

# 2008 SDS/2 Users Group Conference

October 16-17, 2008  
Lincoln, Nebraska



**SDS/2**  
DESIGN DATA

## Educational Sessions

The conference's breakout sessions were divided into three tracks. Track 1 was geared for all SDS/2 users; Track 2 was designed for more advanced users of the software; and Track 3 featured a series of question-and-answer sessions.

### Breakout Sessions

In Track 1, sessions included an overview of basic SDS/2 operation techniques between FabTrol and SDS/2 (presented by Rich Williams of FabTrol); report writer and advanced selection (presented by Gary Gustafson and Ryan Vanek of Design Data); and model import / export and BIM (presented by Brian Cobb of Structural Detailing, LLC).

Track 2 sessions offered advanced users a chance to learn some techniques with parametrics (presented by Bruce Vaughan of BV Detailing & Design, Inc.); connections (presented by Rich Steffens of Douglas Steel Fabricating Corp. and Doug Dutkiewicz of Universal Detailing, Inc.); and parametric add-on routines (presented by Patrice Pelletier of BD Structural Design, Inc.).

In Track 3, sessions included an overview of hardware setup (presented by Dave Henegar of SDI, Inc.); parametrics (presented by Bruce Vaughan of BV Detailing & Design, Inc.); and report writer and advanced selection (presented by Gary Gustafson and Derk Wichhart of Design Data).

### General Sessions

In the 7.1 enhancement update session, Design Data's James Schwartz provided an overview of enhancements that have been added to SDS/2 since last year's annual conference. Guest speaker and AISC Senior Engineer Bo Dowsnell, P.E., Ph.D., delivered a two-hour overview of the AISC seismic design and provisions manual as they relate to detailing.



Rich Williams presented on operation techniques between FabTrol and SDS/2.



AISC's Bo Dowsnell was a featured guest speaker.

## Users Group Banquet

The first day of the two-day conference was capped off by a banquet at the Country Club of Lincoln. The evening included a cocktail hour and buffet dinner, followed by the annual presentation of the Connector's Club award, guest speaker Dr. Tom Osborne and a jazz quartet.

### Connector's Club Award

Brian Cobb of Structural Detailing, LLC presented the annual Connector's Club award. Advisory Board members and past recipients of this award nominate standout individuals who have demonstrated exemplary dedication and commitment to the development and application of SDS/2 during the preceding year.

There were two recipients of this award for 2008: Bruce Vaughan of BV Detailing & Design, Inc. and James Schwartz of Design Data.

### Guest Speaker: Dr. Tom Osborne

Dr. Tom Osborne, the legendary former football coach of the Nebraska Cornhuskers, presented his views on leadership. Filled with anecdotal references and real-life examples, Osborne offered a glimpse of what legends are made of and how we all can attempt to achieve similar satisfaction in our own work and life. The Hall of Fame and three-time national champion football coach, who achieved 255 victories in 25 seasons, is again on staff at the University of Nebraska as athletic director.



2008 Connector's Club recipient Bruce Vaughan of BV Detailing & Design, Inc.



2008 Connector's Club recipient James Schwartz of Design Data.

## Design Data Update

### Dager Retirement Announcement

Jim Dager kicked off this year's annual conference with a welcome and introduction. During the opening, Dager announced his retirement as president of Design Data. After a career of leading the growth and development of SDS/2 and its impact on the steel software industry, Dager retired October 31st.

Dager also announced that Damon Scaggs, an 18-year veteran of Design Data, was appointed as his successor to lead Design Data toward the company's future success. Barry Butler, also a longtime manager of the SDS/2 development team, was promoted to executive vice president.

### Software Preview, Piracy

During the Design Data update, new company president Damon Scaggs gave conference attendees a sneak preview of things to come in the SDS/2 software. After Stephanie Haith presented the 2008 Solid Steel Competition awards, Design Data's Tom Duden provided an inside look into what measures the company has incorporated to combat software piracy.



