PROJECT OVERVIEW

Assembly line logistic concept redesign

PROJECTS

Initial situation

- Company initiative, seeking for savings with reduction of full-time employees (FTE) and space utilization, mainly
- Assembly prioritization based on its low VA/NVA ratio
- Project life extended by OEM from 5 to 9 years

Scope

- New logistic concept redesign and documentation:
  - New layout definition
  - Material and information flow definition
  - Benefits calculation (incl. nonfinancial)
  - Implementation plan
  - ROI calculation

Approach

- Current situation analysis
  - 7 wastes identification on current layout and logistic concept
  - Takt time vs. cycle time analysis
  - Walking distances calculation (km/year)
  - Micro-stoppages calculation
- Multidisciplinary workshop (cardboard engineering) execution for new layout alternatives creation
- Line re-balancing
- Multidisciplinary team coordination, seeking for alignment on new layout and logistic concept

Layout redesign workshop (cardboard engineering)

Challenges

- Culture of continuous improvement in the development process
- Parallel improvement projects on-going – with higher priority (low resourse availability)
- Complex logistic concept through the whole plant
- Confrontation between áreas

Achievements & Results

- ✓ Continuous flow between workstations:
  - ✓ Elimination of WIP
  - ✓ Elimination of WIP handling movements
- ✓ ~20% of space reduction on assembly line
- ✓ 2 FTE reduction per shift
- ✓ 50% walking distance elimination
- ✓ ROI <6 months