

## **Improved Inventory Models with Ramp Type Demand and Weibull Deterioration**

*Peter Shaohua Deng*  
Central Police University  
R.O.C.

### **Abstract**

We consider inventory models with ramp type demand for items with Weibull deterioration. Wu et al. have studied these models and made excellent extensions. However, their paper contains an unnecessary condition to insure the existence of the minimum solution and only investigated the case that the inventory cycle time is longer than the period during which demand is in the increasing cycle. The purpose of this paper is twofold. First, we solve their model without the unnecessary condition. Second, we consider the general case to find the minimum solution. We offer numerical examples to illustrate our findings such that our proposed improvement indeed saves money.

*Keywords:* Inventory, Ramp Type Demand, Weibull Distribution.