# from the **COITO**



Scott L. Melnick

couple of years ago, AISC's Bobbi Marstellar dropped on my desk a copy of a wonderful article from *Metropolitan Home* magazine—an article that became the genesis of *MSC*'s "What's Cool in Steel" feature. As a result, each August we not only take a look at the hottest new products, but we write about the coolest happenings in the steel design and construction industry.

And the coolest of all? Definitely the 3D printers. Imagine taking a CAD drawing and no longer simply seeing it in 3D on a screen, but being able to print out a physical, three dimensional model. As a test, we sent our friend Ian Coats of AceCad Software the hardcopy drawings used to fabricate the large steel teaching sculptures that grace more than 120 campuses around the country. Using the StruCad 3D Modeling System, he quickly detailed the project and produced the necessary electronic drawings. MSC's Lena Singer then sent the files to the two leading 3D printer manufacturers, Z-Corporation and Dimension, so we could see complimentary samples. Both produce highly detailed, beautiful results (see p. 48).

Z Corporation reported that their color-coded output took about seven hours to make and would have cost around \$400 if purchased from a service bureau, including labor and machine time. Dimension Printing (a division of Stratasys) reported that their much larger, single color output took around three days to complete (it was made larger than the printer's output size and assembled in pieces) and would have cost about \$2,500 from a service bureau. For a list of service bureaus, visit www.zcorp.com or www.dimensionprinting.com.

The printers themselves can be purchased starting at about \$25,000. (Both companies have been invited to exhibit at the North American Steel Construction Conference in February, but so far neither has committed.)

Of course, besides making cool toys, the printers have a practical application in being able to show clients detailed models of proposed designs.

A few more cool things that didn't make our cool list but are decidedly cool include:

#### **Cool Book**

A few weeks ago Nucor-Yamato's Joe Stratman handed me one of the greatest books ever written, at least judging by its popularity as bedtime reading with my youngest son. It's called *The Three Little Rigs*, by David Gordon. This amazing story re-imagines the famous porcine adventure as the tale of three little trucks sent off by their mother to build their own garages—and reveals what happens when the mean wrecking ball shows up! Let's just say that steel is clearly the material of choice. I urge everyone to pick up a copy—either at your local bookstore or by visiting your favorite library. Or, if you can't find one, AISC has a limited number of copies for sale at www.aisc.org/bookstore.

### **Cool Reference**

A slightly more useful, but decidedly less cool, book is *The Blue Book of Grammar and Punctuation*. This simplified grammar guide and workbook (only 103 pages with more than half being practice exercises) is ideal for people who can't remember the difference between "effect" and "affect" or whether punctuation goes inside or outside quote marks. The book is available for \$12.95 from www.grammarbook.com.

#### **Cool Sport**

One of the coolest sports is Ultimate Frisbee. And for a great picture, check out page 113 of the July 11, 2005 issue of *Sports Illustrated*. The person diving for the frisbee is AISC's own Becky LeDonne!



#### **Editorial Offices**

Modern Steel Construction One E. Wacker Dr., Suite 700 Chicago, IL 60601 312.670.2400 tel 312.670.5403 fax

#### **Editorial Contacts**

Editor & Publisher Scott L. Melnick 312.670.8314 melnick@modernsteel.com

Managing Editor Keith A. Grubb, P.E., S.E. 312.670.8318 grubb@modernsteel.com

Assistant Editor
Lena Singer
312.670.8316
singer@modernsteel.com

#### **AISC Officers**

Chairman James A. Stori

Vice Chairman Stephen E. Porter

Treasurer
Lawrence A. Cox

Secretary & General Counsel David B. Ratterman

President
H. Louis Gurthet, P.E.

Vice President, Finance & Technology E. Joseph Dietrich

Vice President, Engineering & Research Louis F. Geschwindner, Ph.D., P.E.

Vice President, Communications Scott L. Melnick

Vice President, Marketing John P. Cross, P.E.

Vice President, Certification Roberta L. Marstellar, P.E.

## **Advertising Contact**

Account Manager John A. Byrne 847.699.6049 tel 847.699.8681 fax byrne@modernsteel.com

1400 E. Touhy Ave., Suite 260 Des Plaines. IL 60018

To receive advertising information, contact John Byrne or view it online: www.modernsteel.com

#### Address Changes and Subscription Questions

312.670.5444 tel 312.670.5403 fax admin@modernsteel.com