

## **ABSTRACT**

*PT Chitose Indonesia Manufacturing is a manufacturing company which produces various kinds of chairs. This research focuses on the construction department of the company. Based on observations on the production floor, the construction department is using layout process where machines are grouped into three main processes pressings, appeal, and shringking. There are some parts that pass through the construction department is back pipe, pipe seat, and leg pipe. The company's superior product is the product category chair meetings. Categories meeting chair produced regularly and in large quantities than most other product categories. Problems in the construction department is the backtracking, irregular material flow, the movement of materials between the remote facility operations and the addition of the machine.*

*This research in designing the layout of the plant facilities using approaches Group Technology (GT) and Algorithm BLOCPLAN. In the GT approach using 3 methods: Rank Order Clustering (ROC), Similarity Coefficient Algorithm (SCA) and the Cluster Identification Algorithm (CIA) to group parts and machines.*

*In the calculation results of this study, the proposed layout using Group Technology approach and algorithm obtained BLOCPLAN total from to chart (FTC) moments displacement of 3871.5 or a reduction of 46.61% when compared to the existing layout.*

**Keywords :** *Layout, Group Technology, BLOCPLAN, Moment of Movement*