

The Role of Nanotechnology in Advancing Mechanical Engineering

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Abstract: *This paper explores the transformative role of nanotechnology in mechanical engineering, highlighting how innovations at the nanoscale improve the performance, durability, and efficiency of mechanical systems. Through an analysis of recent literature and case studies, the paper illustrates how nanotechnology enhances materials, processes, and product designs, bringing about significant advancements in various engineering applications, including manufacturing, energy systems, and aerospace..*

Keywords: Manufacturing, energy systems, nanotechnology, Durability, Efficiency, etc