

Survey Shows Mechanical Engineers Expect Increase in Sustainable Design Work

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ASME and Autodesk Conduct Second Annual Industry Survey of Sustainable Design Trends

NEW YORK & SAN RAFAEL, Calif., Jan 12, 2010 (BUSINESS WIRE) -- Results from the second annual Sustainable Design Trend Watch Survey, jointly commissioned by the American Society of Mechanical Engineers (ASME) and Autodesk, Inc. (NASDAQ: ADSK), indicate that mechanical engineers expect to see an increase in sustainable design work in 2010.

Despite the challenging economy, respondents indicate with a 6 percent increase over last year that they believe sustainable design will be further incorporated into their work in 2010. The survey also reported for the second consecutive year that more than two-thirds of participating mechanical engineers have worked on sustainable products, and more than half of ASME student members are involved with sustainable design in their studies.

The survey is conducted to understand the effects of sustainable design on mechanical engineers and their manufacturing businesses in industries ranging from aerospace and automotive to energy and transportation. According to survey results, designs that use less energy or reduce emissions remain the most important sustainable technology practice, while manufacturing processes that use less energy and natural resources were also a priority.

"The results of this important ASME-Autodesk survey demonstrate that sustainable design practices are exerting a positive influence on the mindset of engineers at all levels," said Thomas G. Loughlin, executive director of ASME. "Going forward, engineers will be at the forefront in creating sustainable technologies that produce large-scale impacts worldwide."

"There is no question that sustainable design is a priority for mechanical engineers, and Autodesk collaborates with ASME on this survey to highlight the importance of making smarter, more sustainable design decisions at every step of the design process," said Robert "Buzz" Kross, senior vice president, Manufacturing Industry Group at Autodesk.

One example of a manufacturer incorporating sustainable design practices is Ohio-based Unverferth Manufacturing Company, Inc. Unverferth is a leading, family-owned manufacturer of agricultural and farming equipment, including a full line of tillage products, which worked to adapt its products to the soil conditions of different geographies.

Using Digital Prototyping, Unverferth has decreased the number of physical prototypes it builds by 75 percent. In doing so, the company decreased materials usage for prototypes from 230 to 60 metric tons annually. In addition, Unverferth has reduced product weight by 5 percent through more efficient use of materials.

Balancing Priorities to Achieve Sustainability

The survey indicates that top drivers of sustainable design practices within organizations include regulatory requirements, rising energy costs and client demand.

Along with creating designs that use less energy and reduce emissions, respondents indicated that priorities include improving manufacturing processes to use fewer resources; using renewable, recyclable and recycled materials; and reducing material waste in manufacturing.

Similar to last year, respondents again indicated that cost is a major consideration, with one-third of respondents reporting they would consider sustainable technologies for new products only if they are cost saving.

Survey Methodology and Demographics

The online surveys of more than 53,000 ASME professionals and nearly 20,000 ASME student members were conducted over a two-week period that concluded in November 2009. The questionnaire generated more than 3,000 respondents in the United States. About 65 percent of the professional engineer respondents had more than 20 years of engineering career experience, with more than 20 percent focusing on the design and development of products, systems or equipment. Nearly 20 percent of the respondents work in the energy and power industry, with another 15 percent in consulting/design/professional services. For more information on sustainability at Autodesk, visit http://www.autodesk.com/green.

Autodesk and Sustainable Design

As a leading provider of 2D and 3D design, engineering and entertainment software, Autodesk strives to provide solutions that help enable smarter, more sustainable design decisions.

The Autodesk solution for Digital Prototyping helps manufacturers design, visualize and simulate their ideas, enabling them to innovate in sustainable ways, such as saving energy and optimizing material use. In addition, Digital Prototyping helps manufacturers reduce waste, make sustainable materials choices, and address product-related environmental regulations and voluntary standards worldwide. To learn more about sustainable design at Autodesk, visit http://www.autodesk.com/sustainabilityreport.

About ASME

ASME helps the global engineering community develop solutions to real-world challenges. Founded in 1880 as the American Society of Mechanical Engineers, ASME is a not-for-profit professional organization that enables collaboration, knowledge sharing and skill development across all engineering disciplines, while promoting the vital role of the engineer in society. ASME codes and standards, publications, conferences, continuing education and professional development programs provide a foundation for advancing technical knowledge and a safer world. For more information, visit http://www.asme.org.

About Autodesk

Autodesk, Inc., is a world leader in 2D and <u>3D design</u>, engineering and entertainment software for the manufacturing, building and construction, and media and entertainment markets. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of stateof-the-art software to help customers experience their ideas digitally before they are built. Fortune 100 companies -- as well as the last 14 Academy Award winners for Best Visual Effects -- use <u>Autodesk software</u> tools to design, visualize and simulate their ideas to save time and money, enhance quality, and foster innovation for competitive advantage. For additional information about Autodesk, visit <u>http://www.autodesk.com/pr-autodesk</u>.

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