Operational Excellence in Plastic Packaging Industry

Case Study
India

About Client

Client is one of the leading names established in the year 2010 with the primary focus on manufacturing of Adstar® bags. Client specializes in PP circular woven bags laminated/unlaminated, valve type/open mouth, with liner or without liner bags, HDPE Circular woven bags laminated/unlaminated, valve type/open mouth, with liner or without liner bags, BOPP reverse laminated PP bags, PP/HDPE laminated/un laminated fabric.

Client has well spread business in Indian Subcontinent, East/Middle Africa, South/West Africa, East Europe, East Asia, Central America, North Europe Middle East, South America, South/West Europe, South East Asia, North America.
Objectives

- To reduce breakdowns
- To improve Overall Equipment Effectiveness (OEE)
- To reduce wastage
- To improve visualization practices
- To improve manpower productivity

Analysis

After exhaustive analysis & discussion with the client, following key improvement areas were found:

- High material wastages
- High rate of equipment breakdowns
- Manpower Productivity was low
- Overall Equipment Effectiveness (OEE) was low
- Lack of proper data monitoring and management practices
- Lack of visualization practices

Approach

Project Initiation

- Establish Transformation Framework
- Foundations Training and Implementation
- Time Study for segregation area
- Root cause analysis, Fishbone analysis & Why why analysis
- Root cause analysis on short width, folding, knotting, etc.
- Process flow redesigning
- Roll Out RACI (Responsible, Accountable, Consulted, and Informed) Matrix
- OEE Monitoring and Improvement
- Establishing Data management practices
- Set Performance Management System
Project Implementation

Team Faber Infinite initiated transformation journey by taking the following steps:

- Time Study conducted for segregation area
- Cause and effect analysis carried out to reduce wastage
- Revised shift targets & Overall wastage monitoring system was established
- Fishbone analysis and why-why analysis on each problem and implemented improvement points
- Data monitoring was improved w.r.t OEE, breakdown and wastage tracking; which resulted in attacking the root causes
- One Point Lessons (OPL) were identified and designed at looms and tape plants
- RACI Matrix designed and rolled out
- COTI (Cleaning, Oiling, Tightening Inspection) check list for autonomous maintenance was initiated at looms and tape plants, which impacted in reducing breakdown (analysis done for 13 looms which were selected for AM Skill Level Improvement with the help of skill matrix and regular trainings by team leaders implementation)
- Follow up by steering committee for action plan implementation, COTI, OEE data, AM activities, Why Why analysis for sustenance

Results Delivered

Wastage reduced by ~30%
OEE improved by ~25%
Breakdown time reduced by ~70%
Structured Problem-Solving saved INR ~1.5 Crores (15 million)
Breakdown reduction saved INR ~52 lakhs (5 million)
Other savings amounts INR ~4 million
Five S + Safety audit score improved by ~75%
SOPs adherence improved

Sustenance

Implemented results shall be sustained over a period using Systematic Audit & Improvement Loop (SAIL) & Daily Work Management (DWM)

Visit Faber at www.faberinfinite.com for more information and a complete list of regional contacts or send us e-mail: consulting@faberinfinite.com