

MEDTRONIC

Focus on Costs and Efficiencies

For Memphis, TN-based Medtronic's Spinal & Biologics, a world leader in medical technology, increasing innovation while reducing costs is the No. 1 focus. And when you're manufacturing process involves microns, innovative and technologically advanced machines and systems are crucial.



The Medtronic team reviews projects during its morning board walk.

"We can't remain competitive without innovative new technologies, and must develop new tools to assess our technology needs for future products, at lower costs," said Tim Pierce, Medtronic Spinal senior lean sigma program manager. "But there must be a balance, so we developed a template that allows us to assess the need for new equipment and technologies, and chose the ones that will be successful long term."

An example, Pierce noted, is a new spindle machine that can reduce capital expense, but comes with high maintenance costs. The template tool assesses the need and return on investment.

It has paid dividends for Medtronic. "We cancelled the purchase of four new machines because our forecasting questioned the demand and need," he said.

Pierce noted that the company has automated much of its manufacturing section, including an innovative new vision, engineering and inspection (VEI) machine that he said has reduced production time from two hours to 30 seconds.

“It’s a simple and effective use of innovation,” he said. “With the complexity of our products, we worked to develop a process to inspect every part within 30 seconds. It’s worked very well.”

What’s also working well is Medtronic’s innovation group charged with the sole responsibility of assessing the technologies and their cost efficiencies through research and experimentation.

“The group invests in nothing but innovations in technology that complement our core competencies,” Pierce said “In the medical device field, if you’re not innovating, you’ll lose market share. It’s simply a necessity for growth.”

An innovative new initiative, Design for Reliability and Manufacturing, is up next for Medtronic. “It fits into our overall business plan that includes cross-functional alignment, not just silos,” Pierce said.