

IMPROVING STORAGE AND GOOD DISPATCH OPERATIONS IN WAREHOUSE BY DESIGNING ONLINE QC AND OPTIMIZING INBOUND LOGISTICS IN INDIA'S LARGEST OIL INDUSTRY

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Abstract

In the last decade or so, the warehouse and logistics market have seen many drastic changes, which is a result of the evolution of new technology in this sector. The agility of the supply chain market has a great impact on the market dynamics. Flexibility of the work area and space is the highest need of the current time. Developing new ways and technologies and implementing them on the current system is highly preferred over investing on the assets for the same purpose. The present case study is carried out in India's largest edible oil manufacturing company solving the issues faced by its concerning the space availability and material management. Here, we have tried to develop a new method on Palletisation and apply the same to selected variants. In this, a mathematical model has been developed which helps in obtaining the accurate number of boxes of various dimensions on a given pallet. Other factors such as the strength of the box, box thickness, height factor of rake and the handling of the forklift driver etc have been considered in the present model. This model was successfully implemented in three warehouses and the authenticity of the model was also verified. It resulted in more stacked and packed a lot on the pallet that made it easy for the forklift driver to handle. It also had a huge impact on the space availability as the company got about 2 rakes empty each day and could push its production limits.

Keywords: Palletization, Forklift Movement, Warehouse, Material Management.
