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Fabrication of Integrated Thresher and Pallet Making Machine

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Abstract: *Rice is one of the chief grains in India, and as such, is a major food crop, especially in the eastern and southern regions of India. Rice production amounts for a sizable amount of economy. However, farmers continue to harvest with the traditional methods, which affect their yield, and thereby affecting their earning. This paper deals with the fabrication of integrated thresher and pallet making machine. marks a significant milestone in agricultural technology, offering a novel approach to streamline multiple processes within a single unit. Traditional agricultural practices often involve separate equipment for crop threshing and agricultural residue management, leading to inefficiencies in labor, time, and resource utilization. In response to these challenges, the integrated machine presents a comprehensive solution by combining the functions of threshing harvested crops and producing pallets from agricultural residues. The fabrication of the integrated thresher and pallet making machine represents a convergence of mechanical, electrical, and agricultural engineering principles. The design and engineering of the machine involve careful consideration of factors such as power requirements, material handling mechanisms, and safety features. Automation plays a crucial role in coordinating and controlling the various operations of the machine, ensuring smooth and efficient performance while minimizing human intervention.*

Keywords: *Crop cutting, Integrated Thresher, Pallet Making, Agricultural Machinery, Optimization*