MAJOR BOTTLED WATER COMPANY INCREASES OEE BY 35% THROUGH EQUIPMENT OPTIMIZATION SOLUTIONS

01 | CHALLENGE

Equipment maintenance, Downtime

A leading bottled water company was seeking to improve its operations and increase overall equipment effectiveness (OEE) at one of its most operationally challenging plants in the United States. The organization struggled with mismanaged equipment followed by inefficient maintenance planning, scheduling and execution and maintenance expenses. Challenges were amplified with inadequate Root Cause Analysis (RCA) processes, ineffective start-ups from poorly executed changeovers, and a lack of training.

02 | SOLUTIONS

Equipment Optimization

Following an in-depth analysis, Myrtle Consulting Group identified three key areas of improvement: blow molders used to produce plastic water bottles, kister equipment used to make multi-bottle packages and palletizer equipment used to put bottles on pallets to send to retail stores and workforce training. The team took the following approach:

- Rebuilt one blow molder station per week to ensure part reliability, partnered with a technical services company to train mechanics and other plant employees assigned to the rebuild team
- Improved kister performance through Myrtle Consulting’s equipment performance optimization methodology, Centerlining
- Enhanced the palletizer performance with focus on forklift driver timing
- Improved RCA processes, upgraded packaging, changeover, and start-up processes using the Single Minute Exchange of Dies (SMED), the methodology used by Myrtle to reduce changeover time
- Increased efficiency by working with injection molding managers to revamp maintenance planning, scheduling and execution processes
- Hired and trained operators with refreshed operator standard operating procedures, troubleshooting guides and baselining of all machines to factory specifications, revised breakdown and reporting procedures

03 | RESULTS

35% INCREASE IN OEE

Management coaching, training sessions, and implementation of new internal processes helped lay the foundation for success. Improving the company’s work-order prioritization, planning, scheduling, and execution processes helped reduce downtime. Overall efficiency of the blow molding machines increased by 20% and preform quality improved and became a company-wide standard. Myrtle Consulting helped the client achieve its ultimate target and increased OEE by 35%.

“The magnitude and speed of results have been astounding. My people have a foundation to build upon for years to come.”

- President and General Manager