

Accepted Manuscript

Title: Tensile Strength of Commercial Polymer Materials for Fused Filament Fabrication 3D Printing

Authors: Nagendra G. Tanikella, Ben Wittbrodt, Joshua M. Pearce



PII: S2214-8604(16)30085-9
DOI: <http://dx.doi.org/doi:10.1016/j.addma.2017.03.005>
Reference: ADDMA 158

To appear in:

Received date: 6-5-2016
Revised date: 8-2-2017
Accepted date: 13-3-2017

Please cite this article as: Nagendra G.Tanikella, Ben Wittbrodt, Joshua M.Pearce, Tensile Strength of Commercial Polymer Materials for Fused Filament Fabrication 3D Printing (2010), <http://dx.doi.org/10.1016/j.addma.2017.03.005>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- >Challenging to 3-D print functional parts with known mechanical properties
- > Using variable open source 3-D printers for a wide range of materials.
- > Tested tensile strength following ASTM D638 for fused filament fabrication
- > Tensile strength of a 3-D printed specimen depends largely on the mass
- > 2 step process developed to screen 3-D prints for mechanical functionality

Download English Version:

<https://daneshyari.com/en/article/5020044>

Download Persian Version:

<https://daneshyari.com/article/5020044>

[Daneshyari.com](https://daneshyari.com)