ABSTRACT

PT DAHANA *which is a state-owned company engaged in the explosives sector.* PT DAHANA's *goods and services are used daily by various industries in Indonesia, from the general mining sector, both metals, minerals and coal, quarry and construction sectors such as cement, asphalt and andesite quarrying, construction projects such as dams, tunnels, irrigation, demolition of old buildings, port deepening, oil sector and gas such as oil well casing perforation operations, seismic operations, and also military operations. In carrying out its operational activities, the company found a problem, namely the total cost of inventory that exceeded the budget, therefore it is necessary to have the right material inventory policy to minimize excess inventory (over stock). Through this research study, we will discuss the design of raw material inventory policies in order to minimize total inventory costs using the* ABC-XYZ *analysis approach with the periodic review method. The results of this research are in the form of spare parts classified based on cost consumption and demand variabilities, the results of inventory policies that can be used are caused by the high inventory costs incurred by the company, namely periodic reviews* (R, s, S) *and periodic reviews* (R, S) *with the determination of optimal review intervals, and it was found that the calculation of the total inventory costs proposed by* Rp.114,575,007,522. *which is* 7% *lower than the existing condition which has a value of* Rp.122,597,286,688.

Keywords **– *Overcost, Overstock, Periodic Review, Policy, Variance.***