

ABSTRACT

In the Merah Putih Cement plant construction in bayah, frequent delays caused by the concrete raw materials are lack of or stockout, and the fluctuation of the gap between needs and receipt of material.

The purpose of this study was to determine the factors that cause fluctuations in the gap between needs and receipt concrete raw material, as well as make improvements of inventory management to the method Continuous Replenishment...

Continuous Replenishment method is a research / resolve problems used in solving these problems. Economic Order Quantity methode is function calculates the minimum quantity of material inventory subsequent minimum total cost can be obtained. In to determine when to do order? and how much quantity orders? so that efficient inventory levels and did not occur out or mostly stock used method of Re-Order-Point.

Total cost of very large before use Continuous Replenishment method due to the total cost of ordering and storage of great material. With the approach of the Continuous Replenishment method obtained by the difference in total cost before and after the implementation of the Continuous Replenishment methods significantly different result more efficient.

It was concluded that the concrete material shortage caused by the time ordering raw materials imprecise and inaccurate quantity. And improved fluctuation the gap between needs and receipt of material is done by ensuring proper material ordering schedule and exact quantity of material ordering so that the level of inventory to be efficient.

Keywords: Economic Order Quantity, Reorder Point and Continuous Replenishment

ABSTRAK

Dalam pembangunan pabrik Semen Merah Putih di Bayah, sering terjadi penundaan pengecoran disebabkan oleh *raw material* beton yang kurang atau habis, serta adanya fluktuasi selisih antara kebutuhan dan penerimaan material.

Tujuan penelitian ini adalah mengetahui faktor penyebab fluktuasi selisih kebutuhan dan penerimaan material pengecoran, serta melakukan perbaikan pengelolaan *inventory* dengan metode *Continuous Replenishment*.

Metode *Continuous Replenishment* adalah suatu riset/penyelesaian masalah yang digunakan dalam menyelesaikan masalah tersebut. Metode *Economic Order Quantity* berfungsi menghitung kuantitas persediaan material minimum selanjutnya total biaya minimum bisa diperoleh. Dalam menentukan kapan harus dilakukan pesanan? dan berapa kuantitas pesanan? sehingga tingkat persediaan efisien dan tidak terjadi kehabisan atau kebanyakan stok digunakan metode *Re-Order-Point*.

Ditemukan total biaya sangat besar sebelum digunakan metode *Continuous Replenishment* disebabkan total biaya pemesanan dan penyimpanan material yang besar. Dengan pendekatan metode *Continuous Replenishment* diperoleh selisih total biaya sebelum dan sesudah implementasi metode *Continuous Replenishment* hasilnya signifikan berbeda yang lebih efisien.

Disimpulkan bahwa kekurangan material beton disebabkan oleh waktu pemesanan *raw material* yang tidak tepat dan kuantitas tidak akurat. Dan perbaikan fluktuasi selisih antara kebutuhan dan penerimaan material dilakukan dengan memastikan jadwal pemesanan material yang tepat, dan kuantitas pemesanan material yang tepat sehingga *level inventory* menjadi efisien.

Keywords: *Economic Order Quantity*, *Reorder Point* dan *Continuous Replenishment*