

RINGKASAN

PT Putra Muba Coal yang berada di Desa B2 Mekar Jadi, Kecamatan Sungai Lilin, Kabupaten Musi Banyuasin Provinsi Sumatera Selatan, memiliki *barge loading conveyor* (BLC) yang berada di area *stockpile* sekaligus langsung menuju pelabuhan Sungai Tungkal. Pemindahan batubara dari *stockpile* menuju kapal tongkang dilakukan menggunakan *belt conveyor* dengan kapasitas desain 1.000 ton/jam sedangkan perusahaan menargetkan produktivitas *belt conveyor* menuju kapal tongkang sebesar 600 ton/jam. Penelitian ini dilakukan untuk mengevaluasi produktivitas *belt conveyor* secara teoritis dan aktual serta menyesuaikan target yang sudah ditetapkan oleh perusahaan. Selain itu, penelitian ini juga bertujuan untuk mengidentifikasi faktor-faktor yang mempengaruhi produktivitas *belt conveyor* tersebut dan pengaruhnya terhadap waktu kerja efektif dari *belt conveyor*. Setelah penulis melakukan pengamatan secara langsung di lapangan dan melakukan perhitungan produktivitas teoritis *belt conveyor* pada masing-masing rangkaian *belt conveyor* didapatkan produktivitas *On Ground Feeder* (OGF) sebesar 1.329,95 ton/jam, *barge conveyor* (BC) sebesar 761,38 ton/jam, dan rangkaian *radial loading conveyor* (RLC) sebesar 717,16 ton/jam. Sedangkan rata-rata produktivitas aktual seluruh rangkaian *belt conveyor* pada bulan Desember 2024 adalah 515,60 ton/jam. Tidak tercapainya produktivitas disebabkan tidak adanya *crusher*, kombinasi unit *loading* yang belum mencukupi, material batubara yang diangkut berkalori rendah sehingga mudah lengket pada area corong *chute* serta sering terjadinya *breakdown* komponen *belt conveyor*. Hal ini dapat diatasi jika dilakukan pemeliharaan rutin dan pembersihan rutin pada area *chute*, serta pengalokasian unit *loading* untuk area *feeding* di area *On Ground Feeder*.

Kata Kunci : *Belt Conveyor*, Produktivitas, Pengapalan, Waktu Kerja Efektif

SUMMARY

PT Putra Muba Coal, located in B2 Mekar Jadi Village, Sungai Lilin District, Musi Banyuasin Regency, South Sumatra Province, has a barge loading conveyor (BLC) located in the stockpile area as well as directly to the Tungkal River port. The transfer of coal from the stockpile to the barge is carried out using a belt conveyor with a design capacity of 1,000 tons / hour while the company targets the productivity of the belt conveyor to the barge of 600 tons / hour. This research was conducted to evaluate the theoretical and actual productivity of the belt conveyor and adjust the targets set by the company. In addition, this study also aims to identify factors that affect the productivity of the belt conveyor and its effect on the effective working time of the belt conveyor. After the author made direct observations in the field and calculated the theoretical productivity of the belt conveyor on each series of belt conveyors, the productivity of the On Ground Feeder (OGF) was 1,329.95 tons / hour, the barge conveyor (BC) was 761.38 tons / hour, and the radial loading conveyor (RLC) circuit was 717.16 tons / hour. While the actual average productivity of the entire belt conveyor circuit in December 2024 was 515.60 tons / hour. Unachieved productivity is due to the absence of a crusher, an insufficient combination of loading units, low-calorie coal material that is transported so that it is easily sticky in the chute funnel area and frequent breakdowns of belt conveyor components. This can be overcome if routine maintenance and routine cleaning are carried out in the chute area, as well as allocating loading units for the feeding area in the On Ground Feeder area.

Keywords: Belt Conveyor, Productivity, Shipment, Effective Working Time