

ABSTRACT

The aims of this research are to measure the manufacturing flexibility, to improve the manufacturing flexibility and to implement the frame work of decision-making process of the manufacturing flexibility improvement with evaluation criteria.

The method analysis used is Analytic Hierarchy Process (AHP). This type of research is to study the total implementation of all technical and manufacturing management at PT CI. Techniques of data collection is done by observation and questionnaire asked to respondents who truly understand the business, supply chain and manufacturing at PT CI.

Based on the result of measurement and selection of priority to improve the types of manufacturing flexibility at PT CI, it's identified that volume, product mix, machine, process, manpower and operational flexibility are the priorities. With implementing the frame work of decision-making process of the manufacturing flexibility improvement with evaluation criteria, it's determined that the highest value is the result of the determination of priorities in the Visual Management. That means that the first priority improvement initiatives in manufacturing flexibility at PT CI is Visual Management.

Key words : manufacturing flexibility, analytic hierarchy process (AHP)

ABSTRAK

Penelitian ini bertujuan untuk mengukur fleksibilitas manufaktur, meningkatkan fleksibilitas manufaktur dan menerapkan sistem pengambilan keputusan untuk menilai strategi fleksibilitas manufaktur di PT CI. Metode analisis yang digunakan adalah Analytic Hierarchy Process (AHP). Jenis penelitian ini adalah penelitian total survey dari seluruh pelaksanaan teknis maupun manajemen manufaktur PT CI. Teknik pengumpulan data dilakukan dengan cara observasi dan mengajukan kuisisioner kepada responden yang benar-benar memahami kegiatan bisnis, rantai pasok dan manufaktur PT CI. Berdasarkan hasil pengukuran dan pemilihan prioritas peningkatan jenis fleksibilitas manufaktur PT CI ditemukan bahwa fleksibilitas volume, bauran produk, mesin, proses, tenaga kerja dan operasional menjadi prioritas. Dengan penerapan rerangka berpikir proses pengambilan keputusan peningkatan fleksibilitas manufaktur dengan evaluasi kriteria terhadap alternatif tindakan didapatkan bahwa nilai tertinggi hasil penentuan skala prioritas adalah pada Visual Management. Artinya, prioritas pertama inisiatif peningkatan fleksibilitas manufaktur di PT CI adalah Visual Management.

Kata kunci : fleksibilitas manufaktur, *analytic hierarchy process* (AHP)