



## Tom Tucker, P.E, Principal



Tom Tucker, a registered Professional Engineer and “Qualified Steam Specialist” with the United States Department of Energy (DOE), is Founder and Principal of Kinergetics LLC. He has performed over 250 energy, process and technology assessments in the food/dairy, pulp and paper, ethanol/chemicals, plastics and metals industries.

In addition to Kinergetics, Mr. Tucker is co-founder of two energy technology development companies in Wisconsin. With Greenway Energy Technologies (new startup Middleton, WI), he is leading the design and development of energy analysis software and measurement and verification technologies to expedite evaluation of energy efficiency and renewable energy projects.

Mr. Tucker has provided training and has been an invited speaker at events sponsored by the International Dairy Foods Association, the American Society of Mechanical Engineers, Xcel Energy, the Midwest Renewable Energy Association and numerous other trade associations.

### **AREAS OF EXPERTISE**

- Industrial process efficiency assessments with emphasis on drying, evaporation, energy recovery, compressed air, process heating, process cooling and cogeneration.
- Field measurement, verification and testing to determine actual system efficiency, develop project scope and provide realistic expectations for return on investment.
- Turnkey design and engineering, project management and commissioning.
- Systems modeling related to energy use and environmental emissions.
- Evaluation of emerging energy efficient technologies for economic and technical feasibility.
- Continuous improvement and development of management systems for energy.

### **PROFESSIONAL EXPERIENCE**

- Principal and Founder, Kinergetics LLC (2006 to present)
- Field Deployment Specialist, Cleantech Partners, Inc (March 2009 to present)
- Co-founder (with WTS-Paradigm), Greenway Energy Technologies (2007 to present)
- Lead Process Energy Engineer, Wisconsin Focus on Energy
- Senior Engineer, Science Applications International Corporation
- Senior Engineer, BT Squared, Inc
- Plant Engineer & Environmental Director, Sid Richardson Carbon Company

### **EDUCATION**

- Bachelor of Science, Chemical Engineering, University of Wisconsin-Madison
- Bachelors in Physics, College of Charleston, Charleston, South Carolina

## **LICENSES / CERTIFICATIONS**

- Registered Professional Engineer – Wisconsin (#33984-006)
- Qualified Steam Specialist – United States Department of Energy (#161)
- Fan Systems Energy Expert – United States Department of Energy (#124)
- Quantum Steam Specialist – Level I, Level II (#272146)
- Certified Facilitator – EnVinta One-2-Five Energy Management Process

## **PUBLICATIONS**

- “Primer (training CD): Condensing Heat Recovery,” Midwest Food Processors Association, Financial Support from the US Department of Energy and Cleantech Partners , Inc., February 2007
- Accepted: “Availability Analysis as an Aid to Energy Resource Allocation,” American Society of Mechanical Engineers (ASME) Electric Power Conference 2006, Atlanta, Ga.
- “Rethinking the Benefits of CHP,” Proceedings/Presentation, ASME-Electric Power Conference, April 7<sup>th</sup>, 2005, McCormick Place, Chicago, IL.
- “Theoretical/Best Practice Energy Use in Metal Casting Operations,” pp. 62-91, with Keramida Environmental, Inc., U.S. Department of Energy-Industrial Technologies Program, May 2004.

## **PRESENTATIONS & TRAINING PROVIDED**

- “Developing and Initiating an Energy Conservation Plan,” University of Wisconsin-Madison, April 2008
- “Quick Hit Opportunities to Reduce Electricity and Natural Gas Use,” Provided to Field Representatives, Wisconsin Focus on Energy Industrial Program, October, 2005, Madison, WI.
- “Dairy Plant Energy Cost Reduction,” International Dairy Foods Association, “Environmental & Energy Solutions in Dairy Plants,” October 2005, Chicago, IL.
- “Industrial Ventilation Best Practices,” Wisconsin Focus on Energy Series, April 2005.
- “Energy Efficiency in Swimming Pools,” Wisconsin Focus on Energy, numerous dates, 2005.
- “Energy Efficiency in Food Processing Plants,” 43<sup>rd</sup> Annual Rural Energy Conference, St. Paul, MN, March 2005.
- “Energy Cost Reduction in Metal Finishing,” Minnesota Metal Finishers Association, March 2004.
- “The Business Case for Management Systems,” American Plastics/Chemistry Council, October 2003