

ABSTRACT

Supply represents problems for all organization, both orienting profit and also non profit, supply is resource that kept in any time interval, resource is in the form of raw material for processing of half goods become to experience of furthermore process or the finished goods. Supply is used to guarantee mechanism fluency of goods accomplishment as according to user requirement, until the system earn to reach optimum job. Inventory control of spare parts is different from inventory control of raw material, because requirement of raw material is not influenced by demand that limited by time, while demand of spare parts is influenced by damage accelerating of that spare parts. The raise of damage accelerating will generate higher demand of spare parts. Then for spare parts supply that more accurate presumably need to be developed with appropriate model.

Supply model that is used represents supply model (Q,r) with back order at this supply model done adjustment at demand by corresponding with damage accelerating of spare parts, determining of variable of Q<sup>8</sup> and R obtained from degradation at each variable of supply total cost formula which is done adjustment with damage accelerating of spare parts in planning interval determined from average of spare parts age, then minimum and maximum values are obtained from existing formula.

Calculation result of supply decision variable can be look at following tables :

	Air bag			Pincer Upper			Solenoid Valve			
interval	1	2	3	1	2	3	1	2	3	
Q	2	3	6	3	4	6	2	2	3	unit
r	5	7	13	4	4	7	4	4	5	unit
ss	4	5	8	3	3	5	3	3	4	unit
ms	7	10	19	7	8	13	6	6	8	unit

From calculation result of supply decision variable can concluded that planning interval which better be used for Air Bag is 3 month with total cost is about Rp. **2,309,920**, for Pincer Upper is 6 month with total cost Rp. **851,107** , for Solenoid Valve is 7 month with total cost Rp. **1,236,010**.