

Design and Development of Computer Controlled Gear Cutting Machine

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Abstract: *The design, development, and performance evaluation of a low-cost, portable, and affordable gear cutting machine. The machine is specifically designed to cater to the needs of small-scale manufacturing units, provide with a cost-effective solution for gear production. The research focuses on addressing the gap in the market for accessible gear cutting machinery, aiming to enhance local industry growth and manufacturing capabilities. The thesis outlines the design process, key features, construction, and performance evaluation of the gear cutting machine, demonstrating its potential to facilitate gear production in small-scale manufacturing setups. The findings of this research contribute to the advancement of affordable manufacturing solutions, enabling small-scale manufacturers to compete effectively in the industry.*

Keywords: automatic gear cutting, mechanical System, Automation, industries