

ABSTRACT

DESIGN OF ROUND TOFU MOLDING (Case Study At Mr. Andi's Tofu Factory)

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Mr. Andi's tofu factory in Palembang has a problem in the process of tofu wrapping. This caused by the tofu wrappers who often absent due to the particular event that led the owner, Mr. Andi experiencing the difficulties in the process of making round tofu, because the processing time is getting slower than usual and has to employ the tofu wrapper replacement with higher wages. The tofu molding is specifically designed for Mr. Andi's tofu factory. This device is made based on the size of round tofu which has dimension of $(6,25 \times 6,25 \times 4) \text{ cm}^3$. It is made based on appropriate technology method which also considering the antropometry of the workers. The size for each cover, base, core part, and cloth suppresser is $(50 \times 50 \times 3) \text{ cm}^3$. On the inner part, there is a small square made of aluminium, size of $(6,25 \times 6,25) \text{ cm}^2$. The cloth suppresser has the same size but added with small nails made from mild steel and positioned right at the center of each small square in the core part. The cost of making this device is Rp 460.000,- and the maintenance cost is Rp 5.000,- /month. Break event point in 13.728 unit and Rp. 8.227.778,-, payback periode in 2 day. On the enviromental aspect, the liquid waste from the tofu filtered water which excrete from the using of the device still left because it doesn't change the production process. Energy use for workers before is 161 kkal/hour and after 131 kkal/hours. Wrapping tofu using a cloth processing time longer and very heavier. Once the round tofu molding is made, it is expected to produce bigger amount tofu and can be used by the whole of traditional tofu industry.

Keywords: Round tofu molding, appropriate technology method, Break event point, Payback Periode, energy.