WAREHOUSE LAYOUT DESIGN TO MINIMIZE THE NUMBER OF PRODUCTS THAT ARE NOT ACCOMMODATED IN BLOCK AND THE EFFICIENCY OF GOODS MOVEMENT ACTIVITIES AT FINISHED PRODUCT STORAGE DIVISION OF PT. ISM BOGASARI FLOUR MILLS SURABAYA

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Abstract
Warehouse is an important part for supporting production system. Better warehouse setting and conditioning are suggested to avoid loss, to minimize cost, and to accelerate warehouse operation and service. Warehouse should be designed well, so that goods or materials can fulfill maximum capacity, both vertically and horizontally. When capacity utilization is not at maximum amount, it will cause many products can’t be accommodated in the warehouse, which at long term can cause company loss. This phenomenon occurs in the 25 kgs flour product storage in PT. ISM BOGASARI FLOUR MILLS SURABAYA, especially in warehouse A and warehouse B. Warehouse space utilization which still ineffective take a result that many products can’t be accommodated in the storage blocks, so they must placed in alley. Another way, randomized storage policy on the existing condition will also cause high forklift-operational-cost per day. This is the main reason why we need to redesign and rearrange storage blocks capacity and storage policy from existing condition. Methods used for that purpose are including calculation of storage blocks capacity that match with the needs of each product, and also usage of dedicated storage policies to reduce forklift operational cost per day. The results obtained are reduction of the number of products placed outside the block by 9.74% as well as reduction of forklift operating costs by 57.28%.

Keywords: Warehouse, Storage Space Capacity, Out of Block, Dedicated Storage Policy