TRAVEL MIS-OPERATION PREVENTION USING AUTOMATIC WARNING SYSTEM FOR EXCAVATOR

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MASTER'S DEGREE
in

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MASTER OF MECHANICAL ENGINEERING

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ABSTRACT

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Excavators are one of the types of machines used for production activities. Excavators are the main tools in charge of digging moving and loading materials to the dump truck as a result of production. Excavator damage will cause some dump trucks to be unable to work. One of the most extensive damage is to the undercarriage. On the other hand, the data shows that the use of travel operation is still quite high. If referring to the information on the manual that travel usage errors may increase the potential damage to the undercarriage. This study aims to monitor travel operations through travel time monitoring and motor travel temperature readings. From the results of the study pointed out that there is a significant relationship between travel time and temperature rise in motor travel. In this study also reviewed how monitoring the use of travel is used to prevent travel operation errors by operators through warning mechanisms to operators as well as the utilization of internet networks and remote communication as a tool to conduct surveillance by supervisors to operators.

Keywords: Excavator, Undercarriage, wireless, temperature, heavy equipment

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DEDICATION

I dedicate this study to my family, UT School and PT United Tractors Tbk

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