

## ABSTRAK

PT Petrosida Gresik merupakan salah satu perusahaan agroindustri yang memproduksi produk pestisida dan bahan kimia di Indonesia. Jenis produk pestisida yang diproduksi salah satunya yakni Sidazeb dimana dalam proses produksinya dilakukan secara manual dengan tenaga manusia sehingga membuat permintaan konsumen masih belum terpenuhi. Selama penelitian terdapat *waste* yang terjadi saat proses pengemasan produk Sidazeb sehingga menyebabkan bertambahnya *lead time*. Berdasarkan permasalahan tersebut dilakukan pendekatan *lean manufacturing* untuk mengidentifikasi dan mengurangi *waste* dengan menggunakan *tools current state value stream mapping* untuk menggambarkan aliran proses produksi pada rantai pengemasan produk Sidazeb dengan perhitungan waktu siklus, waktu normal, waktu baku serta *takt time* dan PAM (*Process Activity Mapping*) untuk memetakan seluruh aktivitas serta mengelompokkan aktivitas VA (*Value Added*), NVA (*Non Value Added*), dan NNVA (*Necessary But Non Value Added*). Identifikasi *waste* dilakukan dengan pengisian formulir *checklist* dari pengamatan secara langsung dan wawancara. Analisa hasil identifikasi *waste* menggunakan diagram pareto menunjukkan terdapat empat *waste* yang diprioritaskan yakni *defect, environmental, helath, and safety, waste not utilizing employee knowledge, skills and abilities* dan *waiting*. Penyebab terjadinya empat jenis *waste* diidentifikasi menggunakan *fishbone diagram*. Usulan perbaikan yang diberikan untuk mengurangi *waste* pada rantai pengemasan produk Sidazeb berupa pembuatan SOP, penerapan 5R, pembuatan jadwal *maintenance* mesin sealer, peletakan material produk Sidazeb pada proses terakhir. Hasil dari usulan perbaikan tersebut dibuatkan PAM perbaikan dan dipetakan pada *future state value stream mapping* sehingga diketahui bahwa terdapat penurunan waktu pada aktivitas NVA sebesar 1500,76 detik dan aktivitas NNVA sebesar 162,47 detik.

**Kata kunci:** *Lean Manufacturing, VSM (Value Stream Mapping), PAM (Process Activity Mapping), E-DOWNTIME Waste, Diagram Pareto, Fishbone Diagram*

## **ABSTRACT**

*PT Petrosida Gresik is one of the agro-industrial companies that produces pesticide and chemical products in Indonesia. One type of pesticide product produced is Sidazeb where the production process is carried out manually with human labor, making consumer demand still unfulfilled. During the research there was waste that occurred during the packaging process of Sidazeb products, causing an increase in lead time. Based on these problems, a lean manufacturing approach is carried out to identify and reduce waste by using current state value stream mapping tools to describe the flow of the production process on the Sidazeb product packaging floor with the calculation of cycle time, normal time, standard time and takt time and PAM (Process Activity Mapping) to map all activities and grouping VA (Value Added), NVA (Non Value Added), and NNVA (Necessary But Non Value Added) activities. Waste identification is done by filling out a checklist form from direct observation and interviews. Analysis of the results of waste identification using a pareto diagram shows that there are four prioritized wastes, namely defects, environmental, health, and safety, waste not utilizing employee knowledge, skills and abilities and waiting. The causes of the occurrence of four types of waste were identified using a fishbone diagram. Proposed improvements given to reduce waste on the packaging floor of Sidazeb products are in the form of making SOPs, implementing 5Rs, making a sealer machine maintenance schedule, placing Sidazeb product materials in the last process. The results of the proposed improvements are made PAM improvements and mapped on the future state value stream mapping so that it is known that there is a decrease in time on NVA activities by 1500.76 seconds and NNVA activities by 162.47 seconds.*

**Keywords:** *Lean Manufacturing, VSM (Value Stream Mapping), PAM (Process Activity Mapping), E-DOWNTIME Waste, Pareto Diagram, Fishbone Diagram.*