Productivity Improvement
In Engineering Industry

Case Study
India

About Client

The client is one of the leading manufacturers, suppliers and exporters of Air Cooler and Heat Exchangers for 2 decades. Their product range is wide and the most appreciated of them are Oil Coolers, Intercoolers & After Coolers and Heat Exchangers.

The products are highly regarded for being robust in housing, resistant to wear & tear and cost effective as well. Client has a huge clientele based across the globe including the Indian Subcontinent, East Asia, Middle East and South East Asia.
Analysis

In discussion with the client and detailed analysis, following key improvement areas were agreed and finalized:

- Culture building for operational excellence
- Data management practices
- Throughput time reduction
- Overall Equipment Effectiveness (OEE) improvement
- Work In Process (WIP) standardization
- Inventory management practices
- Production Planning & Control
- Manpower productivity improvement
- People Development - Performance Management System
- Robust communication system and standards

Approach

Conducted the overall detailed analysis & set organizational priorities to improve operations through

- Gemba Walk
- Value stream identification
- Current State Mapping (CSM)
- Future State Mapping (FSM)
- Implementing Kaizens
- Inventory optimization through Kanban
- Six S (5S + Safety) Audit & implementation
Project Implementation

- Conducted Dipstick Analysis and identified the improvement areas
- Prepared Current State Map (CSM) of all activities
- Projects identified to improve the current state via implementing Kaizens
- Carried out detailed inventory analysis for inventory optimization
- Identified & rolled out Kanban for runners and repeaters
- Liquidated non-moving - stranger items
- Prepared supermarket design for cooler components section
- Conducted OTIF (On Time In Full) analysis to understand & improve delivery system
- Conducted customer service analysis to understand the defect patterns
- Conducted Six S (Five S + Safety) Audit
- Employee Engagement survey was undertaken
- Prepared Future State Map (FSM) for all business activities (for two value streams) & spaghetti diagram
- Prepared Transformation roadmap for people excellence, operational excellence & sustenance
- Recommended various initiatives to roll out transformation journey across the organization

Results Delivered

Reduction in throughput time by ~2.3 times

Improvement in value added ratio by ~24%

Transportation Index reduction by 224

Improvement in inventory costs by INR ~1.5 crores (INR 15 million)

Reduction in overtime by ~3.5 times

Sustenance

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