

## **ABSTRACT**

### **PERANCANGAN ALAT PENJEMUR KEMPLANG PADA INDUSTRI KEMPLANG ARHAN PALEMBANG**

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*South Sumatera is one of the provinces in Indonesia which becomes a place for local or international tourists to visit. Palembang, which is the capital city of South Sumatera, has several tourism places and special dishes. One of Palembang special dishes is “kemplang”. There are many industries for this food and one of those industries is “Kemplang Arhan” Industry. “Kemplang Arhan” Industry is well-known in or even outside Palembang. The industry needs tools and equipments for helping the process of production. Besides production phase, the drying, because of limited working space and workers which take a long time when taking the big amount of “kemplang” after the drying phase because workers raised the basking container one by one, then the production capacity is not optimal because the basking container circular, as well as when reversing “kemplang”, the body of workers are not ergonomic because the shoulder and back of the workers are bending. Regarding to the problems, a design for ergonomic “kemplang” basking tool has come up. The design is made of anthropometry size of worker’s body with 76 cm in length, 76 cm in width and 144 cm in height, while the size of bowl has 70 cm in length and 60 cm in width. The result of the research is based on work load through pulse which has decreased from 109 beats per minute which is categorised as medium to 87 beats per minutes which is small. On production output has increased which begins from 272 pieces become 426 pieces and based on the revenue analysis toward the future outcome invest, the payback period will be 0.13 years while ROI become 64,78%. The usage of basking “kemplang” tool has given impact toward the reduction of work load and the escalation of production output.*

**Keywords:** *Ergonomic, Anthropometry, Tools Design, Work Load, Production Output.*