ABSTRAK

Leon Mas merupakan sebuah UMKM yang bergerak dibidang produksi tekstil pakaian jadi anak-anak yang memroduksi berbagai macam desain produk seperti jumpsuit, dress, hingga setelan baju anak anak 0-1 tahun. Leon Mas masih memiliki permasalahan dibidang produksi seperti proses produksi yang terlewat, lantai produksi yang dinilai belum efektif apabila dibandingkan dengan standard produksi, serta sistem pergudangan yang berbahaya dan tidak disusun. Makapeneliti melakukan observasi serta implementasi langsung di lapangan menggunakkan data yang didapatkan dari operasi seperti jumlah produksi, alur, waktu, serta jumlah karyawan atau pegawai dan diolah dengan metode systematicallayout planning yang berisikan FTC, OPC, Routing Sheet, MPPC, ARC, ARD, AAD, dan flow process untuk mendesain layout baru serta penggunaan metode shared storage yang berisikan Throughput, Assignment, Perhitungan kebtuhan serta ruangan. Setelah melakukan pengolahan, maka didapatkan 2 buah alternativedesainyang memiliki efektivitas, jarak, waktu yang lebih singkat dari layout awal.Dari kedua alternative dilakukan simulasi menggunakan aplikasi Flexsim dan dibandingkan waktu serta throughput produksinya, serta dipilih alternative 1 dikarenakan jumlah throughput produksi lebih banyak 2 potong dibandingkan dengan alternative 2, dengan peningkatan sekitar 11,4% dibandingkan layout awal. Langkah terakhir yaitu implementasi desain akhir yang telah dipilih pada tempat produksi.

Kata Kunci : Tata Letak Fasilitas, Systematical Layout Planning, Shared Storage, Implementation

ABSTRACT

Leon Mas is a small to medium bussiness engaged in the production of textiles for children's apparel that produces various product designs, such as jumpsuits, dresses, and clothes for children from 0-1 years old. Leon Mas still has problems in the production sector, such as the missed production process, the production layout which is considered ineffective when compared to production standards, as well as a dangerous and unorganized warehousing system. So the researchers conducted direct observations and implementations in the field using data obtained from operations such as the amount of production, flow, time, and number of employees and processed using a systematical layout planning method that use FTC, OPC, Routing Sheet, MPPC, ARC, ARD, AAD, and flow processes to design new layouts and use shared storage methods that use Throughput, Assignment, Calculation of needs and space. After being processed, result of the 2 alternative designs that have effectiveness, distance, shorter time than the initial layout. From the two alternatives, simulations were carried out using the Flexsim application and compared the time and production throughput, and alternative 1 was chosen because the number of production throughput was 2 more pieces compared to alternative 2, with an increase of about 11.4% compared to the initial layout. The final step is the implementation of the final design that has been selected at the production site.

Keywords: Facility Layout, Systematic Layout Planning, Shared Storage, Implementation