During the opening of the 2008 SDS/2 Users Group Conference, Jim Dager (left) announced his retirement as president of Design Data. Damon Scaggs (center) has taken over leadership of the company; Barry Butler (right) was named executive vice president.

## 2008 SDS/2 Users Group Overview



The SDS/2 Advisory Board (back row, from left to right): Bruce Vaughan, Barry Elmore, Arlen Hilbrich, Marvin Freeman, Luis Torres and Tom Kramer; (front row, from left to right): Ivan Jivkov, Maurice Roy, Dave Henegar and Jo Owens. (Not pictured: Troy Gibbins, Chris Riley, Brian Cobb, Barry Butler and Mike Obst).

This year's conference reached record numbers, with over 250 SDS/2 users and Design Data representatives attending the annual conference.

### Users Group, Advisory Board

During the annual business meeting, Troy Gibbins of Innovative Steel Detailing, Inc. was elected as the new vice president of the Users Group. The meeting — open to all users — also included an update on activities of the SDS/2 Advisory Board.

Advisory Board members, as well as Design Data staff, hosted a users round table. Members of both group were on hand to field questions and discuss enhancement ideas. Luis Torres of The Steel Detailers in Seminole, Florida, moderated.

### 2009 Conference Dates Set

The 2009 SDS/2 Users Group Conference will be held at the Embassy Suites in Lincoln, Nebraska, September 30 through October 2, 2009.

## 2008 SDS/2 Solid Steel Competition Winners

### Grand Prize - Commercial

#### Disney Animal Kingdom Lodge Annex - Superior Steel, Inc.

Superior Steel, Inc. took home the grand prize for commercial with their Disney Animal Kingdom Lodge Annex project, located in Lake Buena Vista, Florida. Superior Steel, Inc. was the detailer and fabricator for this project.

The main feature of the Annex is the lobby, which was built using intersecting pipe arches. The arches are 12-inch-diameter pipe. Each arch has multiple radii to create an elliptical shape, and increase in size toward the entry.

One of the issues this project had was locating the stubs and flange connections for the intersecting arches in a way the shop could accurately control. These stub connections are skewed, rotated and curved. To solve this, Superior Steel created shop jigs in the SDS/2 model. The jigs were bolted to the end flange of the arch segments and precisely located the flanges of the intersecting arches.

### Grand Prize - Industrial

#### PSEG Mercer Generation Power Plant - Innovative Steel Detailing, Inc.

Innovative Steel Detailing, Inc. (ISD) won the grand prize in the industrial category for their PSEG Mercer Generation Power Plant project, located in Hamilton Township, New Jersey.

The PSEG Mercer Generation Power Plant is a coal and natural gas facility that fuels steam and combustion turbines to produce electricity. In order to comply with federal regulations requiring a significant reduction of nitrogen oxide (NOx) emissions, PSEG chose to implement cutting-edge duct injection technology at several of their power plants. ISD discovered a method for utilizing SDS/2's complex geometric capabilities as a tool to model these multi-shaped ductwork transitions.

Although SDS/2 is normally associated with structural design and connections, ISD found a way to use Design Data's technology to model a vast range of complex structures that combine ductwork along with their supporting framework.

By taking advantage of SDS/2's geometric functionality, ISD was able to integrate bending, rolling, fusing, cambering, mitering, and beveling graphics with heavy pipe bracing and support column connections, accompanied by a full set of design calculations.

### Second Place - Commercial

#### Jungala at Busch Gardens - Seminole Machine and Welding, Inc.

Seminole Machine and Welding, Inc. won second place in the commercial category for their Jungala at Busch Gardens project.

Jungala is the latest attraction at Busch Gardens, Tampa, Florida. This is an all-inclusive family play area that includes three levels of walkways, net sky crawls, net climbs and mazes, zip line rides, and a shot and drop ride. It also features interactive animal attractions, gardens and fountains.

