

## **ABSTRAK**

PT.GILGAL BATU ALAM LESTARI merupakan perusahaan penambangan batu granodiorit yang memiliki target produksi sebesar 20.000 ton/bulan. Namun dalam realisasi kegiatan penambangannya produksinya tidak sesuai dari target yaitu hanya 15000 ton/bulan. Oleh karena itu dirasa perlu dilakukan penelitian dan pengkajian tentang faktor-faktor yang mempengaruhi tidak tercapainya target unit peremuk yang beroperasi, serta merekomendasikan desain perbaikan agar target produksi bisa terpenuhi

Metode penelitian yang dilakukan di lapangan ialah metode pengamatan secara langsung dan metode kuantitatif. Penelitian ini dilakukan dengan pengambilan data berupa pengamatan data primer (peralatan yang digunakan, proses peremukan, waktu kerja efektif, dan produksi batuan perhari) dan data sekunder (spesifikasi alat, produksi existing dan jam kerja perusahaan). Data yang diperoleh kemudian diolah menggunakan metode komparatif untuk membandingkan hasil perhitungan kapasitas aktual dan teoritis sehingga efektivitas alat diketahui dan bisa dianalisis faktor-faktor penghambat produktivitas.

Berdasarkan hasil pengamatan dan perhitungan yang dilakukan diketahui bahwa produksi existing unit peremuk sebesar 15.131 ton/bulan, diketahui ada 3 faktor yang menghambat proses produksi yaitu ukuran umpan terlalu besar, waktu kerja efektif belum tercapai, dan aliran proses peremukan batuan belum baik pada sistem operasi. Ada 3 upaya perbaikan yang diusulkan untuk memenuhi target tersebut adalah dengan, 1 memperbaiki waktu kerja efektif, 2 penambahan jumlah umpan dan 3 memperkecil ukuran umpan dan. Dengan mengurangi waktu hambatan diperoleh produktivitas sebesar 17.728,51 ton/bulan (21% dari existing). Dengan penambahan jumlah umpan produktivitas yang diperoleh sebesar 20.376,576 ton/bulan (35% dari existing). Dengan alternatif ke tiga yaitu memperkecil ukuran umpan akan diperoleh produksi sebesar 30.564,8 ton/bulan (103% dari existing).

Kata Kunci: Produksi, Granodiorit, Operasi Peralatan, *Crusher*

## ABSTRACT

*PT.GILGAL BATU ALAM LESTARI is a granodiorite mining company with a production target of 20,000 tons/month. However, in the realization of mining activities, the production does not match the target, which is only 15000 tons/month. Therefore, it is deemed necessary to conduct research and study on the factors that influence the failure to achieve the operating crusher unit target, as well as recommend improvement designs so that production targets can be met.*

*The research methods carried out in the field are direct observation methods and quantitative methods. This research was conducted by collecting data in the form of primary data observations (equipment used, crushing process, effective working time, and rock production per day) and secondary data (tool specifications, and existing production). The data obtained were then processed using a comparative method using the formula to compare the results of the actual and theoretical capacity calculations so that the effectiveness of the tool is known and the factors inhibiting productivity can be analyzed.*

*Based on the results of observations and calculations, it is known that the production of the existing crusher unit is 15,131 tons/month, it is known that there are 3 factors that hinder the production process, namely the feed size is too large, the effective working time has not been achieved, and the flow of the rock crushing process is not good in the operating system, There are 3 proposed improvement efforts to meet the target, namely, 1 improving the effective working time, 2 increasing the number of baits and 3 reducing the size of the bait and. By reducing the delay time, the productivity is 17,728.51 tons/month (21% of the existing). With the addition of the number of feeds, the productivity obtained is 20,376,576 tons/month (35% of the existing). With the third alternative, which is to reduce the size of the feed, a production of 30,564.8 tons/month (103% of the existing) will be obtained.*

*Keywords: Production, Granodiorite, Equipment Operation, Crusher*