

Note on An EQQ Model for Deteriorating Items with Exponential Time-Varying Demand and Partial Backlogging

Kun-Shan Wu

Tamkang University

R.O.C.

Abstract

In a recent paper, Chang and Dye [1] developed an economic order quantity model for deteriorating items with exponential time-continuous demand and partial backlogging. In this note, the model of Chang and Dye [1] is reconsidered. A further extended model is developed for a general continuous time-varying demand. We find that under the assumptions of the Chang and Dye [1], the optimal procedure is independent from the form of the demand rate. We have also shown that it gives the global minimum.

Keywords: Deteriorating Items, Time-varying Demand, Partial Backlogging.