ABSTRACT

A PLANNING HORIZON THEOREM AND OPTIMAL ORDERING POLICIES IN THE CASE WHERE DEMAND RATE VARIES ONCE OVER A FINITE PLANNING HORIZON

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This paper deals with the continous review lot sizing problem in the case where demand rate varies once over a finite planning horizon. In the case of demand rate varing once over a finite planning horizon, relationship between demand rate prior to the demand turning point and the after affects the selection of the optimal ordering policies.

This paper shows that information concerning the location of the demand turning point and optimal number of deliveries in the periods prior to and after the demand turning point can effectively be used to determine optimal ordering policies. It presents a planning horizon theorem which assures the condition under which the planning period can be separated into two independent subperiods at the demand turning point.