



How 3D printing is changing the face of packaging of electronics

Over the last few years, 3D printing has already seeped in to the prototyping stage of product design and development. Slowly and steadily it is also making its presence felt in the actual production stages. In certain industries where customization is the need of the hour, 3D printing technology has swiftly replaced many conventional and time-consuming processes. This was clearly evident in the case of Sine Automation & Integration Pvt. Ltd., our client based out of Mumbai, India.

Sine Automation & Integration Pvt. Ltd.



Sine Automation & Integration Pvt. Ltd. is a leading Indian integrator and manufacturer of Cladding Station, Orbital Welding, Butt Welding, XY Manipulator since 2010. The company specialises in construction of Horizontal Cladding Machine, Vertical Cladding Machine, Butt Weld Station, Orbital Welding Machine, Sniffer Tube Welding, & Universal Cladding Station.

Current Challenges:

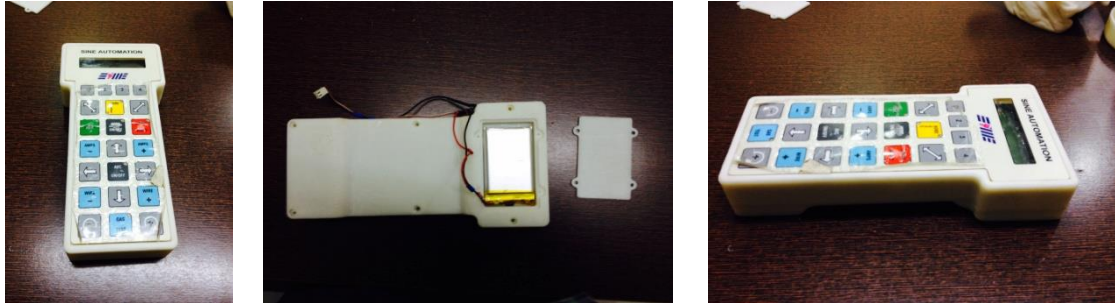
Sine Automation & Integration Pvt. Ltd. builds customized CNC welding robots for their end-clients. Each Computerized Numerical Control welding robot is build according to the design requirements of the end-clients applications. These robots are manufactured one at a time and it is unlikely that two CNC welding robots will have the same design. The same goes for the controllers used to operate these robotic machineries. Each controller has industry-specific requirements and there is no scope to have stock or pre-built controllers made. Making customized remote controllers is a tedious and intricate process and the design team had the controller body machined out of aluminum. This process was expensive as well as time consuming. Due to the customized nature of this requirement, outsourcing this process wasn't practical.

[Divide By Zero Technologies](http://www.dividebyzero.com)

H.O: No. 20, Growmore Tower,
Sector - 2, Kharghar, Navi Mumbai - 410210.

Phone: +91-9167943604
Email: sales@divbyz.com

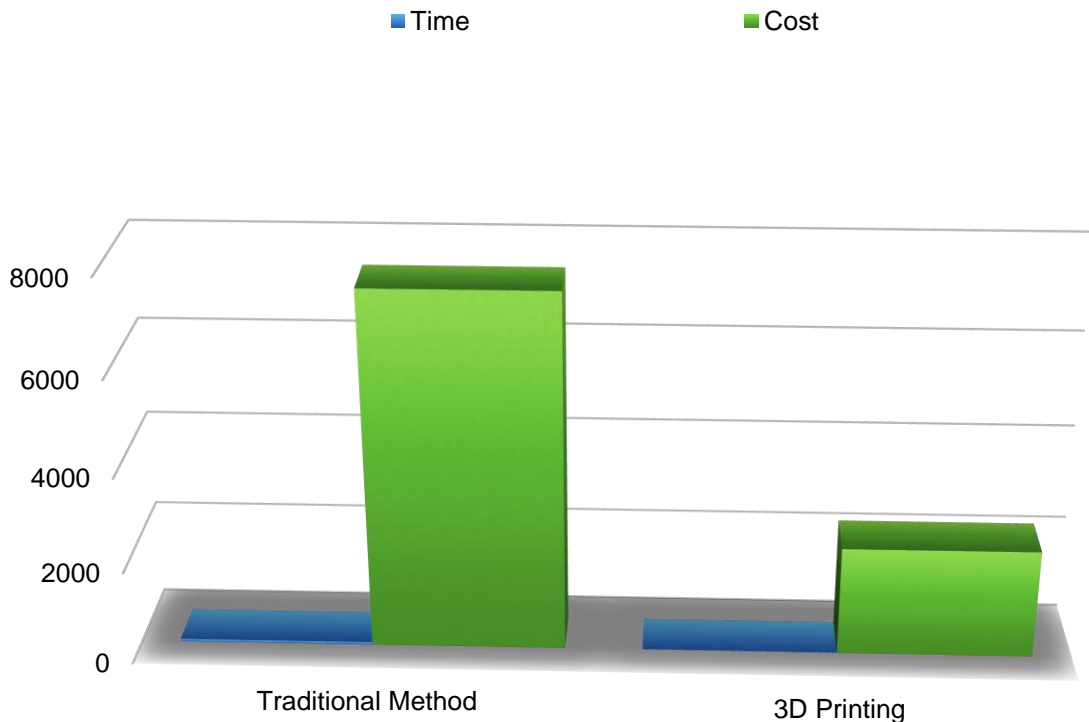
Solution by DBZ:



Divide by Zero provided Sine Automation & Integration Pvt. Ltd. with our Accucraft i250D 3D printer. They used 3D Printers to print out a customized and sturdy body for the remote controller to be used by end-clients. These controllers needed to be built-to-last and stand tall against abuse in real-world environs.

Benefits of using Divide by Zero Technologies 3D Printer:

After implementing Divide by Zero Technologies 3D Printers, Sine Automation & Integration Pvt. Ltd. were able to reap the following benefits:



[Divide By Zero Technologies](http://www.divbyzero.com)



-
- Shorter Turnaround Time – The time required to develop a controller was slashed down by 80% (approx).
 - Higher Cost-Efficiency – There was 70% (approx) reduction in cost to develop the controller.
 - Accuracy – The printed controllers are accurate with external components such as the battery, the key-pad membrane, and the LCD screen fit seamlessly in to the body.
 - Longevity – The output quality of the controller body is sturdy and long-lasting as the end-users environs may be highly demanding.
 - Production Quality – Thanks to the premium output quality of the DBZ printers, Team Sine Automation has already deployed the remote control as an end product merely by applying few post-processing techniques such as painting and buffing.

[Divide By Zero Technologies](#)

H.O: No. 20, Growmore Tower,
Sector – 2, Kharghar, Navi Mumbai – 410210.

Phone: +91-9167943604
Email: sales@divbyz.com