

## **ABSTRACT**

*Business competition in the field of making hydraulic press machines that must be faced by CV. XYZ especially in industrial areas is getting heavier. Suppliers from various infrastructure companies want to have a good but quality machine to accelerate the manufacture of various types of products including producing paving blocks and briquettes. This research aims to increase the amount of paving block production, replace material materials from the previous one, and add new molding aids features to produce briquettes to avoid mixing between paving block raw materials and briquettes. In this research will use reverse engineering methods to design paving block and briquette mold aids in accordance with their research objectives and through alternative concrete experience analysis then modeling and analysis sections by way of the latest reverse engineering version, namely CAD reconcrution and redesign. In addition, it is simulated with software, autodesk inventor nastran which has an effective value in the simulation of von misses and deformation.*

**Keywords— [Product Design, Paving Block, Bricket, Reverse Engineering]**