

AN EPQ MODEL FOR DETERIORATING ITEMS WITH DEMAND AND TIME VARYING DETERIORATION WITH SHORTAGES

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ABSTRACT

The paper presents a production model, which was developed for its deteriorating items with demand rate and time dependent deterioration rate, production rate in demand dependent and greater than the demand rate. The shortages are allowed and completely backlogged. Also, the optimal solution of the model is got, for a numerical example after some adjustments in the derived solution. The carrying out of the sensitivity analysis is also done, in order to examine the effects of changes in model parameters on the optimal solution.

KEYWORDS: With Shortages, Deteriorating Items, Sensitivity Analysis, Demand Rate