

Using AHA 3D Printers to Speed-up Prototyping Phase at Genus Power Infrastructures Limited.

Genus Power is a leading provider of innovative power device solutions. Genus has lately faced the issue of outsourcing its Rapid Prototyping work which elongated the product development cycle. With the help of AHA 3D printer they reduced product development time tremendously.



Genus Power Infrastructures Limited

Genus Power is an integral division of Kailash Group. Founded in 1994, the company has three business divisions which offer highly innovative and sustainable solutions to the power sector.

Based in Jaipur, Genus has dominated in the sector with its top notch R&D Center and the continuous desire to innovate.

Business Situation

Being a product development company, mechanical product development has been a key feature of R&D labs of Genus Power. The challenge to come out with new products is the main element to maintain the leading position in the current market.

The Genus R&D team had been using a rapid prototyping method for performing quality checks of their designed product before going for final tooling. But due to lack of in-house capability they had to outsource the RP work to other cities which not only added cost but also added lead time of more than 2 months to the entire process. This not only slowed their production work but also made them choosy while making prototypes of a new development, hence reducing the quality measures.

At that time they got in touch with the Aha 3D team, who launched their very first printer and decided to work with them for a better solution.

“Rapid prototyping is an indispensable part of design flow, and saves costly errors by enabling actual design validation early in the development process. However, getting it done from the service bureaus was expensive and time consuming, so we decided to try a solution from Aha3D.”

Bhupesh Upadhyay
HoD Mechanical R&D, Genus

3D Printers for Rapid Prototyping

Upon studying the requirement, Aha 3D team realized that the Genus did prototyping for two purposes namely Internal level Prototyping & Product Prototyping.

Aha 3D was developing an industrial 3D printer, with an objective to resolve all the issues collected from this and other similar exercises. Team Aha3D collaboratively worked with Genus for providing a solution. Reality3D was offered to Genus for its application, and within its limited capabilities Genus found its true worth in making prototypes.

Having an in-house 3D printer helped Team Genus in manners beyond their expectations. Now they can prototype any part of the machine that they might have skipped due to the high lead time involved. This not only made the development process full proof but also helped them in getting marketing approval and confirmation very easily.

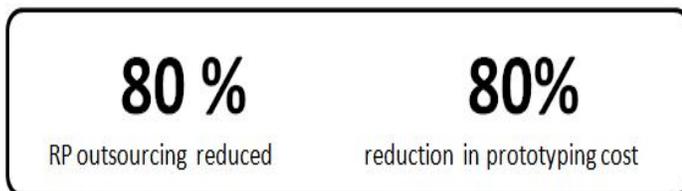
“Aha3D team worked very closely with the Industry to define, develop and mature the ProtoCentre 3D printers. They have very well understood the demands of the industry and meet most of our needs of an Industrial 3D printer. These machines cost 1/6th that of an equivalent US-made machine, both to procure and run”

Bhupesh Uphadyay

Gains and Future Plans

With the help of Aha 3D’s 3D printer, Genus could speed up its rapid prototyping practices. They could now perform 80% of their rapid prototyping work in house itself that they had to outsource earlier. This reduced the prototyping time from 2 months to 3 days.

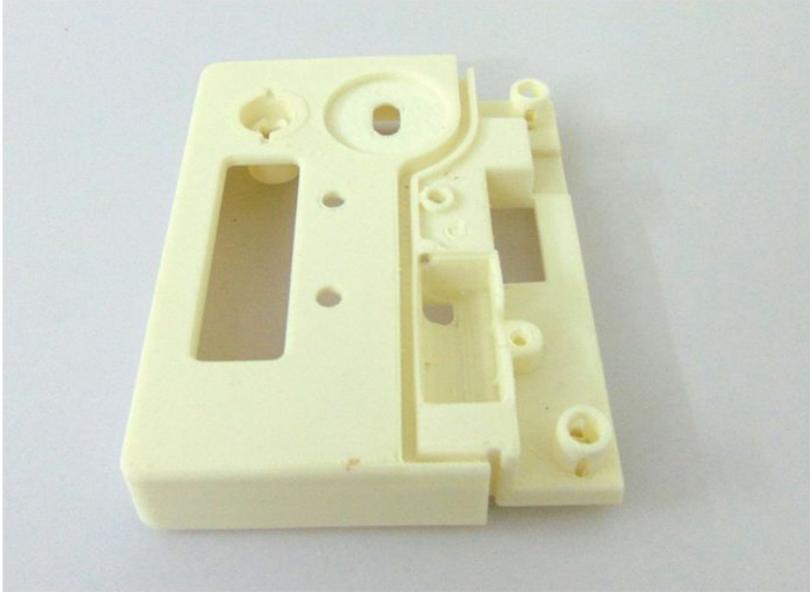
Also the previous cost involved in making a prototype, where they used to spend INR 40,000 per prototype earlier, now they could achieve the same results for less than 20% of the earlier cost.



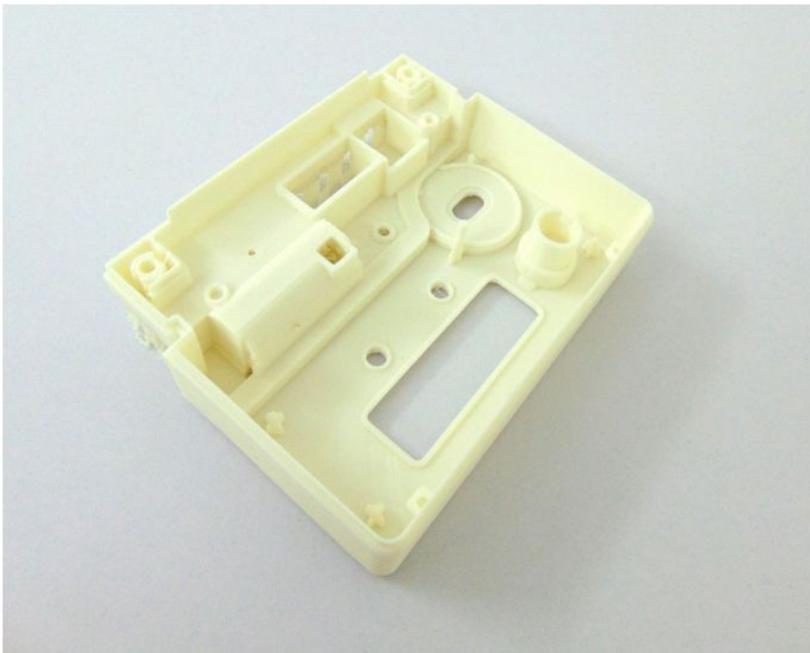
Mr. Bhupesh says that having an in-house 3D printer is a true aid for any manufacturing unit. It not only opens up the possibility of prototyping but gives true insight of the design before it goes for tooling. Mr. Bhupesh was very satisfied and positive about applications of 3D printing.

Summarizing it, it can very well be said ‘Aha3D made the Rapid Prototyping process of Genus rapid indeed’.

Prototype Photos



Prototype of one such power meter 3D printed on an AHA 3D printer for Genus



Disclaimer: All logos, images and trademarks used in this document are the property of their respective owners. Permission is granted by GENUS to Aha 3D to use the material and information in this case study for their audience education and business development purpose. Reproducing it without permission is prohibited.