

# AEROSPACE<sup>®</sup>

## MANUFACTURING and DESIGN

# OMAX Corp. Helps Judge Future Inventions

OMAX<sup>®</sup> Corporation recently served as one of the highly influential guest judges at Georgia Institute of Technology's latest Capstone Design Expo.

OMAX Corporation recently served as one of the highly influential guest judges at Georgia Institute of Technology's latest Capstone Design Expo, a culmination of 40 mechanical and biomedical student projects from the school's mechanical engineering senior design course.

"The Capstone Design Expo is a great opportunity for student teams to showcase the hard work and creativity they've put into their semester-long projects for outside sponsors," says Craig Forest, assistant professor at Georgia Tech in the GW Woodruff School of Mechanical Engineering. "As part of the expo, the school uses an esteemed group of judges to help select the three most innovative, useful and market-worthy projects."

Each team consisted of four to five students who worked together to define their project, perform research, develop a design and then fabricate, test and refine their prototypes - all under the tutelage of faculty and external sponsors or mentors. In the past, student teams have worked on commercial projects for Delta Air Lines and Coca-Cola.

The students created their project prototypes in the Woodruff School's Invention Studio, a facility that invites all Georgia Tech students and faculty to come in and develop their own inventions using advanced machine tools and

electronics equipment, including an OMAX 2626 JetMachining Center<sup>®</sup>. The Invention Studio is free for them to use and open 24 hours a day.

Steve Brown, director of government educational solutions for OMAX, was one of the 40 expo judges. He and representatives from Shell Oil, Metronix, Inc., Emory University and several other organizations were tasked with determining how well the student teams applied prototyping and analysis to solve real-world problems.

A new type of sternal retractor, a device that cuts through the human sternum and cranks open the rib cage, was named one of the winning projects for its ability to eliminate blood loss and avoid rib cracking - common problems of current designs. First, second and third-place winners received a cash prize of \$500, \$300 and \$200, respectively.

Brown has been involved with Georgia Tech since 2009 when the university, per the request of Professor Forest, pur-

chased the OMAX 2626 for the Invention Studio.

"We graduate approximately 400 mechanical engineers per year, and all of them have utilized the OMAX waterjet machine," says Forest. "It is the workhorse of our Invention Studio, and I absolutely love it. Students enjoy the fact that it is so easy to use. In fact, most of the prototypes presented at our recent Capstone Design Expo were made using the OMAX 2626."

Forest became familiar with the OMAX brand of abrasivejet machines while attending the Massachusetts Institute of Technology to earn his Doctor of Philosophy and Master of Science degrees. "We had several OMAX machines at MIT, and I used all of them. I find they are the best waterjets on the market."

According to Brown, several other universities across the nation utilize OMAX machines as part of their curriculum, including Harvard, Princeton, University of California at Berkeley and Florida State. **A**



OMAX Corporation  
21409 72nd Ave. South  
Kent, WA 98032  
800-838-0343 | PH: 253-872-2300 | FAX: 253-872-6190  
www.omax.com