



Robotic 3D Printer

Robotic 3D printing is a novel yet promising approach to manufacturing. The aim of this project is to join 3D printing and robotics together, to make 3D printing more flexible and to remove limits.

Features:

Two main drivers are pushing its development: the need to additively create large objects more accurately and repeatedly, and also the opportunity to achieve more automated and integrated production with 3D printing. To make it possible, in this project the following main aspects have been developed: designing and 3D printing the extruder's housing and filament guidance system, mounting the created part onto the robotic arm, programming software to control the necessary hardware like the stepper motor or cooling system.