

ABSTRACT

PT. XYZ is an enterprise for sales services, maintenance, repair and spare parts provider of Toyota. To support its function, PT XYZ has regional parts depot Bandung, a distribution warehouse that supply spare parts product to the whole region of West Java. PT. XYZ has two types of warehouses, non-chemical and chemical warehouses. chemical warehouse is a warehouse with 86 m² area that arranged floor storage stack based on the block allocated for the associated SKU. The problems experienced in chemical warehouse at the moment is the number of products that are not absorbed and stored off site storage. Conditions due to a few blocks overcapacity and several kinds of products that do not have a storage block.

Steps being taken to resolve the problem consists of two stages. First, redesign the warehouse layout with heuristic method approach. Second, redesign warehouse storage allocation by using shared storage method. Warehouse layout design phase is done to increase the capacity and utility sheds. Meanwhile, storage allocation is conducted to find out the number of blocks of storage that most minimum.

Based on the calculation, best proposed layout is an alternative with horizontal aisle and 4-1 lane depth. The proposed layout proved to increase capacity by 27% to 132 Palet positions and minimize the amount of storage out of the block into 0%.

Keywords : *Warehouse Layout, Out of Block, Heuristic Approach, Shared Storage*