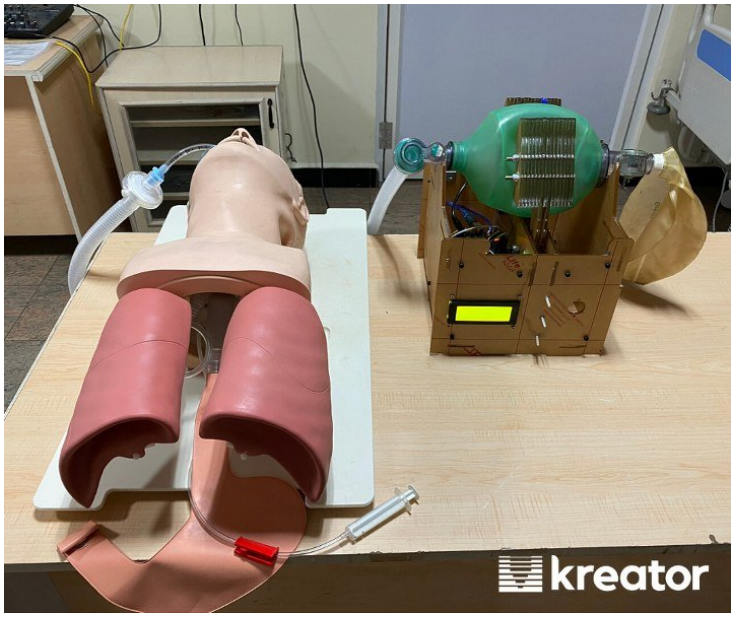
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Kreator 3D develops cost effective ventilator

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The team has decided to make their designs available as an open-source file owing to the prevalent Covid-19 situation in the country, to ensure maximum reach of the product



Kreator 3D, a Chennai based start-up primarily into manufacturing of 3D printers, has collaborated with SRM Institute of Science and Technology and Rizel Automotive Chennai to design an easy-to-manufacture and cost-effective ventilator in a short span of just 2 weeks. Final assembling and testing has been done and the device is now being submitted for necessary approvals to requisite medical bodies.

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In wake of the current pandemic that has struck the globe, the team at Kreator 3D wanted to use their technological know-how, skillset and put it to good use for the society. After intense brainstorming with doctors, and realizing that ventilator splitters are not the most effective and safe devices, they decided to build a stand-alone cost-effective ventilator. Collective knowledge and collaborative efforts with SRM Institute of Science and Technology (SRMIST), and Rizel Automotive helped finalize the design faster.

Shubham Dawkhar, Chief Technology Officer, Kreator 3D said, “Current online data suggests that only 20% of the Covid 19 patients need a ventilator. However, when the need arises, it becomes imperative to provide it to the patients in time, owing to the criticality of the situation. Current ventilators in the market cost about 10-15 lakhs and it takes a good amount of time and processes to build one. It was this gap that we decided to bridge; thus, built a fully functional ventilator that serves patients in case of emergencies.”

Commenting on the collaboration with SRMIST and Rizel Automotive, Anurag Atulya, Chief Executive Officer of Kreator 3D says, “The collaborative efforts of all three entities has helped in creating a product that we think will help in easing at least one battle against Covid-19. Our focus was not just on creating a product, but to build a cost effective and functional machine that reaches people in time. In such a grave crisis, it’s important that there is effective use and transfer of technological knowledge for the betterment of the society. Therefore, in order to reach out to more manufacturers in the country, we decided to make our design public, so a greater number of companies/people can help build and provide these ventilators to hospitals.”

The SRM Innovation and Design Centre oversees the innovation activities in the institute through its Incubation center and provides the FABLAB, a one-stop shop equipped with all necessary equipment and tools to its students.

Dr Shantanu Patil, Head, SRM Innovation and Design Centre(SIIC) and HoD, Translational Medicine, SRM Medical College while commenting on the collaboration says, “We are happy to collaborate with Kreator 3D and Rizel Automotive to get this product to reach its final stages and will extend all possible support and help that’s needed for the product to reach its final goal.”

The team at Kreator 3D are also printing and supplying 3D printed face shields to SRM Hospital, civil servants and workers around the city.