

**USULAN PERBAIKAN TATA LETAK GUDANG DISTRIBUSI  
DENGAN METODE *CLASS BASED STORAGE*  
(STUDI KASUS: PT.BUDIMAS MAKMUR MULIA,SURAKARTA)**

**ABSTRAK**

PT. Budimas Makmur Mulia bergerak di bidang *Consumer Goods* yang mendistribusikan kebutuhan bulanan ke toko-toko, minimarket, grosiran, supermarket dan lain-lain. Barang-barang yang didistribusikan ada berbagai macam jenis produk seperti: kosmetik, makanan, minuman, dan lain-lain. Gudang penyimpanan PT.Budimas Makmur Mulia mempunyai luas bangunan 1044,45m<sup>2</sup>. Kondisi awal gudang diketahui bahwa ada permasalahan penataan barang yang tidak rapi dan tidak sesuai dengan jenis produk. Hal tersebut menyebabkan tempat atau lorong menjadi sangat sempit, sehingga menyulitkan proses penyimpanan dan pengambilan barang. Selain itu waktu pengambilan barang menjadi lama dikarenakan harus memindahkan barang yang menghalangi. Usaha untuk menyelesaikan permasalahan tersebut yaitu melalui perbaikan tata letak dengan metode *Class Based Storage*. Pengelasan didasarkan oleh frekuensi keluar-masuk. Tahapan penelitian dilakukan dengan menghitung frekuensi perpindahan, jumlah tempat penyimpanan, perancangan dengan sistem rak, jarak perpindahan, ongkos material handling. Hasil penelitian menunjukkan bahwa berdasarkan frekuensi perpindahan, material dikelompokkan menjadi Kelas A: DNP Reguler,MLK Biskuit, Inmj-008, Inmj-011. Kelas B: Sleek 450 ml, B&B, Inmj-009, Ellips, Master Spr Col, Ovale FL. Kelas C: Ovale ML Sleek 70 ml,Nomos Aerosol Orange, Inmj-012, Resik V Absolute, DNP Lavender, Nomos Penc DB Jumbo. Layout yang diusulkan dapat menurunkan jarak perpindahan 7,15 % dan ongkos material handling sebesar 4,8% selama Januari sampai Mei 2017.

**Kata Kunci:** Tata Letak Gudang,Class Based Storage,Ongkos Material Handling.

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***ABSTRACT***

*PT. Budimas Makmur Mulia is engaged in Consumer Goods which distributes monthly needs to shops, minimarkets, wholesalers, supermarkets and others. The goods are distributed there are various types of products such as: cosmetics, food, beverages, and others. The storage warehouse of PT.Budimas Makmur Mulia has a building area of 1044,45m<sup>2</sup>. The initial condition of the warehouse is known that there is a problem of arrangement of goods that are not tidy and not in accordance with the type of product. This causes the place or hallway becomes very narrow, making it difficult for the process of storing and retrieval of goods. In addition, the time of taking the goods to be long because they have to move the goods that block. The effort to solve the problem is through the improvement of layout by Class Based Storage method. The flow is based on the frequency of in and out. The research stages are done by calculating the frequency of displacement, the amount of storage, the design with the shelf system, the distance of movement, the cost of material handling. The results show that based on the frequency of displacement, the material is grouped into Class A: Regular DNP, MLK Biscuit, Inmj-008, Inmj-011. Class B: Sleek 450 ml, B & B, Inmj-009, Ellips, Master Spr Col, Ovale FL. Class C: Ovale ML Sleek 70 ml, Nomos Aerosol Orange, Inmj-012, Absolute V Absolute, DNP Lavender, Nomos Penc DB Jumbo. The proposed layout can reduce the moving distance of 7.15% and material handling cost by 4.8% during January to May 2017.*

**Keywords:** *Warehouse Layout, Class Based Storage, Material Handling Cost*