

ABSTRACT

The tofu industry plays a crucial role in driving the regional economy in Indonesia and providing employment opportunities for the surrounding community. According to data from BPS, the demand for tofu has been increasing over the past five years. Although there was a decline in 2022, the demand for tofu rebounded the following year. This increase in demand has a positive impact on the economy; however, it also presents challenges for tofu producers. Most tofu industries in Indonesia are small-scale or home-based enterprises that still use traditional methods for tofu production. One such example is PD Mahrup, located in Cibogo, Bandung, West Java. Like other home-based tofu factories, PD Mahrup faces production issues. Direct observations have revealed several processes that lead to time production waste. To address these issues, lean manufacturing techniques can be applied, utilizing tools such as value stream mapping and process activity mapping. The use of these tools has identified several types of waste in tofu production, including waste from motion, transportation, and waiting. This final project focuses on reducing the waiting waste during the tofu pressing process by designing a pneumatic press and cutting tool. If the proposed tool design is implemented by the company, it could reduce waiting waste during the tofu pressing process from 1837.87 seconds to 771.96 seconds.

Keyword — Lean Manufacturing, Waiting Waste , PAM, Product Development