

ABSTRACT

Art Aluminum Casting, known as Artal Cast is a company engaged in the recycling of aluminum use aluminum trash. One of the product that interest by the consumer is in the form of factory machinery spare thread holder. Based on information from the Art Aluminum Casting known that frequent delays to fulfillment consumer orders. The delay occurred because the operator is not able to fulfill the standards set time. That happen because it is found waste in the recycling process of aluminum into the thread holder.

Value Stream Mapping and Process Activity Mapping are used to find waste that occurs in the process of recycling aluminum in Artal Cast. From Value Stream Mapping known non-value added activities is 16% or 605.5 seconds and 84% value added activities or 3223.2 seconds with lead time 3828.7 seconds. From Process Activity Mapping, found wastage Delay and Transportation respectively 9.5% and 6.5%.

To eliminate the existing waste in aluminum recycling process method lean manufacturing is used. Value Stream Mapping the future state indicates that the percentage of value added activities increased to 99% or 3244.1 seconds time with lead time 3263.4 seconds. Process Activity Mapping the future state indicates that the delay can be eliminated and Transportation reduced to 1%.

Keywords: *Waste, Value Stream Mapping, Process Activity Mapping, Non Value Added, Value Added, Lead Time.*