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Portable 3D Printer

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Abstract: *This research paper focuses on Portable 3D printing, an innovative blend of Computer Numerical Control (CNC) technology with additive manufacturing techniques. The study begins by defining CNC-based 3D printing and emphasizing its growing significance in the field of precision manufacturing. A brief history of both CNC and 3D printing technologies is presented to provide context. The paper then explores the working process of CNC-integrated 3D printers, including the types of materials used in fabrication. It highlights the advantages of this hybrid approach over traditional manufacturing and standalone 3D printing systems, particularly in terms of accuracy, repeatability, and automation. Real-world applications across various industries are discussed to demonstrate its versatility. Finally, the paper outlines the future scope and potential advancements in CNC-based 3D printing technology.*

Keywords: 3D Printer, CNC Based 3D printer, 3D Models, Printing

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