



## Annual Survey of U.S. Design Engineers



### Solid improvements in salaries and overall satisfaction, but increased stress from insecurities, added duties- DN editor points to broadening one's knowledge base

The publication of Design News magazine's annual survey of its design engineering audience reports positive news on salaries, up 4.3% on average in 2011, for the first time in two years, despite the struggling economy. But while career satisfaction remained high with 78% saying they would recommend the design engineering profession to their children- rising stress levels and concerns about job security were noted by a majority of re-

spondents.

### Better Pay, But More Responsibilities with Downsizing

For example, 28% reported company downsizing in the past six months, with 38% of those stating this had resulted in additional responsibilities for them and in specific cases no changes in project lead-time requirements. For many, more work included more managerial duties- the average number of employees supervised jumped from 11 in 2009 to 15 in 2010 to 26 in this 2011 survey.

Design News editorial director Alexander Wolfe pointed out the value at this time for design engineers to avoid resting on their domain-knowledge laurels. It's no longer enough to be knowledgeable in one particular sector, one area of technology. Now's the time to broaden one's knowledge base and skill set. One immediate benefit is the contribution to more cost-effective designs, he stated.

### Broadening Your Design-for-Manufacturing Knowledge Base

In the area of designing custom components for custom manufacturing processes, leading processors have regularly offered substantive consultation services to OEM engineers and purchasing specifiers to aid in optimizing designs for their process. Over the last decade Chicago White Metal Casting has in addition devoted significant resources to creating a broad, accessible knowledge base for OEM designers and engineers considering alternate processes in the early stages of a product's design. For engineers evaluating custom die casting as a process alternative, this information and data can be invaluable in making personal consultations more efficient, informative and productive.

Today this Design-for-Die-Casting knowledge resource (available online 24/7 at the CWM website's DC2 Die Cast Design Center) is unique in its breadth and depth of information focused for use by OEM designers, engineers and buyers- over 70 design guides, engineering bulletins, application-tech briefs, case studies, buyer resources and reference manuals/CD-ROMs are available, including on-demand Webinars and FAQs. Its use can mean avoiding expensive manufacturability mistakes.

### For OEMs: A Tailored Intro to the DC2 Die Cast Design Center

To aid in making the online Design Center resource of maximum value in the shortest time, here are three recommended lists of suggested documents for 24/7 download, related to your design project role and background in the past use of the die casting process. >> [More....](#)

### CWM Webinar Event Product Solutions Through Die Casting

#### Join us...

This free, in-depth die casting seminar will help you add efficiency, functionality and cost savings to your components. You'll learn how to help capitalize on today's advanced die casting capabilities to improve performance and lower the costs of your component designs.

#### Event Date and Time

Thursday, Dec. 1, 2011  
11:30 AM - 12:30 PM CST

[REGISTER NOW](#)

#### Highlights

##### • Die Casting Basics

- ⇒ What it is
- ⇒ Die casting vs. other processes
- ⇒ Cold chamber vs. Hot chamber
- ⇒ Economics of die casting
- ⇒ Alloy choices

##### • Die Cast Design Tips

- ⇒ MagmaSoft® Analysis: why you should ask your die-caster if they perform this on ALL your projects
- ⇒ Cost reduction

##### • Tooling & Prototyping Options

##### • Coatings and Other Secondary Processes

Space is limited.  
[Reserve your seat now.](#)

## CWM Wins NADCA Die Cast Design Award



The design engineering teams from CWM and Cast Products collaborated on a new die cast product. The results were an innovative product design and an award from the North American Die Casting Association for the design's ingenuity, cost savings and overall quality.

The award was given in the < 6 oz. non-electroplated category and was presented at the 2011 Die Casting Congress & Tabletop held in Columbus, Ohio last month.

Converted from ABS plastic to zinc, the product's durability and performance was greatly enhanced. The casting is used to hold a camera onto an interactive whiteboard. The camera picks up infrared light from the whiteboard and sends it to a computer. To accurately capture this, the camera had to be rigidly held in place. High product demand created an aggressive timeline to produce parts. The design teams met the challenge and samples were approved for production in just 5 weeks.

### DC2 Design Center



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## Developing an Optimum Product Design Capitalizing on Die Casting



casting alloys and the die casting process offer opportunities for distinct product

Developing an optimum product design is similar, in most respects, for any material/process combination. In capitalizing on today's advanced die casting processes, however, specific attributes of die

advantages and cost reductions that require somewhat different tactics. These should be applied when a totally new product is being developed, and are critical when an existing product made from another material or process is being redesigned for die casting.

When a design is started from a clean sheet of paper, the designer must disassociate the design constraints from the materials and processes traditionally employed. This is the path to the optimum cost-effective results. Three principles are helpful...

>> [More](#)

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