

**REDUKSI AREA TRANSIT *PART OVERFLOW* DENGAN  
PERBANDINGAN METODE *DEDICATED STORAGE* DAN METODE  
*CLASS BASED STORAGE***

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**ABSTRAK**

PT XYZ merupakan produsen produk otomotif yang sangat berkembang dan selalu berusaha meningkatkan produktivitasnya dalam proses produksi untuk mencapai target produksi. Salah satu kebutuhan penting produksinya adalah *part*. *PPC & Logistic Department* PT XYZ merupakan departemen yang bertugas memenuhi kebutuhan *part* proses produksi dengan melakukan proses *supply* ke area lini produksi *assembly (sub-assy line)*. Permasalahan yang dihadapi proses *supply part* adalah terjadinya *overflow* di area lini produksi *assembly* yang membuat operator membawa dan menyimpan *part* ke area transit *part overflow*, namun penempatan dan penyusunan *part* yang *overflow* tidak memiliki aturan spesifik dan tidak tertata jelas sehingga operator menempatkan *part* pada *slot* yang masih kosong di area tersebut. Hal ini mengakibatkan operator perlu mencari dan membongkar tumpukan *part* jika membutuhkan suatu jenis *part* yang akan disuplai kembali. Terdapat 18 jenis *local part* yang disimpan di area transit *part overflow* ini dengan setiap jenis *part* berasal dari tiga *flow rack* berbeda di area lini produksi *assembly* yaitu *flow rack* N-04, N-05, dan N-06. Tujuan penelitian ini adalah untuk memberikan rekomendasi perbaikan penempatan dan penyusunan *part* di area transit *part overflow* dengan perbandingan metode *dedicated storage* dan *class based storage*. Hasil penelitian menunjukkan bahwa pengolahan data yang dilakukan dengan kedua metode menghasilkan nilai yang berbeda. Perhitungan menggunakan metode *dedicated storage* menghasilkan jarak perjalanan total kondisi aktual sebesar 4298,873 m/bulan dan usulan sebesar 3316,218 m/bulan dengan persentase penurunan sebesar 22,858%. Sedangkan perhitungan menggunakan metode *class based storage* menghasilkan jarak perjalanan total kondisi aktual sebesar 4298,873 m/bulan dan usulan sebesar 3527,909 m/bulan dengan persentase penurunan sebesar 17,934%. Sehingga metode yang dipilih untuk melakukan usulan perancangan tata letak pada area transit *part overflow* adalah metode *dedicated storage*.

**Kata Kunci** : *Dedicated Storage, Class Based Storage, Tata Letak, Jarak Perjalanan Total, Part.*

**REDUCTION OF OVERFLOW PART TRANSIT AREA WITH  
COMPARISON OF DEDICATED STORAGE METHOD AND CLASS BASED  
STORAGE METHOD**

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**ABSTRACT**

*As a highly developed automotive product manufacturer, PT XYZ always strives to increase its productivity in production process to achieve production targets. One important requirement in its production are parts. PPC & Logistics Department PT XYZ is department that is tasked with fulfill needs of parts in production process by carrying out supply process to assembly line production area (sub-assy line). The problem faced in this supply part process is overflow in assembly production line area which makes the operator carry and store parts to transit area of overflow part, but the placement and arrangement of overflow parts do not have specific rules and are not clearly ordered so that operator will place parts in an empty slot in area. This results in operator needing to find and unload stack of parts if they need type of part to be supplied again. There are 18 types of local parts that are stored in this transit area of overflow part, with each type of parts coming from three different flow racks in assembly line production area, namely N-04, N-05 and N-06 flow racks. Purpose of this research is to provide recommendations for improvements in placement and arrangement of parts in transit area of overflow part with comparison of dedicated storage and class based storage methods. The results showed that data processing carried out by comparison two different methods. Calculations using dedicated storage has result that total travel distance under actual conditions of 4298,873 m/month and proposal of 3316,218 m/month with reduction percentage of 22,858%. Whereas calculations using class based storage resulted in total travel distance under actual conditions of 4298,873 m/month and proposal of 3527,909 m/month with reduction percentage of 17,934%. So method that will be chosen to do proposed layout design in transit area of overflow part is dedicated storage.*

**Keywords** : *Dedicated Storage, Class Based Storage, Layout, Total Travelled Distance, Part.*