally-friendly process that produces best-in-class Z-strength parts would have a significant, positive impact on turnaround time, operational costs, product quality and safety.

Functional prototypes of mechanical components for small appliances represent 90% of the parts produced by the company's lab, while 10% are visual prototypes. They use Rize One primarily for functional prototypes due to





the unique strength of the parts it builds. Yet they also produce selected visual prototypes with Rize One thanks to its ability to 3D print detailed text and images onto parts. On average, the company builds 5-10 parts per week with Rize One, and as many as 20 parts per week during peak periods.

### 50% Faster and 50% Cheaper

Within just a few weeks of receiving their Rize 3D printer, the company began diverting print jobs from one of their expensive 3D printing systems to Rize One due to the speed, ease, cleanliness and safety of Rize's post-

processing method.

Remarked the company's lab manager, \*The time savings on part turnaround using Rize

One is significant. Previously, our existing system required up to three days to produce a usable part: 15 hours to 3D print an average part, which rolled into the following day, turning 15 hours into 48 hours. This was followed by 8-10 hours of support removal in an acidic bath. While the part might be ready at the end of the second day, it typically extended into the third day to generate a usable part and deliver it to an engineer.



With Rize One, we can deliver a usable part to an engineer the next day. You can imagine how this time savings escalates when taking into consideration the multiple iterations required for each component.

In addition, the company is saving 50% on material costs and resolved their safety concerns using Rize One compared to the other system.

## **Looking Ahead**

The CPG manufacturer's lab manager is enthusiastic about the new possibilities that an enhanced, full-color Rize 3D printer will offer to produce more of their visual prototypes at a fraction of the cost and time it takes today. "We currently use external model makers to hand craft detailed

visual models that cost an average of \$1,000 per component and take 3-4 weeks to complete," he said. He is also experimenting with Rize One to produce functional low moisture absorption prototypes.

Summarized the company's technology group leader, The ability for us to 3D print an injection molded-quality part on demand safely and affordably using Rize's Augmented Deposition 3D printing technology would revolutionize how our products are 35 designed and manufactured.