

GREAT DESIGNS IN STEEL 2017



Jody Hall

Now in its 15th year (16th seminar), the annual Great Designs in Steel offers engineers an unprecedented one-day immersion in the latest in advanced high-strength steel (AHSS), including dozens of technical presentations and a hands-on look at cutting-edge applications. This year's seminar on May 17 in Livonia, Mich., is already sold out. Jody Hall, vice president of the automotive market for the Steel Market Development Institute (SMDI), explains the event's purpose and appeal.

What was the genesis of Great Designs in Steel?

It was launched by the American Iron and Steel Institute (predecessor of the Steel Market Development Institute) in 2002 to highlight the continuing collaboration between the automotive and steel industries.

The first seminar focused on a joint demonstration project that showed how AHSS could be used to reduce vehicle weight while improving safety, performance and structural rigidity. At the time, there were just a handful of such steels available to the automotive industry. Today there are more than 200 steel grades available, and matching the best grade of steel for the application has become considerably more complex.

How would you describe the value for attendees?

This is a very specific event for the men and women in North America who design vehicle structures. It's an extremely content-rich experience, with an emphasis on sheet steel components and lessons learned in forming such parts out of AHSS grades of material. It's an exceptional place to see the geometry and design details of some of the most advanced vehicles on the road today.

Great Designs in Steel is also a unique opportunity for peer-to-peer networking. That aspect is one of the event's largest draws. We believe the meeting is the largest and longest-running automotive materials conference in the U.S., and perhaps the world. The first Great Designs in Steel back in 2002 drew 475 attendees. We know we're providing real value, because attendance has grown dramatically since then. This year's event has attracted more than 1,500 registrants from the steel and automotive industries.

What exhibits will attendees find at this year's conference?

In the main exhibit hall, they'll be able to inspect displays by 18 event sponsors, including five bodies-in-white: the BMW 7 Series large luxury sedan, 2017 Cadillac CTS midsize luxury sedan, 2017 Chrysler Pacifica minivan, and Honda's 2017 model Ridgeline pickup truck and 2018 Odyssey minivan. We

will also have a second exhibit hall, the Steel Showcase, featuring SMDI's member companies along with SMDI programs that will have additional components and products on display.

What about technical presentations?

Attendees will be able to choose among 31 tech presentations that have been arranged in three simultaneous tracks. These fast-paced presentations will cover AHSS applications and manufacturing processes, including laser-welded components, laser-welded blanks and other advanced joining processes.

There will be talks on hot-stamping and advances in traditional metal stamping, with particular emphasis on predicting formability and stamping characteristics of the latest third-generation AHSS, which are just now becoming commercially available. This is a major topic, because the newest steels offer more flexibility and elongation than previous options. Other technical sessions will cover such subjects as repairing AHSS bodies and structures, material lifecycle assessment and the impact of modern steels on the environment.

How does SMDI promote acceptance of new steels?

We've been doing it for 30 years through the highly successful Auto/Steel Partnership (A/SP), a consortium of steelmakers and General Motors, Ford and Fiat Chrysler Automobiles. The A/SP enables steelmakers and carmakers to work together on how to best utilize the special performance features of the new grades of steel as they come to market. SMDI also collaborates directly with additional OEMs.

But with so many choices today, it can be difficult to keep up. Last year the



Steel
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A/SP launched a six-hour training session on how to select the best grades and manufacture them for given applications. The program has proven to be a very effective way to accelerate the use of new steels while reducing performance and forming issues.

The training is free and has been very well-received. We trained more than 500 engineers in the Detroit area in the first four months of 2017 alone. Our first-year focus was on the Detroit Big Three carmakers and their suppliers. The partnership will be gathering names of engineers During Great Designs in Steel in the Steel Showcase, who would like to participate in the program later this year.

Where can readers learn about next year's event?

Visitors can find out more about SMDI and the 2018 conference at www.autosteel.org.