

## **ABSTRACT**

### **DESIGN TIRE SPLITTING TOOLS BASED ERGONOMIC**

***(Case Study In The Small and Medium Enterprises Ban Pak Sutris Palembang)***

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*Mr. Sutris' small and medium enterprises is a business that is engaged in manufacture of sofa tire for tire split. In the process of making sofa tire , expecrally for tire cleave process worker often complain about heavy workload and pain in the body such as the neck, right shoulder, upper arm left, back, and the left knee were done in a way that does not work ergonomics, so as to reduce the number of tire production divisions. Workload measurement using pulse and musculoskeletal complaints of pain using a questionnaire Nordic Body Map. In an average day can produce as many as 21 tire cleavages. Whereas in fact, if on the eve of the feast demand reaches 30-34 pieces. Therefore it is necessary to design an ergonomic tools. The method used in the design of the tire splitting tools are methods intermediate technology (TTG). The design of this tire splitting tools are expected to reduce the workload and muskoluskeletal complaints of workers so as to increase the amount of production tire cleavages. split tire tools rectangular with a size of 101 cm height, width, 36 cm and 81 cm long. On the left side of the right and bottom klaher given player that serves as the axis of the tire. The material used is a hollow steel 4x4 size 1.8 mm, klaher, and cast iron with an investment cost of Rp. 340,000. After implementation muskoluskeletal impairment amounted to 46,20%, the workload of 22.83% and an increase in production of 30 tires a day apart. The payback period will be obtained for 2 days.*

*Keywords: Design Tire Splitting Tools, Nordic Body Map (NBM), Pulse, Ergonomic. Intermediate Technology*