

Fused Deposition Modeling (FDM)

FOR PROTOTYPE
& END-USE PARTS

FDM

Fused Deposition Modeling (FDM) is a layer additive manufacturing process that uses production-grade thermoplastic materials to produce both prototype and end-use parts. Solid Concepts offers a number of thermoplastic FDM materials that can be used for direct digital manufacturing including ABS (in both natural and black), PC-ISO polycarbonate and Ultem-9085 for high temperature applications.

Since FDM parts are constructed with production-grade thermoplastics they are functional and durable. In fact, Ultem-9085 is flame, smoke and toxicity certified to UL-94V0 and FAA 25.853 standards and possesses an excellent strength-to-weight ratio.

APPLICATIONS

- **Concept models** – Test form and fit, communicate design intent
- **Functional prototypes** – Tough prototypes that can be used for functional tests
- **End-use parts** – Low volume production without tooling expense and lead times
- **Manufacturing tools** – Quickly manufacture jigs, fixtures, tooling masters and production tooling without machining

INDUSTRIES

- Aerospace
- Automotive
- Commercial
- Consumer
- Industrial
- Medical



FDM ABS Black material was used to test the new design of this videogame control.



Ultem-9085 material is flame, smoke and toxicity certified to UL-94V0 and FAA 25.853 standards making it ideal for end-use aerospace parts.

 **SOLID
CONCEPTS**
Rapid Product Development