

ABSTRACT

PT. Beton Elemen Persada is a company that is engaged in manufacturing which produces AAC (Autoclaved Aerated Concrete) Block. This research focuses on AAC Block types 600x200x100 mm. In the production process of AAC Block, there are defects that are discovered which can affect the level of achievement of production targets. Based on the company data, the average percentage of defects that occur is 19.134% (over the limit of 5% than the standard). In order to minimize waste defects, lean manufacturing approach will be used.

Research stage begins with collecting the primary data which is then processed to describe the value stream mapping (VSM) current state and the process activity mapping (PAM) to map the flow of the process. In identifying the dominant cause of waste defect in the production process of AAC Block using Pareto diagram that produces the type of defect undersize as the dominant cause of waste defect. Using the Fishbone diagrams and 5 Why, researcher identifies the problems and root causes of the type of waste defect undersize. 5W1H analysis is used to explain the problem and determine the proposed design of improvements. The settlement of the each root cause of the waste defect undersize is using tools lean manufacturing in the form of andon and display.

The proposed design of improvements in the form of display procurement, andon, spray hood machine, mortar adding, procurement of breakdown sheet, maintenance intervals, and maintenance card in an effort to minimize waste in production defect AAC Block.

Keywords: *Lean Manufacturing, AAC (Autoclaved Aerated Concrete) Block, Waste Defect, Value Stream Mapping, Process Activity Mapping, Andon, Display*