

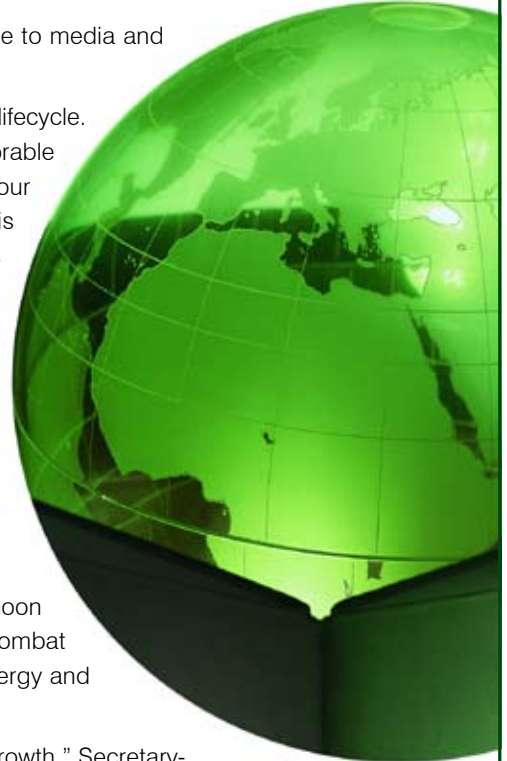


Getting Green

The word “eco-design” has been popping up with increasing frequency, from home to office to media and beyond. Getting green is a fast-approaching social and product requirement.

In product manufacturing, eco-design means improved ecological impact across the whole of a lifecycle. Designs have always reflected functional requirements prioritized to satisfy customers at a favorable price point. Until now that formula has largely excluded what happens when a product leaves our hands as an unwanted item. However, the impact of eco-design on important world markets is forcing manufacturers to consider the deeper interdependencies and affects that engineers can control when creating products.

DFMA users have been great at understanding design interdependencies, their broad effects and their real end cost. Getting green will certainly mean both “eco”-nomic as well as ecological design. To help design engineers tackle both issues in one analysis, Boothroyd Dewhurst, Inc. is announcing DFMA 2009 with Design for Environment (DFE). For more information on eco-design, just read our feature story below or call us at 401-783-5840.



Global Markets Urged to Think Greener

At the 2009 World Economic Forum in Davos, United Nations Secretary-General Ban Ki-moon urged the world's political and business leaders to commit to a “Green New Deal” to combat global warming and the economic downturn by creating jobs and investing in renewable energy and technological development.

“Investment in sustainable technologies will turn today's crisis into tomorrow's sustainable growth,” Secretary-General Ban said. The United Nations Environmental Program (UNEP)'s “Design for Sustainability” project promotes eco-design and innovation that aim towards cleaner production and eco-efficient industrial systems.

Sustainability—meeting the needs of the present population without compromising the ability of future generations to meet their own needs—has ascended global governments' To-Do lists since the U.N. defined the term 20 years ago. While everyday people tailor their carbon footprints and replace their incandescent light bulbs with compact fluorescents, sustainability across industries, government and nations is the scope that's necessary.

Sustainable cell phones, printers, even car prototypes can trace their green attributes back to product design. Boothroyd Dewhurst, Inc. (BDI) is certainly part of the effort, with new sustainability analysis capabilities in DFMA 2009.

The new Design for Environment (DFE) capability within DFMA 2009 brings environmental knowledge into the very beginning of the product design process: often the easiest and most effective stage for manufacturers to address the issue of DFE material selection. The software offers best costs for products in addition to sustainable designs.

DFMA 2009 has been developed for easy use by the design engineer at his or her work station. Product development teams can make fundamental decisions about environmental impact issues early in the process of defining products. This approach recognizes the challenges design engineers face integrating numerous product requirements, and it promotes the creation of “greener” products.

The software identifies and rates materials for their compliance to changing international standards regarding toxicity and end-of-life destinations. Integrated DFMA/DFE analysis provides design and manufacturing cost savings, warns design teams about materials to avoid, and documents environmental compliance.

Europe's Lead on Legislation Creates Opportunity

The sustainability enhancement to the software was inspired largely by the introduction of such EU legislation as the Waste from Electronic and Electrical Equipment (WEEE) directive and the Motor Vehicles directive. Manufacturers must demonstrate that their new products don't contain certain banned materials—Restriction of Hazardous Substances (RoHS) compliance—and that a certain proportion of the product is reusable or recyclable at end-of-life. [click HERE](#) for full story



BOOTHROYD DEWHURST

dfma® Insights

June 2009

News from the Frontlines of DESIGN FOR MANUFACTURE AND ASSEMBLY

DFMA Forum News

THE 2009 INTERNATIONAL FORUM on Design for Manufacture and Assembly, June 9-10, in Warwick, RI, is fast approaching. Can American manufacturing regain the leading role it played in world markets from the 1960s to the 1990s? *Reviving Manufacturing through Better Design* is the theme of the 24th annual conference. There may be no better year to attend the Forum than this one. Competitive issues relating to environmental design, DFMA, and leading PLM technologies are on the schedule for 2009. A panel discussion on what role DFMA users can play in reviving U.S. manufacturing takes place on Wednesday, the 10th of June. Join us! [click HERE](#) for more information

Let's Fix U.S. Manufacturing Competitiveness

Mike Shipulski
Director of Engineering
Hypertherm Inc.
Hanover, NH

Have we read enough, talked enough, circled and delayed the issue enough to finally do something about the decline in U.S. manufacturing? Are we afraid enough yet, after each quarterly government trade report, to undertake what is obvious as far as engineering goes? We have the technical know-how in U.S. manufacturing to take away the offshoring advantage of cheap labor. We can design high labor costs out of most products and have elegant assemblies ripple profitably down U.S. manufacturing lines--for export and domestic consumption.

"We have to reassign the product costs mistakenly placed on manufacturing departments."

How? First we have to reassign the product costs traditionally and mistakenly placed on manufacturing departments, and put them where they really belong: with the designers. Let's face the facts: total costs are designed into products at the very start and stay there, give or take the 10-15% reductions that manufacturing engineers generate with lean programs or newer workcells. It's time to help designers understand service and warranty, production throughput, labor, material, rework and general overhead costs--and to structure that understanding into their work.

This nation has already beaten up its "valued" supply-chain. There are no more easy costs to take out in that effort. Other popular ideas provide mainly incremental advantages isolated to silos. The truth is that the big, magical dollars are "upfront." Let's move past the 25-year-old campaign aimed at fixing the over-the-wall syndrome, and set a contemporary strategy. It's a business strategy of truly integrated design and manufacturing with upper management providing goals and useful, tactical accounting. This next step is everyone's responsibility, even if it manifests largely in design departments guided by management.

[click HERE](#) for full story

THE 2009 INTERNATIONAL FORUM
on Design for Manufacture and Assembly
The Product Development Conference on DFMA Best Practices of the Future 1000



DFMA 2009 Webinar Replay is Online Now

Are you ready for a walkthrough of DFMA 2009 software? If seeing actual software screens and specific examples of product analysis are what you and your team need, then take the opportunity to listen now to Nick Dewhurst, Executive Vice President of Boothroyd Dewhurst, Inc. as he demonstrates the new DFMA capabilities in his March 18 Webinar. Nick discusses environmental analysis, cost estimating for the cell machining process and generating quick estimates for machining. **Click HERE** to replay the 30 minute Webinar.

