

INCREASING THE PRODUCTIVITY OF THE PC2000 AND PC1250
EXCAVATORS BY REDUCING THE PROBLEM OF ABNORMAL CYCLE DT
HAULER AT PT. PAMA SMMS SEKAKO, NORTH BARITO REGENCY,
CENTRAL KALIMANTAN.

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

INCREASING THE PRODUCTIVITY OF THE PC2000 AND PC1250 EXCAVATORS BY REDUCING THE PROBLEM OF ABNORMAL CYCLE DT HAULER AT PT. PAMA SMMS SEKAKO, NORTH BARITO REGENCY, CENTRAL KALIMANTAN.

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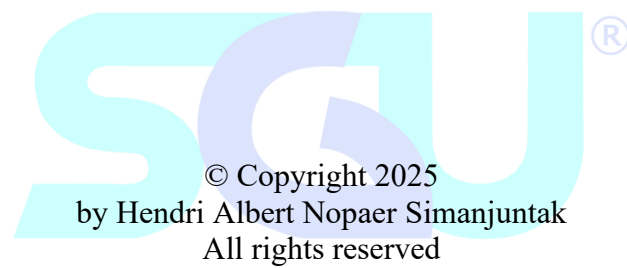
The productivity improvement of the PC2000 and PC1250 loaders at PT. Pama Site Sekako is essential as these are the main production machines for transporting the overburden material, which covers the coal, so the coal can be extracted and transported to the stockpile area. The abnormal cycle of Dump Truck Hauler is the main cause of the loader's productivity not reaching the target. The productivity of the PC2000 and PC1250 loaders is only 96% of the set target, which needs to be addressed by examining all the Pareto problems through a fishbone diagram. The analysis is conducted using time study and work sampling methods, as well as direct field observations. Several improvement recommendations are obtained to increase the productivity of the PC2000 and PC1250 loaders. The improvements include enhancing the blasting fragmentation quality, implementing a parking method for the Dump Truck Hauler when the unit stops operation at two locations: the front loading area and the Dump Truck Hauler parking area, improving the operator's start-up time during shift changes and after rest time, monitoring and controlling operations through Long Range Control System (LRCS), and increasing the physical availability of the Loader and Hauler units by raising the breakdown schedule ratio. The

commitment and cooperation of all involved departments and support from project management to carry out the corrective actions are key to success. From the implementation of these improvement ideas, this study successfully increased the productivity of the PC2000 and PC1250 loaders by 12%, where the average productivity before the improvement was 600 bank cubic meter per hour (bcm/hours), which increased to an average of 678 bank cubic meter per hour (bcm/hours).

The reduction of the Abnormal Cycle DT Hauler can increase the productivity of the PC2000 and PC1250 Loaders by 12%.

Keywords: Productivity, PC2000, PC1250, Abnormal Cycle, Dump Truck Hauler





DEDICATION

With gratitude to Lord Jesus Christ for His strength and help, and also to all beloved family members and colleagues. I am especially thankful to:

1. My beloved wife Furiska Deviany Pandiangan and my children Princess Leoni Angelina S and Prince Lionel Bradley S, who have given their wholehearted support and sacrificed family time together
2. My beloved Parents: S. Simanjuntak and Osa N. br. Hutapea who always pray for the best for me, my sisters and my brothers who always encourage me and offer their prayerful support, may Allah bless all my family and be with them always.
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