

## LOCATIONS

### United States

Houston, Texas  
Cincinnati, Ohio

### Canada

Toronto, Ontario  
Montreal, Quebec  
Calgary, Alberta

### Latin America

Mexico City, Mexico  
Bogota, Colombia

### EMEA

London, England  
Frankfurt, Germany  
Johannesburg, South Africa



## SOLUTIONS

- Management Operating System (MOS)
- Production Loss Accounting (vs Waste Solutions)
- Overtime Protocol
- Labor Flexibility
- Key Performance Indicator (KPIs)
- Machine Standards
- Standard Work
- Centerlining
- SMED

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# Moist tobacco production and packaging facility improves manufacturing operations and profitability

## CHALLENGE

A global smokeless tobacco company needed to reduce manufacturing costs and raise profit margins to operate efficiently. High hourly headcount and overtime drained both cashflow and profit. Additionally, unstable line performance and mechanical breakdowns consistently hindered production runs, resulting in increased levels of tobacco and material waste. Production schedules did not meet on-time targets, which resulted in weekend overtime operations. In this scenario, the equipment required a lot of attention, causing additional staffing to address downtime events.

Several other factors also contributed to the struggle in meeting budgeted profit margins. Loss accounting data was plentiful, but accurate information to take meaningful actions was scarce. To compound this issue, communication across the organization was inconsistent and siloed. Equipment run-right setpoints and guidelines to effectively run the machines were not established. Additionally, formal procedures did not exist to ensure consistent and efficient startups, shutdowns, and product changeovers, which caused production delays and problems with equipment. Ineffective problem-solving capabilities left root causes undetermined, which resulted in problems reoccurring. Furthermore, a clear escalation process was not established to communicate issues and get timely support. Meetings were not effectively structured, and KPIs were not used to measure performance and drive the business forward.

Clearly defined roles and responsibilities were limited at most levels, and absenteeism needed to be tracked and managed. Effective cleaning standards were not executed with defined frequencies, leading to increased levels of equipment downtime.

The client needed immediate help to create a clear path for maintenance, reliability, and production floor improvements and a precise schedule to execute. Known for its expertise in the industry, Myrtle Consulting Group was brought in to deliver sustainable and measurable improvement.

**“Myrtle has helped us setup a strong foundation to continue our improvement efforts.”**

- Senior Director, Plant Operations

## APPROACH

Myrtle analyzed the situation and established integrated workstreams with the client that included Management Operating Systems (MOS), Maintenance and Reliability, Production Operations, and Organizational Design to right-size staffing.

## MOS

The team installed a new management system, changing the overall structure of the day-to-day business. This new system aligned the efforts on the floor to the goals of management.

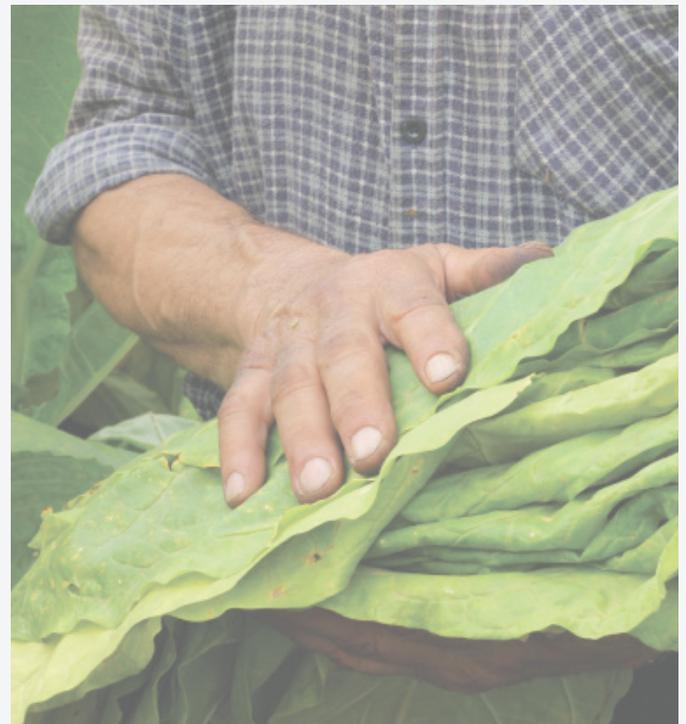
In the Production Department, the team created visual boards to track hour-to-hour line performance and highlight any off-target KPIs. Front-line supervisors participated in Gemba walks that closely monitored machine performance and were able to communicate the status of the lines more accurately. The team utilized this data in several communication meetings, such as shift kick-off meetings with crews, supervisor-to-supervisor turnover meetings, and reported to the Production Manager at newly installed production review meetings. Thus, effective communication created a unified direction and basis at all levels.

