FHC Revamps Project Management System with Maine MEP’s Innovation Engineering Services

New product innovations expected to achieve $500,000 in retained sales, result in $250,000 cost savings

Augusta, Maine: As one of Maine’s most successful mid-size manufacturers, FHC Inc. of Bowdoin has developed a global market for its neurosurgical products. From its manufacturing facility in Maine, it supplies an international clientele of neurosurgeons and neuroscientists with an array of microelectrodes and special purpose clinical instruments.

A key factor in the company’s success has been its entrepreneurial zeal. Since its founding in 1970, FHC has designed and manufactured more than 7,000 unique metal microelectrodes and a broad range of state-of-the-art clinical and research instrumentation. Recognizing that innovation is critical for future growth, the company historically has had multiple potential new products in the pipeline. But like many smaller firms with limited human and financial resources, many of these pipeline projects remained unfinished.

To address this problem, FHC engaged the Maine Manufacturing Extension Partnership (Maine MEP) to provide Innovation Engineering coaching and lean manufacturing consulting in order to achieve product and process improvements.

"After having several staff attend an Innovation Engineering Leadership Institute, we engaged Maine MEP’s John Karp to work with us on a Jumpstart project, which yielded two new products. One of these we were able to bring to market in a record time of nine months, versus a more typical time of 18 months," said Keri Seitz, chief executive officer of FHC.

Innovation Engineering Jump Starts are fast and focused projects for accelerating profitable growth while providing a hands-on experience with the Innovation Engineering Management System (IEMS). The IEMS are typically one to three months in duration and involve three steps: education and immersion by the MEP project manager in a company’s challenge, a one-day Jump Start session and project acceleration coaching.

Led by Karp, Maine MEP’s first black belt Innovation Engineering consultant, FHC used the Jump Start to successfully address a challenge encountered by the company’s European customers, who prefer to use a shorter 28 cm lead on FHC’s microTargeting™ and Star Drive™ to place the devices during neurosurgical procedures. Having seen how the techniques of Innovation Engineering could be used to innovatively modify a product and successfully prototype and commercialize it, FHC decided to embrace the process on a wider scale.

"Following this initial success, we engaged John to work with us on implementing the Innovation Engineering Management System, which we customized to our new Great Idea Group (GIG) process to fit our strict medical device quality and documentation protocols," Seitz stated.

Speed and efficiency are two of the great advantages of Innovation Engineering, noted MEP Project Manager Karp. "It provides a structure for out-of-the-box thinking and yet balances that creativity by providing guidelines that require focused energy and timelines, while curtailing waste."
The FHC CEO touted the results achieved by working with Maine MEP to rebuild the company’s project management system using Innovation Engineering concepts and tools.

“Since implementing our revised systems, we have seen a marked increase in employee participation in new idea generation,” CEO Seitz stated. “We’ve found significant process improvements and have many new products under development that wouldn’t have found their way forward without our new avenue of development.”

The initiatives with Maine MEP over the past two years have directly impacted the FHC’s bottom line.

“As a result of our projects with Maine MEP, FHC developed two new products, and expects to retain $500,000 in sales, 25 percent of which will be due to new products filling in for some going obsolete. We envision that this will lead to $250,000 in cost savings and $240,000 in new investment,” the FHC CEO noted.

Maine MEP’s black belt project manager emphasized the value of Innovation Engineering for local manufacturers.

“Innovation is the key to growth in today’s global market. But it’s important to know not just how to innovate, but how to bring those new products to market with minimal risk. Innovation Engineering gives firms the strategic tools to assess the market, gauge demand, rapidly prototype and cost-efficiently commercialize new ideas. It’s an approach to product development that every Maine manufacturer should embrace,” said Karp.

About Maine MEP

The Maine MEP is an affiliate of the National Institute of Standards and Technology (NIST) under the U.S. Department of Commerce. The national MEP system is a network of manufacturing extension centers that provide business and technical assistance to smaller manufacturers in all 50 states, the District of Columbia and Puerto Rico. Through MEP, manufacturers have access to more than 2,000 manufacturing and business “coaches” whose job is to help firms make changes that lead to greater productivity, increased profits and enhanced global competitiveness. For information on the Maine MEP program, please visit www.mainemep.org, or phone 1-800-MEP-4MFG.