PENNSTATE SMEAL College of Business

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The Center for the Management of Technological and Organizational Change
Gerald I. Susman, Director
Russell Barton, Associate Director

Starting the Lean to Green Journey

Roxanne Turner
Manager, Global Ethics & Compliance
Kennametal
Latrobe, Pennsylvania

Kennametal is a global leader in tooling solutions, engineered components, and advanced materials with a significant footprint around the globe. It is located in over 60 countries with 90 locations and a diverse, global workforce of over 14,000 dedicated employees. Kennametal is divided into two segments – Metalworking Solutions and Services Group (MSSG), with annual sales revenues of $1.8B, and the Advanced Materials Solutions Group (AMSG) with annual sales revenues of $915M. Kennametal is an innovative company with significant research and development investments – 47% of sales is on products released in the past five years. Kennametal's base customers include energy, chemical, power generation, mining, construction, automotive, transportation, aerospace, general engineering and machine tooling.

The company already engages in sustainable practices including: a full line of tools and services for supply chain management groups, called Kennametal complete, where tools are returned to Kennametal for reconditioning and re-tipping; quantification of waste through contract management; quantification of recycling; and scheduling adjustments at some plants to take advantage of off-peak energy rates. Kennametal wanted to go further and it felt that an energy conservation program was the next logical step.

In the first full year of its energy conservation plan implementation, Kennametal is taking the unique approach of adapting Lean to its energy conservation efforts. Lean is already part of its culture – employees understand the Lean toolkit and have a heightened awareness of the impact waste can have on its operations. Kennametal does not focus on Six Sigma, but it does use all of the other tools in the Lean toolkit. Kennametal required all executive management council members to have their Lean green belt by 2006, and their direct reports to have Lean green belts by 2008. The company allows black belts in individual Lean tools – as long as the employee can obtain the required expertise and develops proficiency in one of the Lean areas, then that employee can continue to contribute to the Lean journey at the next level.