

ABSTRAK

Permasalahan yang sering dihadapi PT. Indospring, Tbk adalah masalah ketersediaan bahan baku baik *raw material* maupun *sub material* yang sering kekurangan. Untuk memecahkan masalah tersebut, maka dilakukan perhitungan MRP yang menghasilkan total biaya persediaan minimum dengan menggunakan enam metode *lot sizing* yaitu metode *Lot For Lot* (LFL), *Economic Order Quantity* (EOQ), *Part Period Balancing* (PPB), *Period Order Quantity* (POQ), *Least Unit Cost* (LUC), dan metode *Silver Meal*. Berdasarkan hasil penelitian metode terbaik untuk tipe A adalah *Period Order Quantity* (POQ) dengan total biaya sebesar Rp 1.938.867.648, tipe B adalah metode *Part Period Balancing* (PPB) dan *Period Order Quantity* (POQ) dengan total biaya sebesar Rp 1.676.046.867, tipe C adalah metode *Part Period Balancing* (PPB) dan *Period Order Quantity* (POQ) dengan total biaya sebesar Rp 1.227.449.502, dan tipe D adalah metode *Part Period Balancing* (PPB) dengan total biaya sebesar Rp 576.078.634.

Kata kunci: *Material Requirement Planning* (MRP), Metode *Lot Sizing*.

ABSTRACT

Problems that are often faced by PT. Indospring, Tbk is a matter of availability of raw materials both raw material and sub-material that is often deficient. To solve these problems, then the MRP calculation that generates a minimum total inventory cost by using six lot sizing method is the method of Lot For Lot (LFL), Economic Order Quantity (EOQ), Part Period Balancing (PPB), Period Order Quantity (POQ), Least Unit Cost (LUC), and methods Silver Meal. According to the research the best methods for type A is Period Order Quantity (POQ) with a total cost of Rp 1,938,867,648, type B is the method of Part Period Balancing (PPB) and Period Order Quantity (POQ) with a total cost of Rp 1,676,046,867, Type C is a method of Part Period Balancing (PPB) and Period Order Quantity (POQ) with a total cost of Rp 1,227,449,502, and type D is a method of Part Period Balancing (PPB) with a total cost of Rp 576 078 634.

Keywords: *Material Requirement Planning (MRP), Lot Sizing Method.*