

## **ABSTRACT**

Rattan is a non-timber forest natural resource commodity that grows mostly in tropical rain forest areas. Synthetic rattan is here to compete with natural rattan by having advantages such as many color variations, has flexible properties that make it easier for craftsmen, is resistant to sun and rain exposure, is more environmentally friendly because synthetic rattan does not require cutting down trees, easy maintenance and affordable prices. natural rattan price. The author conducted research on PT Inspiro Maha Karya, a synthetic rattan company located in Cirebon Regency. In the synthetic rattan production process at the company, there is a coloring process, namely mixing raw materials with the colors to be determined. Then there is the process of making synthetic rattan by melting the material using an extruder machine to make a synthetic rattan stick and going through quality control to make it ready to be marketed. On the extruder machine used by the company, there is a machine mold that must be treated, such as cleaning the mold from the pile of plastic seeds that stick to it by heating the mold and then cleaning it. When the author made observations, the operator said that he had experienced burns caused during the process of lighting a match which was carried out by direct hands brought close to the gas shot and sprayed the gas directly into the operator's hand, causing the operator's hand to burn. Therefore, the design of a lighter tool is carried out to avoid burn injuries to the operator using the design thinking method because the author wants to find problems not only on one factor to be able to find the widest possible idea.

**Keywords: Work Accidents, Burns, Auxiliary Tools, Lighter Design, Design Thinking.**