

CASE STUDY: WAREHOUSE CONSOLIDATION WITH PFEP IMPLEMENTATION

CONSOLIDATED
**SEVEN
FACILITIES
INTO ONE**

80%
REDUCTION IN
WAREHOUSE
EXPEDITES

66%
REDUCTION IN
PRODUCTION
DOWNTIME

1. DIAGNOSE:

Client Challenges

An automotive supplier's warehouse space and on-hand materials were growing exponentially as it received, processed, and stored material for potential future use.

As a result of lacking a defined inventory and replenishment strategy, the inventory increased from one to seven warehouses. The client needed the right mix of on-hand SKUs in order to optimize material flow from one warehouse instead of the seven it currently operated.

The client was also challenged by:

- Parts damage because of storage issues
- Usage of new parts due to salvage parts not being available
- Lost time from material unavailability
- Multiple storage points causing confusion and downtime due to lack of parts

2. ASSESS:

Current State

The client partnered with LeanCor in order to assess material flow and reduce production time losses (due to parts shortages).

Together, LeanCor and the client focused on the opportunities for improvement within the scope of the warehouse design, transfer and (Plan for Every Part) PFEP implementation.

Focusing on the reduction of inventory allowed for packaging and material flow improvements that freed up production space and also improved overall safety and profitability of operations.

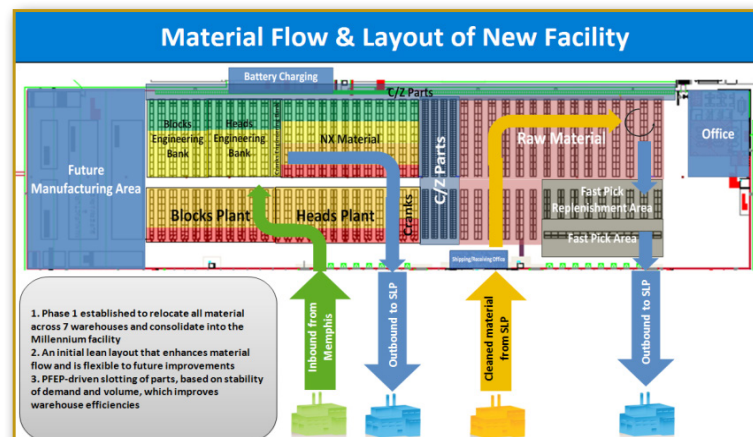
3. DESIGN:

Future-State Strategy

The team created an AutoCAD design of the new consolidated warehouse, and used takt time calculations to reduce operating costs of shuttles, equipment, and resources.

PFEP was utilized as the foundation of the future state parts strategy. 5S was used to sustain optimal inventory levels and locations.

Additionally, right sizing the inventory strategy allowed for anticipated production growth.

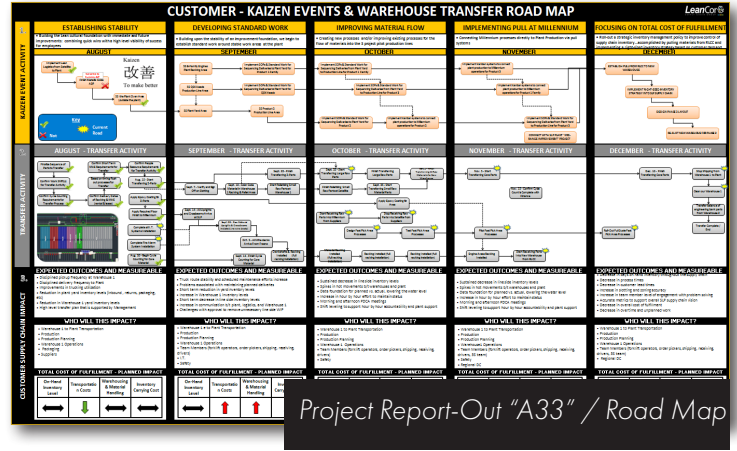


4. DEPLOY:

Implement Solutions and Realize Results

LeanCor developed an actionable roadmap and performed on-site project management to ensure a seamless facility consolidation that resulted in:

- No longer needing six storage facilities and a satellite warehouse
- A PFEP driven by FIFO
- Implementation of pull systems
- 100% visibility of all materials and activity supporting material flow
- A drastic reduction in production downtime



Project Report-Out "A33" / Road Map

This project provided the opportunity to create optimal outcomes in the areas of ergonomics, safety, quality, space utilization, cost, and delivery.

- 80% reduction - expedites from warehouse
- 66% reduction - downtime due to parts shortages
- 4% reduction - warehouse overtime due to ad hoc planning
- 3% reduction - water-spider overtime due to ad hoc planning
- 3% reduction - DOH material due to stability and FIFO
- Foundation for future collaborative kaizen events
- Problems visible, improvements sustained, PDCA rhythm established



Kaizen Event Mapping Exercise

HOME RUN:

The customer now has one warehouse supporting a plan for every part, allowing "pull" replenishment across the extended value stream.

"LEANCOR'S CONSULTING TEAM EXEMPLIFIED PROFESSIONALISM. THEY EXCELLED AT LEAN TRAINING AND APPLYING LEAN CONCEPTS IN THE REAL WORLD."

- MATERIALS SUPERVISOR