Similar to the production area, Myrtle developed crew and supervisor turnover meetings in the Maintenance Department. They also implemented Gemba walks and a visual management board, which highlighted key maintenance information. The Maintenance Manager measured team performance at a weekly maintenance performance meeting. Key performance indicators included Downtime, Technician Utilization, PM Compliance, Schedule Attainment, and Overtime. The team also installed a more robust maintenance planning and scheduling process with a schedule review meeting to vet and publish a weekly execution plan.

Selected participants formed a problem-solving team to focus efforts on top sources of loss. This “Glidepath Team” used quantitative performance and financial data to prioritize initiatives and concentrate on the most impactful solutions. Upper management met weekly to review the performance of all departments and separately to address the high levels of overtime in the plant.

## Maintenance and Reliability

Maintenance needed the basics elements of planning, scheduling, and execution installed. Additionally, they did not have a formalized strategy to maximize the reliability of assets. The department performed reactive actions with work requests typically submitted via word of mouth. A maintenance schedule was created to script the work of the technicians. This work was first vetted and prioritized by the Production Department who now assumed ownership of the equipment. The team developed asset strategies for critical equipment that included practical preventive maintenance tasks, equipment bills of materials, and troubleshooting guides. The same essential equipment was also Centerlined to ensure optimum performance. The team restored equipment to near-new condition through thorough inspections and repair efforts. The team then identified critical adjustment points and run-right settings that were published to aid in equipment set-up and assist production personnel with normal operations.



## Production

Production activities focused on maximizing Overall Equipment Effectiveness (OEE). The team trained all personnel to conduct proper Root Cause Analysis (RCA) for the issues that occurred and then coached the operators to find permanent solutions to problems. As part of problem-solving, the team developed an escalation process that prescribed duties during failures and dictated required communications. The team generated and published regimented startup, shutdown, and changeover procedures to reduce downtime and ensure a reliable recovery.

As part of the operator standard work, the team developed and issued cleaning guides to maximize equipment reliability. During each shift, equipment centers were cleaned by operators and inspected by supervisors. Waste was closely monitored and recorded on operator logs to determine top sources of loss. The team addressed problem areas, and all points were monitored continuously to ensure waste levels remained low.

## Right-sized Staffing

Myrtle built an efficient workforce model that maximized the utilization of the hourly staff. The team measured activity levels and challenged much of the “non-value” activities that were present in many positions. OEE improvement and low work level realization led to new staffing budgets for the future, which natural attrition would help realize.

## SUSTAINABLE RESULTS

The client experienced an overall annualized project savings of greater than 9%. Tobacco loss decreased by 32% and a packaging material loss decreased by 18%. Maintenance Technician utilization improved by 35%, and hourly 10% headcount reduction, with hourly overtime and salary overtime decrease of 30% and 22% respectively. Overall plant output improved by 12.5% with a lower cost to produce.

### ACTUAL RESULTS:

**9%**

Project savings

**32%**

Decreased Tobacco Loss

**18%**

Packaging  
Material Loss

**35%**

Maintenance  
Technician Utilization

**10%**

Headcount Reduction

**30%**

Overtime Decrease

**22%**

Overtime  
Salary Decrease

**12.5%**

Overall Plant Output  
Improvement

Are you in need of more efficient operations? Do you need expertise diagnosing and solving specific challenges? If so, contact us today or visit [www.myrtlegroup.com](http://www.myrtlegroup.com) to learn more.