

Atrium Innovations Inc.

Making the Difference: Thinking LEAN

Featured Case Study



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The Situation Atrium Innovations had hired a new management team to oversee operations of two plants at its Pittsburgh, PA location. Although this team had made improvements within its first two years of being onboard in addressing ongoing manufacturing inefficiencies, Atrium's financial performance was not improving as quickly as expected. To transform the Pittsburgh operations into a Centre of Excellence was set as a priority.

Atrium's leadership team initiated a rationalization program which would engage an onsite consultant to immediately begin affecting operational improvements. Simultaneously, they would also review their contract manufacturing offerings and streamline their processes. Synergetics was contacted to assess overall facility operations and assist in this initiative.

The Initial Assessment Working with Atrium Innovations' management and operations teams, Synergetics agreed to address multiple fronts. Atrium had just created a Master Scheduling Area and was in the process of implementing scheduling tools to improve its overall order/production/shipping process. Order fill rates were poor, forcing items to constantly move and its priorities to change. Upgrades were required regarding processes and front line supervisors.

Also, inventory levels were inflated with the wrong types and amounts of raw materials on hand. At both the Boyce and RIDC locations, there were no standards for staging, locating, or practicing FIFO for inventory. Within their production areas, floor controls were inadequate. At RIDC, the line production/process flow was not based on lean

Atrium Innovations Inc. is a Canadian-based company engaged in the development, manufacture, and commercialization of dietary/health supplements. Atrium owns more than 16 brands recognized for their product innovation and manufacturing lence. They offer superior products and services backed scientific research and recognized by reputable healthcare professionals.

Atrium products are primarily distributed by healthcare practitioners such as physicians and naturopaths. Their products are also sold through health food stores, specialized distribution channels, and direct-to-consumer sales in more than 35 countries, with a primary market focus in North America and Europe.

Atrium manufactures and markets more than 2,000 health and nutrition finished products that are generally based on scientifically supported formulas to deliver expected health benefits. The products are generated primarily from natural sources and include vitamins, minerals, and specialized products to include enzymes, probiotics, and omega-3. Atrium has over 1,100 employees and operates seven manufacturing facilities world-wide.



"Synergetics was a good partner for Atrium in the extension of our change management initiatives. We were extremely pleased with the collaboration from the assessment, design, implementation of process improvements, and the follow-up.

"Synergetics quickly mapped out a best practices approach for our manufacturing business, MOS, and performance measurement model. Synergetics engaged the team from operators, to line managers / supervisors, and to senior leadership for an efficient execution and implementation. We realized results in cost control, productivity improvements, improved operational efficiencies, and quality."

Daniel Kohler – EVP Manufacturing, Packaging, Supply Chain, QA and QC



concepts or best practice methodologies. The overall opportunity was identified to improve throughput and reduce labor by 23%, or a total savings of \$1.5M on an annualized basis.

The Implementation The Synergetics project team held daily and weekly reviews with onsite managers. These reviews would cover specific SKU status results, establish formal daily plans by line/area, and identify existing gaps. Work standards were established by developing T-Max levels on equipment and Reasonable Expectancies on indirect activities determined through observations.

Focus teams were assigned to work on key initiatives, such as reducing production line set-up times. Bottling lines were reconfigured by applying Lean methodologies, resulting in allowing one operator to run two lines and eliminating 19 Full Time Employee (FTE) positions. Synergetics implemented Management Operating System (MOS) tools, provided formal training on presses, and oversaw installations of floor controls. Through this process with management's support, six different manager/supervisor positions across three shifts were also eliminated.

An additional focus team was tasked to redesign warehouse and staging areas for better inventory management. The team identified aged product that required removal, extended the life of products that were acceptable by testing standards, assigned new locations for product accuracy, and reduced inventory on hand according to product need. Baseline performance metrics were instituted to monitor area productivity levels.

In order to meet FDA compliance standards related to the Master Manufacturing Record (MMR), quality and yield requirements were built into this record and increased accordingly. A Preventive Maintenance (PM) system with specific actions for identified equipment requiring upgrades was also put in place as bottle lines were (and currently are being) reconfigured.

The Impact The net annual savings realized as a result of these area / process improvements are impressive, and they have exceeded senior leadership's expectations. The initial targeted savings of \$1.5M (or a savings rate of 23%) were met, and the actual run rate of \$2.25M was a 50% increase over the targeted savings amount. These changes represented a labor savings of 70 FTEs at the time of implementation, and projections indicated an annual savings of \$2.56M, or 80 FTEs, when the bottle line reconfiguration was completed.

At the time of this printing, Atrium had improved their 2^{nd} quarter revenue by 25%, from \$24.5M in 2012, to that of \$30.6M in 2013. Other key indices for 2^{nd} quarter included:

	<u>2012</u>	<u>2013</u>	<u>% increase</u>
Gross Margin	\$1.5M	\$3.3M	119%
Operating Contribution	\$0.8M	\$2.7M	241%
FBITDA	3.25%	8.76%	170%

Productivity rates were also much improved with the efficiencies gained through process redesign. At the end of year 2012, Boyce's production rate was measured at 4,492 pills per labor hour. Midway through 2013, Boyce was operating at 5,258 pills per labor hour, or a 17% improvement. RIDC was operating at 51.1 bottles per labor hour, and midway through the following year, it was at 70.2 bottles per labor hour, representing a 37% improvement.

Atrium's success in working in partnership with Synergetics during this most recent project led to a follow-on S&OP work effort. The statement of work would cover an additional quarter of performance improvement efforts between Synergetics and Atrium Pittsburgh and for continued refinements of a true "Capacity Model" for both Boyce & RIDC production facilities.

Synergetics is a privately held New England-based Management Consulting firm established in 1975. With two office locations in the US and UK, Synergetics operates internationally and employs over 150 professionals as analysts, consultants, project managers, and subject matter experts. As one of the largest "Implementation Consulting" organizations, Synergetics has completed over 1,600 business process engagements across 9 distinct industry verticals. It has built more than \$8B in bottom line profitability and improvements in overall operating efficiencies.

Synergetics has a diverse client portfolio comprised of leading industrial and service corporations across Private Equity, Small and Medium Enterprises, and Fortune 500 Companies. With customized service offerings and solutions, Synergetics performs detailed management, financial, and operational assessments to develop and deliver specific cost savings and revenue enhancement initiatives.

"The return on investment was quickly reflected in financial performance. Actual results and deliverables exceeded the project objectives. I welcome the opportunity to provide a reference for Synergetics and look forward to working with them on future initiatives."

Daniel Kohler – EVP Manufacturing, Packaging, Supply Chain, QA and QC

For more information

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