

ABSTRACT

The high defect rate of Guide B Cam Chain products, particularly the defect known as “lack of rubber volume” has become a significant issue in the production process at PT Aneka Komkar Utama. This defect is caused by inaccuracies in the process of installing the compound into the mold, resulting in uneven material flow and structural defects in the molded product. To address this issue, a Poka-Yoke-based tool was designed to minimize human error through precise position-locking mechanisms. The design was developed using a systematic NIDA (Need, Idea, Decision, Action) approach, starting with identifying user needs through observation and interviews, developing several alternative concepts, selecting the best concept through weighted evaluation, and finally realizing it in the form of a prototype. The selected concept is a slider-type tool made of aluminum alloy, deemed optimal based on technical criteria. Design validation was conducted through feedback from relevant parties within the company, indicating that the design aligns with field requirements. Although not yet implemented, this design demonstrates potential in reducing defects and improving the accuracy of compound installation in the production process..

Keywords: Poka-Yoke, slider tool, defect, compound, NIDA, production Guide B Cam Chain