Title: A COMPARATIVE STUDY OF RAPID PROTOTYPING SYSTEMS

A general comparative study of the literature sources across different Rapid Prototyping systems and performance in different build orientations has shown that the publications are few in number. This research aims to provide general information including dimensional accuracy and tensile properties for different build orientations, and relative water absorption and Shore hardness properties between different Rapid Prototyping systems. Test specimens were fabricated in four popular commercial Rapid Prototyping systems: Selective Laser Sintering (SLS), PolyJet, Fused Deposition Modeling (FDM), and 3D Printing (3DP) at the University of Missouri, Columbia. The results can be used as a preliminary guide to help users determine optimal strategies for rapid prototyping system selection.