

Packaging Design Equipment an Industry Gift to Students

In an unassuming room off Dexter Lawn is Cal Poly's Packaging Design Lab – a place where students are literally on the cutting edge of packaging technology.

The lab is where students design and make packaging for products ranging from water fountains to beverage straws to food products. A \$480,000 Kongsburg computer-assisted design table and the Barco Artios computer and software that run it were donated by Barco Artios, the Association of Independent Corrugated Converters (AICC), and the International Corrugated Packaging Foundation (ICPF).

Cal Poly is one of only 12 universities in the United States with a formal packaging program, and the only university west of the Mississippi that has a Kongsburg CAD table, according to Professor Larry Gay, director of the lab and the university's packaging minor. The Kongsburg/Barco Artios donation was critical to keeping Cal Poly at the forefront of packaging industry technology, he says.

"Barco Artios is one of the most popular CAD tables in use in the industry," Gay says. "I have a lot of companies that come to us and say they want a designer who can use this machine – they'll hire designers from Cal Poly as soon as we can turn them out." Gay adds that Cal Poly design graduates can start at a \$42,000-\$45,000 annual salary.

Some 1,200 students have trained on the Kongsburg since Barco Artios, the AICC, and the ICPF donated it to the lab four years ago, Gay says. Cal Poly student teams have also been able to use the Kongsburg to design and create entries for annual international industry packaging design

contests, capturing an increasing number of first-place titles.

The Kongsburg is a "sample table" linked to a computer. Students use the computer to design a specific box shape – no matter how unusual – with a myriad of cut or print patterns, then design their package on the CAD computer. They place on the Kongsburg a large flat sheet of corrugated box material – cardboard with a fluted layer of ridges between two smooth paperboard surfaces – and the Kongsburg cuts the sheet down to the programmed size for the box, complete with creases for easy folding and assembly.

In the packaging industry, the equipment is used by designers to create several sample versions of product

packaging boxes for clients, complete with labels and artwork glued or laminated to the exterior. Clients then choose a final design.

Once chosen, the boxes are mass-produced on a much larger machine, Gay explains.

In addition to class projects, students have used the CAD table and Packaging Design Lab to design custom boxes for university operations and private businesses.

"If anybody needs a box," says Gay, "we'll build them one."

Finding innovative ways to package goods is an industry concern – and a stable career for graduates, Gay notes.

"Look around," he says. "Packaging is everywhere."



Industrial Technology Professor Larry Gay with Lecturer Joy Christensen (left) and students at the Kongsburg CAD table in the Packaging Design Lab Photo by Jeff Greene