9.1: Inventory

In a manufacturing context, inventory includes raw materials, work that is in process, and finished goods. Running out of a necessary component in the middle of production can be very costly for a manufacturer. The goal of inventory management is to balance the cost of ordering and storing material with the cost of not having that material available when it is needed. Effective inventory management combines elements of accounting, sales, and operations management. Certain aspects of this unit will feel like a review of accounting, but we will be discussing accounting from the perspective of the operation manager. There are a number of strategies for managing inventory. Because direct costs can be calculated based on the length of time an inventory is in storage, accountants and operations managers try to prevent inventory from "sitting around."

An example of one of the most successful implementers of inventory management is Walmart. Walmart uses vendor-managed inventory, meaning that its merchandise does not sit in a Walmart warehouse. Instead, it stays with the manufacturer until Walmart learns from its stores that more is needed. This keeps Wal-Mart from having to pay to store all of the products it sells. In this unit, we will consider how demand influences the operations manager's choice of inventory management system. We will also examine models for determining how much inventory to order and when to order it.

Completing this unit should take you approximately 5 hours.

- **Unit 9 Learning Outcomes Page**
- 9.1: Inventory Management
- 9.2: Types of Inventory and Inventory Decisions
- 9.3: Inventory Control
- Unit 9 Activity and Assessment