

# Boston Scientific Maple Grove



## **Boston Scientific Corporate Overview**

Boston Scientific is dedicated to transforming lives through innovative medical solutions that improve the health of patients around the world. The core values of the company are meaningful innovation, caring, high performance, global collaboration, diversity, and a winning spirit. For the past three decades, they have been committed to pioneering, innovating and advancing science. As a global market leader, Boston Scientific invests nearly \$1 billion annually to innovate and bring to market medical devices and procedures that address unmet clinical needs and reduce the frequency of patient re-intervention. Their unwavering focus on quality and patient outcomes and their collaborative relationships with clinicians make them a provider of choice for innovative products, technologies and services across a wide range of medical specialties.

Boston Scientific delivers 13,000 life-improving products to customers in more than 40 countries. The company is made up of seven divisions, all focused on delivering products to patients with different disease states. They manufacture products in 12 facilities and manage 40 distribution centers across the globe. Boston Scientific generated \$7.2 billion dollars in revenue in 2012.

## **Boston Scientific Maple Grove**

The Maple Grove, Minnesota team primarily manufactures Interventional Cardiology and Peripheral Intervention products such as balloon catheters and stent delivery systems. They also supply components to the rest of the Boston Scientific plant network which includes Cardiac Rhythm Management and other divisions.

The Maple Grove campus has 150,000 square feet available for manufacturing products. There are 1,561 employees delivering 2.3 million finished devices per year. The devices manufactured are used to treat patients in medical facilities world-wide.

## **Quality**

As a regulated worldwide manufacturer and distributor of medical devices, Boston Scientific is required to maintain a Quality System compliant to the United States Food and Drug Administration, European, and other international quality requirements. They are subject to periodic audits and inspections to assure compliance. The Maple Grove team routinely experiences external audits and inspections with

highly compliant results. Additionally, they maintain a strong and active internal auditing group to assure a strong quality system is continually maintained.

Boston Scientific's Quality Management System starts and ends with their customers. They use customer requirements and feedback to continuously improve the quality of their products, processes, and company. Their system enables them to improve business performance and maintain a competitive advantage.

Quality is deeply embedded in the Maple Grove culture and is evident across the organization. Every employee stands behind Boston Scientific's Quality Policy "I improve the Quality of Patient Care and all things Boston Scientific." Everyone understands the importance of quality and the impact it has on their customers. As a result, they continually achieve six sigma quality levels.

## **New Product Development**

Minnesota is a major technology center for Boston Scientific, so Maple Grove is a close partner with new product development teams and plays a key role in bringing new products to market. In the past two years, they have integrated and delivered 19 new products.

The Maple Grove team is co-located with the Process Development, Research and Development, Regulatory, Clinical, Sales, and Marketing groups. This co-location has been critical to foster their ability to innovate and achieve speed to market. Effective collaboration with new product development is a fundamental part of the culture in Maple Grove. They seize the opportunity to partner with their new product development customers and are able to quickly execute for them.

## **Business Essentials**

Boston Scientific has developed a set of enterprise-wide systems that align and standardize the global operations strategy with individual manufacturing sites. One of the key Business Essentials is the Strategic Quality Process. This process standardizes their approach to running the business by prioritizing, executing, and monitoring activities and resources, so they are aligned with the global operations strategy.

The Business Essentials also provide standard management systems and tools that are used at the site level. These systems provide standard processes and tools used for functional alignment, process improvement, lean, corrective action/preventive action, strategic projects, and new product integration.

### **Lean and Continuous Improvement**

The Maple Grove team introduced the Strategic Quality Process to Boston Scientific in 2001. At that time, lean was identified as a formal strategy and has been a strategic focus ever since. Initial lean activity started as home grown efforts generated by the Maple Grove team to improve production processes. Their lean efforts soon expanded to also focus on business processes. Using lean tools and systems became their standard way of doing business and lean initiatives quickly became a priority for all manufacturing sites.

The lean strategy in Maple Grove has continuously evolved and improved. In 2010, they recognized the need to focus on lean culture and incorporated principles into their lean strategy. They defined principles for Maple Grove and documented them in their Principles of Lean Model. The principles connected their existing lean tools and systems and further enhanced the understanding, participation and development of all employees at the site. The principles have aligned the behaviors and decisions of all employees. They have built a lean culture that they have all created together.

### **Maple Grove Achievements**

Maple Grove was awarded the Shingo Prize in 2005. Since winning the prize, the team has continued to achieve many significant results.

#### **Quality**

- Customer complaints consistently held at a six sigma level
- Internally caught near-miss defects reduced by 83%
- Plant scrap reduced by 25%
- Non-conforming materials received from suppliers reduced by 87%

#### **Cost**

- Finished goods days of inventory reduced by 59%
- Product cost of goods average annual reduction of 11%
- Labor efficiency increased by 63%
- Space utilization increased by 31% while introducing 19 new products

#### **Delivery**

- Line fill rate is consistently 98.9%
- Plant cycle time reduced by 33%
- Lead time to our distribution centers reduced by 50%
- Backorder dollars less than 1% of the value of sales

#### **Safety and Environment**

- Minnesota Governors Safety Award recipient for the past 11 years
- 50% reduction in reportable repetitive motion injuries
- ISO 14001 certified
- First Leadership in Energy and Environmental Design (LEED) certified lab building in the United States
- Zero landfill plant with a 30% increase in the amount of waste recycled

#### **Morale**

- Employees generated over 3400 ideas for their continuous improvement system last year
- Employee average tenure is 10 years and has increased 35%
- 450 Boston Scientific Minnesota employees volunteered 1,300 hours for their annual Volunteer Day
- 1100 Boston Scientific Minnesota employees participated in the American Heart Association Heart Walk last year
- All employees participate in the annual Everyone Makes an Impact event which includes Boston Scientific senior leaders and patients
- Boston Scientific has eight voluntary, company-sponsored Employee Resource Groups dedicated to fostering a diverse and inclusive work environment

For more information, please contact:

Cassandra Johnson  
Industrial Engineering Manager  
Boston Scientific Maple Grove  
Phone: 763-255-0631  
Email: Cassandra.Johnson@bsci.com