

Defects in 3D Printing Techniques: Causes, Effects, and Mitigation Strategies

Prof. S.D. More, Prof. H. S. Derle, Prof. P. P. Thakare

Lecturer, Mechanical Engineering Department

Guru Gobind Singh Polytechnic, Nashik

Pravin.thakre@ggsf.edu.in , Sadashiv.more@ggsf.edu.in , Harshal.derle@ggsf.edu.in

Abstract: *This paper explores various defects encountered in 3D printing, their underlying causes, and the effects of environmental factors such as humidity on the printing process. By identifying common issues and their implications, this study provides detailed mitigation strategies aimed at improving the quality of 3D printed parts. The insights presented contribute to advancing the reliability and efficiency of additive manufacturing processes across diverse applications*

Keywords: 3D Printing, Defects, Humidity, Layer Adhesion, Additive Manufacturing