

# TECHNICALITIES PROCESS ENGINEERING

## PRODUCT BUILD LOGISTICS



**CONCEPT** Product Build Logistics refers to the planning, coordination and management of the processes and resources required to manufacture a product. This includes everything from sourcing raw materials and components to assembling and testing the final product. Product Build Logistics is critical to the success of a manufacturing operation, as it ensures the right materials and resources are available at the right time and in the right quantities to meet production goals.

## BACKGROUND

The history of product build logistics can be traced back to the Industrial Revolution, where the concept of assembly line production was first introduced by manufacturers such as Henry Ford. This revolutionized the way products were built, making them more efficient and cost-effective.

## EXAMPLES

**BILL OF MATERIALS:** A bill of materials is a list of all the components and parts required to manufacture a finished product. This document is essential for planning and coordinating the procurement of raw materials and components and managing inventory levels.

**MANUFACTURING PROCESS DESIGN:** Manufacturing process design involves developing and optimizing the production processes required to manufacture a product at scale. This may involve designing specialized equipment, developing process flow diagrams and optimizing process parameters and flow rates.

**QUALITY CONTROL AND TESTING PROCEDURES:** Quality control and testing procedures are essential to ensuring the quality and consistency of the final product. These procedures may include statistical process control, defect analysis and other quality assurance measures to identify and correct issues during production.

