

ABSTRACT

In supporting road infrastructure development in Indonesia, asphalt is one of the most important materials to support the road construction process. Asphalt binds small pebbles (aggregates) and fills the voids between the grains of stone. One company that produces asphalt is PT Pertamina (Persero), located in Cilacap, Central Java. After the asphalt is made, it will then be distributed to one of the factories in the East Java area, namely the Gresik Bitumen Plant. The company has problems in the field of drum packaging asphalt inventory, this causes the sales performance of the Bitumen Plant Gresik factory in 2022 to have a service level of 93.38% with lost sales 39,810 units. The best solution to improve service levels is to design an asphalt inventory policy in drum packaging using the continuous review (s,S) and periodic review (R,s,S) methods. The inventory policy using continuous review method (s,S) produces a safety stock indicator 15,268 units with inventory cost savings Rp. 8,305,269,459 (57.03%) and an increase in service level 6.09% with a value 99.45%. Then the periodic review (R,s,S) resulted in a safety stock indicator 19,690 units with savings Rp 6,615,901,727 (45.43%) and an increase in service level 6.40% with a value 99.77%. This research is expected to help companies determine inventory policies to increase service levels and determine the optimal safety stock indicator for drum-packed asphalt to prevent lost sales.

Keywords : *Service level, Safety Stock, Continuous Review (s,S), Periodic Review (R,s,S).*