Large Textile Manufacturer
Weaving a platform for improvement

Nawaplastic, manufacturer and distributor of PVC products began operations in 1970. The company is a division of Thai Plastic and Chemicals PCL., part of the internationally recognized Siam Cement Group (SCG). Nawaplastic (NPI) is comprised of three companies operating collaboratively to create synergy along three product categories: Pipes, Profiles and Pallet/OEM products.

ANALYSIS
Renoir Consulting was invited to carry out an Analysis of our Client’s operation to assess the feasibility of augmenting their efforts to reduce costs by reviewing their current processes, procedures & systems in areas of Manpower planning & allocation, Energy management & Shop floor waste management. Key findings of the Analysis included:

- While the overall manpower utilization was at a high level, there are pockets of optimization & resource pooling through change in work methods/work content
- Scope to implement Best in class practices and energy saving initiatives existed
- Streamlining of material flow would improve output of packing section to further impact manning norms
- Several Energy Saving initiatives had taken place in the past with positive results, however systemic gaps existed at daily/weekly/monthly levels in their management control system
- There was a decline in the hard waste generation but with a strong PDCA cycle the improvements could be further controlled and sustained

PROJECT
A 25 week project named “PARIVARTAN” was launched under the guidance of 3 Renoir Consultants and a 3 member Client ‘taskforce’ (Change Agents). Three separate Management Action Teams (MATs) for each of the areas, headed by Functional leaders and comprising multifunctional team members from production, maintenance, engineering & finance were formed. Each MAT was assigned the responsibility to drive change and achieve the desired results through process improvement, system implementation, and stakeholder involvement across all levels.

Project Initiation and the Focus Process™
Key initiatives, savings validation and issues/concerns were reviewed by a bi-weekly steering committee, chaired by the Client's MD and consisting of key leaders from the executive team. To ensure buy-in and
Ownership, the Teams spent an initial 8 weeks in identifying opportunities of improvement through process mapping, As-Is organization mapping, manpower analysis, observation/cycle studies and systems effectiveness studies. More than 250+ observation studies and 50+ brainstorming sessions were conducted with supervisors, operators, managers and section heads to further validate the opportunities, list possible solutions, and gain understanding, and ownership.

**Implementation-Making it Happen**

Manpower Raionalisation - Opportunities were identified and restructuring was suggested across various departments based on the following principles:

- **Structural Clarity**: Span of Control was studied along with roles definition and opportunities to expand and combine
- **Workload Optimization**: Unique position identification, activity listing followed by cycle time studies/observation studies were conducted to optimize the workload through automation, planning, layout changes and change in work practices
- **Standards**: In sections where individual targets (standards) were established, cell structures and target setting based on groups were suggested
- **Management Control System improvement**: Production Planning integrated with manpower planning through Short interval Control (SIC)

Energy Management - Key steps included:

- Energy Savings Initiatives benchmarking was done to identify the improvement areas.
- An Energy Map was created and observation studies were conducted to identify potential areas of optimization.
- Section wise SEC (Specific Energy Consumption)/ Daily Energy management was initiated to monitor energy variation

Excess & Hard Waste Reduction:

In order to strengthen the PDCA cycle, various system elements were introduced across different sections to increase operational effectiveness through better visibility and data capturing. On the basis of identified opportunities, Systems such as Indent Tracking System, Excess Analysis report, Series Monitoring system, Hardwaste Audit check sheet, training modules (Videos to sensitize workers), and Terms of Reference for Effective review were rolled out, which helped in achieving considerable reduction in Excess and Hardwaste Production:

"Renoir helped us identify significant areas for improvement in maintenance by improving the work methods and practices. Until now, we never saw opportunities in maintenance in the way Renoir has shown us."

*Client Managing Director*

**THE RENOIR GROUP**

Renoir Consulting is a world leader in sustainable, implemented change. Founded in 1994, Renoir has offices located in North and South America, UK, Europe, Turkey, Middle East, Southern Africa, India, Pakistan, China, South East Asia and Australasia. With over 350 fully employed and highly trained consultants, their work across a wide range of industry sectors gives them a broader perspective of the issues facing your business, allowing them to be sensitive to your unique challenges, culture and specific business issues. This cross-pollination ensures truly effective, rapid and sustainable solutions.

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