This 720-ton job has over 8,500 members. The walkway structures are a composite of steel and wood construction. Because of the complexity, it was originally modeled as 13 different jobs, by four different detailers. Seminole Machine and Welding then merged the different structures together to create one model.

### Second Place - Industrial

#### Clinker Conveyor Storage and Transport Building - GENIFAB, Inc.

The second place award for the industrial category went to GENIFAB Inc. for their Clinker Conveyor Storage and Transport Building project.

This building is part of the Holcim Cement Plant, located in Ste. Genevieve County, Missouri. This project is over 25,000 tons of structural steel, in which GENIFAB participated in the detailing of a total of 6,000 tons in six different buildings. Points of interest include a 450 foot conveyor that enters a concrete silo at a 40 degree angle. This part alone represents 800 tons of steel and 2,000 shop drawings, mostly made from box truss modules. These modules were completely assembled on the ground before being lifted and installed.

## Best of Show

### Benefis Healthcare Heart Institute Patient Tower - CTA Architects Engineers

CTA Architect Engineers was awarded the Best of Show for their Benefis Healthcare Heart Institute Patient Tower project, located in Great Falls, Montana.

CTA completed this project using an integrated engineering / steel detailing process. They worked directly with the engineers, almost eliminating the need for a paper trail between the steel detailer, general contractor and the engineer. A total of four RFIs were submitted on this project.

The Benefis Healthcare Heart Institute Patient Tower is a 250,000 square foot addition to an existing hospital. The building is comprised of two towers, one constructed of steel and the other of concrete. The concrete tower contains two stair towers, a mechanical penthouse, and corner window framing. The steel tower is six stories tall, but has the height of a seven-story building, due to the need for the floors to match the existing building. The highest point on the building is 127 feet above the first floor. The steel tower is actually two separate towers that are connected.

In addition to the two towers, there is a long, "S" shaped concourse, a small MRI building, an auditorium, a sky bridge, and a large canopy. Another canopy that will be located at the end of the concourse is currently in the design phase. The steel tower and concourse contain over 600 moment connections. There are several locations throughout the building that tie into the existing structure, which required direct interaction with the general contractor.

The project is on schedule to be completed in July 2009.

## Honorable Mention

### Townhouse Kit - Howard High School of Technology

Howard High School of Technology in Wilmington, Delaware, was awarded an honorable mention for students Carlos Marcano and Matt Cratty's work on the townhouse kit.

The two Howard High students took a model house — made out of balsa wood by a carpentry class — and translated it into SDS/2. The structure consists of tube members, plates and bars, as well as a spiral staircase.

Howard High School has been using SDS/2 since 2004 under the tutelage of Pat Mulhern.

## Excellence in SDS/2

### Air Traffic Control Tower - Quality Iron Fabricators, Inc.

The excellence in SDS/2 award went to Quality Iron Fabricators, Inc. for their Air Traffic Control Tower project.

This new air traffic control tower, which is located in Memphis, Tennessee, was detailed and fabricated by Quality Iron Fabricators, Inc.

## Thanks to All Who Entered the 2008 SDS/2 Solid Steel Competition!



We would like to thank everyone who submitted a project to this year's SDS/2 Solid Steel Competition. The projects varied in size, type and complexity. They included structures like pedestrian walkways, building expansions, medical facilities, new attractions at Busch Gardens and Disney, aircraft hangars, churches, power plants, casinos, resorts, an traffic control tower, and much more.

Due to the number of entries, we added a second place award for both the commercial and industrial categories. Next year, we will also be adding an education category, which will be open for schools to submit their students' projects.

Again, we would like to thank everyone who submitted their project to the competition. Keep an eye out for the 2009 SDS/2 calendar and be sure to submit your entry for next year's competition.

To view additional pictures of competition entries, go to [www.sds2.com/solid\\_steel2008](http://www.sds2.com/solid_steel2008).