

REDUCTION OF ASSEMBLY TIME IN RAPMAN 3.1 3D PRINTER BY REDESIGN OF ONE OF THE EIGHT CORNERS BY USING DFMA METHOD

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ABSTRACT

Over the last few years a huge development has been made over the 3D printer. One of these achievements was the (DIY) RAPMAN 3.1 3D printer. It has some disadvantages such as the difficulties in the assembly as there are too many parts which are very similar and small. However, this research managed to overcome some of these obstacles using Boothroyd Dewhurst Design for Manufacture Assembly (DFMA) method on the RAPMAN 3.1. Parts are made using nylon and Teflon materials in the prototype. It saves a proper amount of money and time with a design efficiency of 35%

KEYWORDS: Assembly Time in RAPMAN 3.1 3d Printer, Redesign of One of the Eight Corners, Using DFMA Method