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Improving Energy Efficiency in Manufacturing Using Cyber Physical Systems

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Abstract: *As the manufacturing sector faces increasing pressure to reduce environmental impact and operational costs, Cyber-Physical Systems (CPS) offer a transformative solution. This paper investigates the integration of CPS to enhance energy efficiency in industrial processes. By bridging the gap between digital information and physical manufacturing through real-time monitoring and intelligent control, this research proposes a framework for optimizing resource utilization and minimizing energy waste.*

Keywords: Cyber-Physical Systems, Deep Learning, Energy Efficiency, Machine Learning, Predictive Modeling, Smart Manufacturing

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