

ABSTRAK

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Program Studi : Teknik Industri
Judul : Implementasi *Lean Manufacturing* Untuk Mengurangi *Waste*
Pada Produksi *Flavor Powder (Spray Dry)*

PT Firmenich Aromatics Indonesia merupakan perusahaan yang bergerak di industri *flavor* (perisa). Pada departemen *Pilot Plant* khususnya yang memproduksi perisa dalam bentuk bubuk (*Flavor Powder*) dengan teknologi *spray dry* memiliki permasalahan pada berlebihnya produk jadi yang telah diproduksi dan kemudian disimpan namun tidak terpakai dalam kurun waktu dua bulan sehingga dianggap produk yang *non-value added* dan masih terdapatnya aktivitas dalam proses produksi yang *non-value added* yang tergolong dalam pemborosan (*waste*). Untuk itu digunakan pendekatan *lean manufacturing* untuk menghilangkan pemborosan yang terjadi pada proses produksi *flavor powder* tersebut. Metode *lean manufacturing* yang digunakan diantaranya *value stream mapping*, *process activity mapping* atau *activity classification*, *waste identification* dengan E-DOWNTIME, *cost of poor quality*, *pareto chart*, *root cause analysis* dan 5W+1H. Dengan menggunakan metode *pareto chart* dan COPQ diketahui *waste* paling berpengaruh adalah *waste* kategori *over production* dan *inventory*. Setelah dilakukan perbaikan didapatkan hasil berkurangnya *total cycle time* dan *lead time*, peningkatan nilai *Process Cycle Efficiency* sebesar 3,17% dan potensi keuntungan dari aspek finansial sebesar Rp 73,314,231.29 per tahun.

Kata Kunci : *Lean Manufacturing*, *Value Stream Mapping (VSM)*, *Process Activity Mapping (PAM)*, *Pareto Chart*, *Cost of Poor Quality (COPQ)*, *Process Cycle Efficiency (PCE)*

ABSTRACT

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Department : Industrial Engineering
Title : *Implementation of Lean Manufacturing to Reduce Waste in Flavor Powder (Spray Dry) Production*

PT Firmenich Aromatics Indonesia is a company engaged in the flavor industry (flavor). In the Pilot Plant department especially those producing flavors in powder form with spray dry technology have problems in excess of finished products that have been produced and then stored but not used within two months so they are considered non-value added products and still have them. activities in the production process that are non-value added classified as waste. For this reason, lean manufacturing approach is used to eliminate the waste that occurs in the flavor powder production process. Lean manufacturing methods used include value stream mapping, process activity mapping or activity classification, waste identification with E-DOWNTIME, cost of poor quality, pareto charts, root cause analysis and 5W + 1H. By using the pareto chart and COPQ methods it can be seen that the most influential waste is the waste category of over production and inventory. After making improvements, the result is a decrease in total cycle time and lead time, an increase in the value of Process Cycle Efficiency by 3.17% and the potential profit from the financial aspect of Rp 73,314,231.29 per year.

Keywords : *Lean Manufacturing, Value Stream Mapping (VSM), Process Activity Mapping (PAM), Pareto Chart, Cost of Poor Quality (COPQ), Process Cycle Efficiency (PCE)*