

## **ABSTRACT**

*PT. Granesia is a printing and publishing manufacturing company. The resulting products are paper products and products of a commercial character. Products are the subject of research is product of a commercial character. Various types of product made has effected to various of material handling equipment, flow, and also the unit load. Those affections have caused to backtracking and crosstracking flow and high frequency of material because of unplanned unit load. Currently, PT. Granesia plan on doing relayout by adding new departments and new machines that require addition of new material handling equipment to support production system.*

*In this research, the approach to use is General Analysis Procedure. This Approach focus on analyzing the whole of elements that affected the material handling system. Equipment, flow, and unit load are some of elements that came as an outputs from this General Analysis Procedure.*

*Results from this research are improvements in the material handling system design is purchase a trolley, suggestion for using handlift instead of forklift, suggestion for using aluminium platform truck instead of wheel pallet, purchased plastic boxes to help movement of the manual system. Suitable unit load that gained an average of 14% efficiency frequency movement, and also renew the flow of material that minimize backtracking and crosstracking. All of that are grouped into costly measurement or what is called Activity Cost Determination which reduce the handling cost about 9%.*

**Keywords:** *Material Handling, General Analysis Procedure, Material Handling System Design, Activity Cost Determination*