

## Perencanaan Ketersediaan Suku Cadang Filter Untuk Mesin Merek Cummins Di Lokasi Tambang Tokatindung = Availability Planning of Sparepart Filter for Cummins Brand Engines at Tokatindung Mine Site

Rafsanjani, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20526634&lokasi=lokal>

---

### Abstrak

Dalam industri pertambangan terdapat banyak alat berat sebagai penunjang aktivitas di pertambangan. Setiap alat pertambangan memiliki mesin yang perlu dilakukan penggantian suku cadang secara berkala untuk menjaga kinerjanya tetap optimal. Pada lokasi tambang Tokatindung terdapat banyak populasi alat berat yang menggunakan mesin merek Cummins. PT. Altrak 1978 yang bergerak di bidang alat berat dan menjadi distributor resmi untuk mesin merek Cummins di Indonesia bertanggung jawab atas ketersediaan suku cadang dan jasa service. Perlu adanya konsep dan metode perencanaan yang tepat sasaran. Untuk membuat perencanaan yang tepat sasaran perlu adanya data populasi mesin merek Cummins yang berada di lokasi tambang Tokatindung menggunakan metode survei dan observasi langsung. Setelah mendapatkan data populasi tersebut maka ditentukan serta dihitung jenis dan spesifikasi filter yang digunakan setiap bulannya berdasarkan maintenance book dari pabrikan. Setelah mendapatkan data penggunaan filter setiap bulannya, maka dihitung perencanaan stok filter yang harus disiapkan menggunakan metode stok pengaman dan level stok. Jumlah populasi mesin merek Cummins yang ada di lokasi tambang Tindung sebanyak 17 mesin. Dengan aplikasi delapan unit excavator, tujuh unit genset, satu unit crane, dan satu unit pompa air pemadam. Terdapat 45 jenis dan spesifikasi filter berbeda yang digunakan untuk 63 kali periodik service 250 jam, 28 kali periodik service 500 jam, dan 27 kali periodik service 1000 jam setiap tiga bulan. Terdapat total 649 buah filter yang harus distok untuk menjadi safety stock untuk men.

.....In the mining industry there are many heavy equipment to support mining activities. Every mining tool has a machine that needs to be replaced periodically to maintain optimal performance. At the Tokatindung mine site there is a large population of heavy equipment using Cummins brand engines. PT. Altrak 1978, which is engaged in heavy equipment and became the official distributor for Cummins brand engines in Indonesia, is responsible for the availability of spareparts and service. There needs to be concepts and planning methods that are right on target. To make plans that are right on target, it is necessary to have population data of Cummins brand engines that located at Tokatindung using survey method and direct observation. After getting the population data, it is necessary to determine and calculate the type and specifications of the filter that used every month based on the maintenance book from the manufacturer. After getting the filter usage data every month, the calculated filter stock plan must be prepared using the safety stock and stock level methods. The total population of Cummins brand engines at the Tindung mine site are 17 engines. With the application of eight excavator units, seven generator units, one crane unit, and one fire water pump unit. There are 45 different types and specifications of filters used for 63 times of periodic 250 hour service, 28 times of periodic 500 hours of service, and 27 times of periodic service. 1000 hours every three months. There are a total of 649 filters that must be stocked to become safety stock to get a service level percentage of 90% availability of filter spare parts.