Press Assisted Binder Jetting
Team SPrinter

Project Overview

Binder Jetting is a type of additive manufacturing (3D printing) method, where liquid adhesive is used to bind green body layers to construct a final part. One of the major issues in additive manufacturing is the tendency for pores (empty, void spaces) to be left inside the product, which has adverse effects on the part’s quality—especially its strength.

Team SPrinter’s project goal is to create a mechanical press system designed to vary the amount of pressure in between green body layers in order to achieve an increase in the overall porosity of the final printed component. This internally integrated system includes a motor-driven pressure applicator and a heater to satisfy the project requirements.

Meet The Team

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Final CAD Model

Pulley Sub Assembly
Motor Sub Assembly

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Testing

System Level Diagram

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