INCREASING SUPERMARKET PICKING EFFICIENCY

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Dayton-Phoenix Group (DPG) is a locomotive manufacturing company that roots back to 1910. The company has recently relocated and has the 2019 Memorial Day weekend closure that affected the entire facility. The Dayton facility has 60,000 square feet of manufacturing floor space under the roof that is used to produce a range of quality products.

PROBLEM STATEMENT

DPG’s manufacturing, high volume, material handling and is striving to be a Lean manufacturing facility through (1) prioritizing picking for the work and that are currently using materials over the entire plant and (2) updating the database reference to reduce inventory uncertainty on parts, specifically on the location of parts.

HOW TO INCREASE SUPERMARKET PICKING EFFICIENCY?

- PTP
  - Perpetual Inventory
  - Location
  - Graph
  - Standardized Scheduling of Picked Materials
- Collecting Supermarket Data
- Pick Times
- PTP
- Standardized Scheduling Process
  - Production Control
  - Information

HIGH MIX - LOW VOLUME

Volume (BMW) manufacturing facility with over 30,000 distinct parts in the Dayton location used for assembling.

- Producing a high variety of products in small quantities.
- Make it easier manufacturing.

LEAN

• Utilizing lean product flow and trigger routes makes our plant safer.
• I could see a big difference from 5 years ago.
  - Eric Schultz, Corporate EH&SS Manager

IMPLEMENTING GREEN CARD

- Made Screen
  - Visual Permission Slip
  - Indicates Available Space for Materials
  - Pull System
  - Infomation/Flow

HOW WE INCREASED EFFICIENCY & MATERIAL HANDLING IMPROVEMENTS

The graph at right follows the number of pieces moved by a single material handler from October 2022 to early April 2023. It shows that after implementing the Green Card Process the number of material transactions decreased in relation to pieces moved. This indicates that the material handler was making more efficient picks, as they were moving fewer material in less moves.

PROJECTS FOR NEXT GROUP: MOVING FORWARD

The information collected will be used in DPG’s supply chain specialists to allocate ample time for picking when scheduling new jobs, including accounts picking time in the picking schedule process will reduce time wasted handling on material. This information may also be used in the process of updating DPG’s in-house database software, Sysline, to populate accurate inventory information, with a focus on parts locations.

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References