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Technical review on study of Mechanical properties of component using FDM technique in 3D Printing

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Abstract

One of the famous Additive Manufacturing methods for a range of application is Fused Deposition
Modelling (FDM). Fused Deposition Modelling (FDM) is a method for building three-dimensional
geometries layer by layer. The FDM technology, also known as fused deposition modelling, is reasonably
priced, safe for the environment, and appropriate for complicated geometries. Minimize waste of material;
enhance component density and decrease prices are all aims. This article provides a detailed examination
of the variables that directly impact mechanical qualities of components made using the Fused Deposition
Modelling (FDM) technology, such as tensile strength, compressive strength, and bending strength. A
review like this one can help researchers in a related subject choose the optimum optimization method
since component density affects a material's mechanical strength. According to research conducted by a
number of academics, it is crucial to study the mechanical characteristics of materials with various
densities.

Keywords

Additive Manufacturing, Fused Deposition Modelling, Mechanical Properties, Density

Full Text:

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