Application and Evaluation of 3D Printing Technology in Customized Fashion Industry

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Abstract : This study deliberates emerging design activates in 3D printing technology, the paper provides the insight into the broad opportunities in 3D printing applications in fashion world. 3D printing is becoming a reason for reduction of lead time. The process engenders the precise models and one of prototype components for design approbation; trail and testing significance through the production components to be utilized in true working environments. This emerging technology have given elevate to an emergent realm of digitally fabricated art and design. Bitonic Creations, CONTINUUM (3D printed shoes), Jiri Evenhuis, Michael Schmidt have be giving extensive amassments of haute couture dresses and accessories. Cosyflex TM, N12 undergarments are examples of an innovative process for 3D printing. Varied types of liquid polymers such as latex, silicon, polyurethane and Teflon as well as a variety of textile fibers such as cotton, viscose and polyamide enable tailor made fabrics for any need. Patterns, perforations, embossing and embellishments may be created by printing on 3D structure base plate. Computer solidifies material feedstock layer by layer with micro-millimeter detail. In lieu of producing textiles by meter, then cutting and sewing them into final product, 3D printing can become a reason to make sewing equipment obsolete. The findings positively corroborates the expected advantage of 3D printed sample that seem to facilitate the first steps for designer.

Keywords: 3D printing, customization, fashion industry, Haute couture

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