

ABSTRACT

Maintenance is a one of important thing to get satisfy of operational condition from the unit appropriate with the planned. The principle of maintenance activities is to avoid unschedule breakdown and reduce downtime as little as possible thus increasing use of availability and physical availability. This study aims to determine the distribution of downtime units, optimalization use of availability and physical availability units through the influence of the Lowest Lifetime Cost per Total Output project conducted by PT United Tractors site

Based on the problem, the author conducted an analysis on the impact of maintenance management to use of availability and physical availability units of komatsu at PT Putra Sarana Transborneo using the Plan, Do, Check, Action (PDCA) cycle.

Based on the observation and data analysis, the largest downtime contribution from the customer unit is in the PC300-8 type unit of 42.1%, in the PC200-8 unit of 29.5% and D85ESS-2 of 28.4%. the impact given the lowest lifetime cost per total output project to the use of availability and physical availability of the unit, it can be taken the description that optimization use of availability and physical availability does not provide a significant increase. This is when viewed based on the unit use of availability value of 65% where the value only rises 2% and physical availability value by 85% where the value only rises 7%. With the increasing use of availability and physical availability, PT Putra Sarana Transborneo's potential revenue previously amounted to Rp 10,244,510,640.00 increased to Rp 11,518,299,000.00.

Keyword: *Optimization, Availability, Economic Value, Downtime.*

INTISARI

Perawatan merupakan salah satu hal yang penting untuk mendapatkan suatu keadaan operasi unit sesuai dengan yang direncanakan. Prinsip kegiatan perawatan adalah menghindari *unschedule breakdown* dan menekan *downtime* sekecil mungkin sehingga meningkatkan *use of availability* dan *physical availability*. Penelitian ini bertujuan untuk mengetahui distribusi *downtime unit*, optimalisasi *use of availability* dan *physical availability* alat melalui pengaruh *project Lowest Lifetime Cost per Total Output* yang dilakukan oleh PT United Tractors *site* Adaro.

Berdasarkan permasalahan tersebut maka penulis melakukan analisa mengenai pengaruh manajemen perawatan terhadap *use of availability* dan *physical availability* unit *komatsu* pada PT Putra Sarana Transborneo menggunakan siklus Plan, Do, Check, Action (PDCA).

Berdasarkan hasil observasi dan Analisa data, kontribusi *downtime* terbesar yaitu pada *unit type* PC300-8 sebesar 42,1%, pada *unit* PC200-8 sebesar 29,5% dan D85ESS-2 sebesar 28,4%. Pengaruh yang diberikan *project Lowest Lifetime Cost per Total Output* terhadap optimalisasi *use of availability* dan *physical availability* unit tersebut, maka dapat diambil gambaran bahwa optimalisasi *use of availability* dan *physical availability* tidak memberikan peningkatan yang signifikan. Hal tersebut apabila dilihat berdasarkan nilai *use of availability unit* sebesar 65% dimana nilai tersebut hanya naik 2% dan nilai *physical availability* sebesar 85% dimana nilai tersebut hanya naik 7%. Dengan Meningkatnya pemanfaatan dan kesiapan alat tersebut potensial *revenue* PT Putra Sarana Transborneo yang sebelumnya sebesar Rp 10,244,510,640.00 meningkat sebesar Rp 11,518,299,000.00.

KataKunci: Optimalisasi, *availibilitas*, nilai keekonomian, *downtime*.