

ABSTRACT

The geotechnical industry in Indonesia is very important in infrastructure development and construction projects. Strong and stable soil and rock are necessary to ensure the safety and durability of the structure. To do this, it is necessary to have supporting equipment in the form of a hydraulic drilling machine that can carry out exploration and construction. Based on direct observations of what occurred in the field during drilling activities at PT. Siba Geoteknika's work is that work accidents often occur when operating hydraulic drilling machines due to unprotected v-belts so that when the v-belt breaks, workers are injured. Therefore, researchers had the idea to design a special cover for hydraulic drilling machines that could protect workers and be used efficiently. The aim of this research is to design a v-belt cover for a hydraulic drilling machine to improve worker safety without interfering with the machine maintenance process. The method used in this research is a qualitative method, through descriptive analysis it will help the author to summarize and interpret the data obtained in a systematic and objective way. This design produces a v-belt cover product for hydraulic drilling machines to increase worker safety with various features that make it easier for users to use.

Key words: cover, v-belt, geotechnical, drill, safety