

ABSTRACT

PT Tata Bara Utama is a contractor of PT Pada Idi operating in the coal mining sector. PT Tata Bara Utama has set a target for overburden stripping productivity at 200 BCM/hour with 2 mining fleets in March 2023. During the research, productivity did not meet the established targets, with values of 165 BCM/hour and 147 BCM/hour for fleet 1 and fleet 2, respectively, resulting in delays in coal extraction.

The purpose of this research is to analyze the factors causing the failure to achieve the production targets and to determine efforts that can be made to improve productivity at PT Tata Bara Utama. Based on calculations, the current productivity of the loading equipment has not reached the target, with values of 165 BCM/hour for fleet 1 and 147 BCM/hour for fleet 2. This is attributed to high waiting times for the loading equipment. The productivity of the hauling equipment for both fleets has also not reached the target, with values of 165 BCM/hour for fleet 1 and 147 BCM/hour for fleet 2.

According to the research results, the reasons for not achieving the target productivity include a subsided haul road, the width of the mining area, and suboptimal hauling equipment speed with an average load speed of 15 km/h and an empty speed of 22 km/h, leading to high cycle times for the hauling equipment.

Efforts made to achieve the production target include road hardening, widening the mining area, and simulating rimpull to increase hauling equipment speed, ultimately optimizing the cycle time of the hauling equipment. After the improvements, the hauling equipment's productivity reached 229 BCM/hour for fleet 1 and 201 BCM/hour for fleet 2.