

ANALISIS TATA LETAK FASILITAS PRODUKSI UNTUK MENGURANGI BIAYA *MATERIAL HANDLING* DENGAN PENDEKATAN *SYSTEMATIC LAYOUT PLANNING* DI PT WIJAYAKUSUMA SAKTI

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ABSTRAK

PT Wijayakusuma Sakti suatu perusahaan industri *manufaktur (furniture)* yang memproduksi meja kayu. PT Wijayakusuma Sakti berada di Jl. Raya Undip Teluk Awur no.799 RT 002/RW0 01, Kec. Tahunan, Kab. Jepara, Jawa Tengah, Indonesia 59427. Permasalahan yang dihadapi perusahaan berhubungan dengan *material handling*, diakibatkan rancangan tata letak yang ada tidak efektif, kondisi tersebut berpengaruh terhadap biaya *material handling* perusahaan. PT Wijayakusuma Sakti memiliki 9 stasiun kerja dan terdapat 1 kantor admin dengan jarak yang bervariasi antara areanya, total jarak yang ditempuh per hari mencapai 1.027 meter. Biaya yang dikeluarkan perusahaan untuk mendukung aktifitas yang dilakukan sebanyak Rp 448.357,02 per hari. Metode untuk mengumpulkan data pada penelitian adalah melakukan observasi langsung serta wawancara terhadap beberapa karyawan. Penelitian ini menggunakan pendekatan *Systematic Layout Planning (SLP)*, *Operation Process Chart (OPC)*, *Activity Relationship Diagram (ARD)*, *From to chart (FTC)* dan *Blocplan*. Dari metode tersebut dapat diperoleh beberapa pilihan solusi yang memungkinkan pemilihan opsi untuk membantu menyelesaikan permasalahan tata letak pabrik, mengurangi jarak antar area dan memperhitungkan derajat kedekatan. Penelitian ini menunjukkan perancangan tata letak usulan 1 berhasil mengurangi biaya penanganan *material* sebesar 37% dengan biaya Rp 283.501,00, usulan 2 sebesar 9% dengan biaya Rp 408.418,75 dan usulan 3 sebesar -18 % dengan biaya Rp 530.917,63.

Kata kunci: Industri manufaktur, Biaya *material handling*, Tata letak fasilitas, *Systematic Layout Planning (SLP)*

ANALYSIS OF THE LAYOUT OF PRODUCTION FACILITIES TO REDUCE MATERIAL HANDLING COSTS USING A SYSTEMATIC LAYOUT PLANNING APPROACH AT PT WIJAYAKUSUMA SAKTI

ABSTRACT

PT Wijayakusuma Sakti is an industrial manufacturing company that produces wooden tables. PT Wijayakusuma Sakti can be found on Undip Teluk Awur Main Road 33 799 RT 002/RW01, Tahunan Subdistrict, District. Jepara, located in Central Java, Indonesia, has the postal code 59427. The company is experiencing difficulties with material handling due to an ineffective layout design, resulting in increased material handling costs. PT Wijayakusuma Sakti has 9 workstations and 1 admin office, with distances between areas varying. The total distance travelled per day is 1,027 meters. The company incurs costs of IDR 448,357.02 per day to support its activities. The method used for collecting data in the research involves direct observation and conducting interviews with multiple employees. This study employs the approaches of Systematic Layout Planning (SLP), Operation Process Chart (OPC), Activity Relationship Diagram (ARD), From to chart (FTC), and Blocplan. Through this approach, various solutions can be identified to address factory layout issues, minimize distances between different areas, and consider the level of proximity. The study indicates that the layout proposal 1 effectively decreased material handling expenses by 37% for IDR 283,501.00, proposal 2 by 9%, costing IDR 408,418.75, and proposal 3 by -18% with a cost of IDR 530,917.63.

Keywords: Manufacturing industry, material handling costs, facility layout, Systematic Layout Planning (SLP)

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