

ABSTRAK

PT Budi Manunggal merupakan industri manufaktur make to order pembuatan sarung tangan golf dengan tata letak fasilitas produksi multi-floor berbentuk balok yang memanjang ke sisi belakang perusahaan. Keadaan tata letak fasilitas produksi PT Budi Manunggal belum optimal karena letak departemen yang saling berhubungan masih sangat jauh, seperti halnya jarak antara departemen gudang kain dengan departemen pemotongan mencapai 128,16 meter. Untuk memperbaiki masalah tersebut perlu dilakukan analisis terhadap tata letak fasilitas produksi perusahaan. Penelitian ini bertujuan untuk mendapatkan rancangan tata letak fasilitas produksi multi-floor yang optimum dengan mempertimbangkan frekuensi aliran, biaya, dan jarak material handling.

Penelitian ini akan membahas bagaimana mendapatkan tata letak fasilitas produksi multi-floor yang optimal dengan mempertimbangkan frekuensi aliran, biaya, dan jarak material handling. Salah satunya menggunakan metode CRAFT dengan bantuan software WinQSB. Analisis perhitungan dilakukan dengan menggunakan data frekuensi aliran, biaya dan jarak material handling pada tata letak fasilitas produksi perusahaan.

Hasil dari penelitian menunjukkan bahwa terjadi penurunan jarak material handling sebesar 91,56 meter, sedangkan biaya material handling terjadi penurunan sebesar Rp 3.820.211,74. Hasil tata letak fasilitas produksi setelah dilakukan perubahan maka letak departemen packing berada di lokasi satu, departemen penjahitan 1 berada di lokasi dua, departemen penjahitan 3 tetap berada di lokasi tiga, departemen gudang kulit tetap berada di lokasi empat, departemen pemotongan tetap berada di lokasi lima, departemen penjahitan 2 tetap berada di lokasi enam, departemen gudang kain dan asesoris berada di lokasi tujuh, dan departemen gudang karton berada di lokasi delapan.

Kata kunci: Tata letak fasilitas produksi, CRAFT, WinQSB, Frekuensi aliran, Biaya material handling, dan Jarak material handling.

ABSTRACT

PT Budi Manunggal is a manufacturer of make to order the production of a golf glove with the production facility layout of multi-floor beam shaped that extends to the back side of the company. The state of the production facilities layout chart of PT Budi Manunggal is not optimal yet due to the layout of interconnected departments is still very far away, as the distance between the warehouse and the department of cutting can reach 128,16 meters away. In order to fix the problem, it needs to do an analysis to wards the production facilities layout of the company. This research aims to get the optimum draft production facilities layout of multi-floor by considering the flow frequency, cost, and the distance of material handling.

This research will discuss how to get the optimal production facilities layout of multi-floor by considering the flow frequency, cost, and the distance of material handling. One of them uses the method of CRAFT with the help of WinQSB software. The analysis of the calculation is done by using frequency data flow, costs and material handling distances on the production facilities layout of the company.

The result of the research indicates that there is a decrease of the distance material handling as many as 91,56 metres, while the cost of material handling decreases as much as IDR 3.820.211,74. The layout of production facilities after making some changes so the layout of the packing department is at the location one, department of sewing 1 is at the location two, department of sewing 3 remains at the location three, the department of shed leathers remains at the location four, the department of cutting remains at the location five, the department of sewing 2 remains at the location six, department of warehouse fabric and accessories is at the location seven, and the department of cardboard warehouse is at the location eight.

Keywords: Production Facility Layout, CRAFT, WinQSB, Flow Frequency, Cost of Material Handling, and Distance of Material Handling.