

IMPROVEMENT OF OVERALL EQUIPMENT EFFECTIVENESS (OEE) OF
DUMP TRUCK SCANIA P360/P410 IN CUSTOMER PT. XYZ

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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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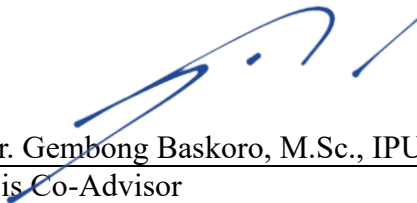
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ABSTRACT

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PT. XYZ is a mining company in South Sumatra, has physical availability issues in 2022 below the target of 80%, especially in OB Dump Trucks (58%) and COAL Dump Trucks (65%). The impact is the absence of production by 96,09% (3.613.902 BCM) and coal production by 99,71% of the 2022 target. The January–June 2023 study shows the OEE of OB Dump Truck (43,86%) and Coal Dump Truck (32,28%) is below the target of 64,00%, indicating that a decrease in PA performance will lower OEE. The RCA method identifies several problems, namely Instructors Rated Ineffective, Breakdown Unit, Part not Ready, and Production Not Achieve. The proposed improvement programs are operational training, maintenance training, Customer Operation Improvement Program (COIP), and Customer Maintenance Improvement Program (CMIP). The evaluation showed an increase in COIP of 11,27% and CMIP of 13,24%. Improvements were made in July–November 2023, with the results of PA Dump Truck OB increasing to 87,30% (OEE 91,99%) and Dump Truck Coal increasing to 97,31% (OEE 103,42%). These improvements prove that improvements to the PA can improve OEE, reflecting the successful implementation of improvement programs.

Keywords: *Overall Equipment Effectiveness (OEE), 5 Why Method, Matrix Diagram, DMAIC*

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DEDICATION



Worship prostration and gratitude to Allah SWT. Your sprinkling of love and compassion has given me strength, equipped me with knowledge and introduced me to love. It is because of the grace and ease that You give that this simple thesis can finally be completed. Salawat and greetings are always poured out to the Prophet Muhammad SAW.

I dedicate this simple work to the person I love very much and love so much.

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