

Raw Material Inventory Strategy for Make-to-Order Manufacturing

by

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ABSTRACT

What is the appropriate raw material inventory strategy for a make-to-order manufacturing company? As companies grow in size and the business environment changes over time, many companies adapt their operating policies to remain competitive. However, some policies, such as raw material inventory policies, are left untouched as “legacies” of the company’s past due to lower priorities or lack of adequate data. These raw material inventory policies are of particular importance to manufacturing firms, especially those that often operate at maximum capacity or have seasonality in demand. This research proposes a raw material inventory policy evaluation tool that allows a company to understand how certain key performance indicators are affected by various changes in its inventory policy and helps the company devise a strategy. This evaluation tool can then guide the company towards a better inventory policy in the absence of cost information and shows the results in terms of number of events. The company can then adjust various replenishment policies depending on the product’s demand characteristics. In addition, the research demonstrates that inventory policy changes can be used to partially overcome supplier service level declines and demand variability.

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