



Material Flow Engineering

Material Flow Engineering is the process of analyzing and optimizing every unique part movement throughout the manufacturing facility. We can handle the flow of the parts or product from docks to lineside or dock to dock.

Real-World Applications

- **Plan for Every Part (PFEP)**

A collaborative lean tool that provides all relevant part information to efficiently manage the movement and replenishment of parts from suppliers to the point of use. It brings disparate parts data together in one centralized database.

- **Dock Capacity Analysis**

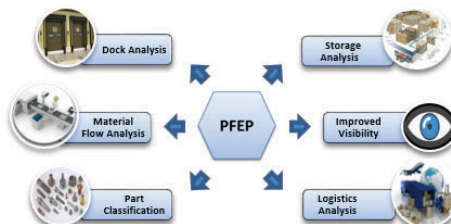
Determine if the current number of docks are sufficient or if new docks are required. Rebalance current loads in order to receive parts closer to the point of use and gain efficiencies.

- **Storage and Inventory Analysis**

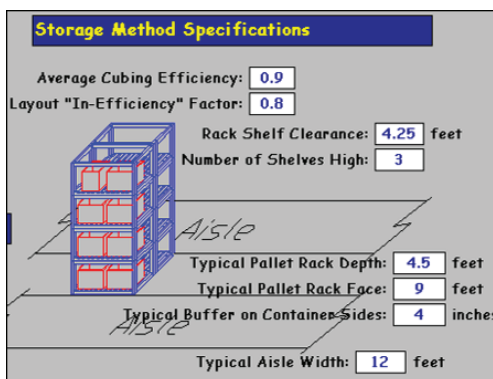
Optimize the amount of floor space required for raw, WIP, and finished goods for a given set of parts or commodities. Identify excess inventory. Improve storage methods and equipment to reduce storage requirements.

- **Material Flow Analysis**

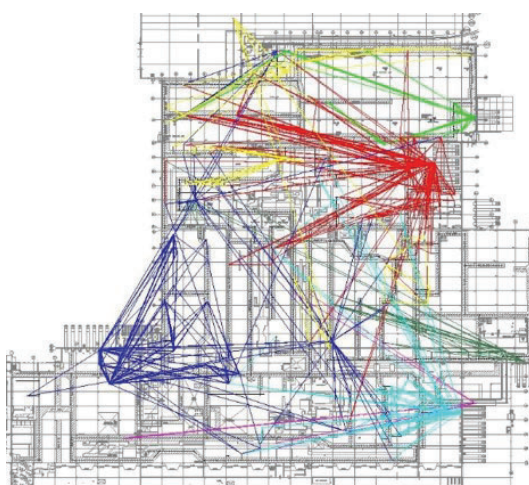
Optimize a part's path through a manufacturing facility and increase safety, minimize congestion and reduce manpower / material handling equipment requirements.



PFEP Development



Storage and Inventory Analysis



Material Flow Analysis

The DSI Advantage

We work with our clients to determine which of our material flow services are best suited to your facility's needs. We give you the results that are required for your facility. We tailor our real-world applications to your facility.

DSI DELIVERS

MANPOWER REDUCTION

We have achieved manpower reductions between 20-40% on projects

SPACE SAVINGS

Our clients will see space savings of 30%-60%

CONGESTION ANALYSIS

Shows the complete flow of every part through the facility and results in a 10-30% reduction in congestion

COST SAVINGS

More efficient delivery processes and travel patterns in your facility