Thinking ahead

MJSA
SINCE 1903

A Publication of Manufacturing Jewelers and Suppliers of America

2005 *AJM*
Innovation Awards

www.ajm-magazine.com

Got It Made

Roland ASD's JWX-10 Model Maker

By Glen A. Beres

For Len Klutts, owner of Klutts Jewelers in Morgan City, Louisiana, creating detailed wax jewelry models on his old milling machine was a painstakingly slow and complicated process.

"For flip and rotary milling, I could set up only one or two jobs a day, max," he says. "It was very limiting and frustrating."

The JWX-10 Model Maker by Roland ASD in Lake Forest, California, changed that.

Since Klutts purchased the machine earlier this year, he has enjoyed a dramatic increase in his milling productivity. "I can now do four jobs in a day, easily," he says.

"I can do things faster and easier with the JWX-10—and I can make anything: double flips, pendants, initial rings, bracelets, charms, you name it. It's been like going from a bike to a Lamborghini."

This kind of versatility and ease of use helped earn the JWX-10 a 2005 *AJM* Innovation Award.

Powered by a 20,000 rpm spindle, the JWX-10 mills wax models with detailed resolution up to 0.002 mm/step. Introduced in January 2005, this precision four-axis desktop milling machine is compatible with most CAD software files and comes equipped with CAM software, tools, wax, and user manuals. Designed specifically for the jewelry industry, the system offers a maximum work area of 14 cm wide by 10.5 cm deep and meets ISO standards for design and manufacturing quality.

In addition, Roland's optional Proto-Wizard software and fixture bundle allows manufacturing jewelers the flexibility to interface with existing CAD programs. Through ProtoWizard, jewelers can import standard STL files from Gemvision's Matrix, Rhino with Techgems, ArtCAM Jewelsmith, and Type 3 3Design, and easily convert them into NC files ready to be milled. The unique, three-sided ring fixture and ring arbor allow for the production of complex designs.

"The JWX-10 is targeted primarily to the custom retailer," says David Olson, marketing manager for Roland ASD. "It

comes with straightforward manuals, tools, wax, and comprehensive tutorials that allow jewelers to begin milling jewelry within a few hours of opening the box."

The impetus behind the system's creation, according to Olson, was the fact that most jewelry milling solutions piece together hardware and software components that are not optimized for producing wax jewelry models. This makes them difficult to use efficiently for many jewelers. The JWX-10, however, was developed from the ground up in an effort to make the jewelry design and manufacturing process faster, easier, and more profitable.

Among the system's other benefits for bench jewelers, Olson adds, is that its small size and quiet operation make it ideal for the shop, and its integrated enclosure keeps cuttings from littering the work area.

According to Charles Lewton-Brain of Calgary, Alberta, Canada, an *AJM* Innovation Awards judge, the JWX-10's low price point of $9,995 makes it an entry-level tool that can play an important role in "embedding CAD/CAM in the ordinary jeweler's workshop."
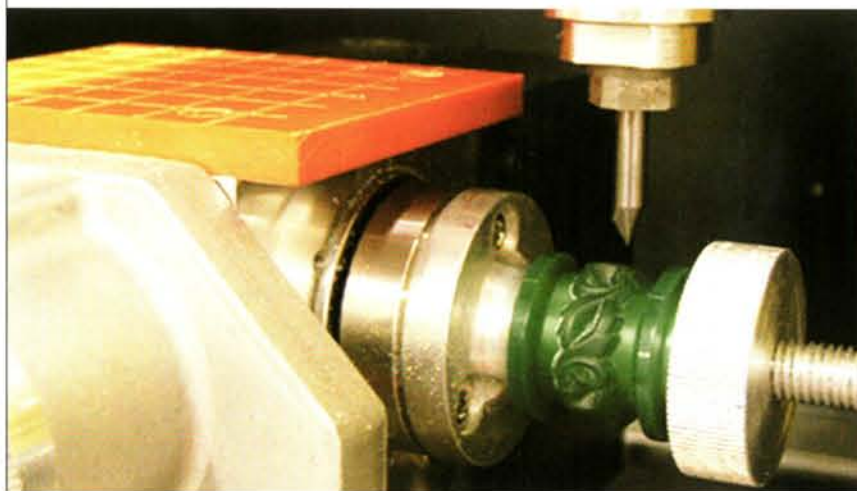
Program coordinators at GIA seem to agree: The school's jewelry manufacturing arts department has chosen the JWX-10 to teach its students the fundamentals of jewelry model making. Students at the school's Carlsbad campus will begin using the machine in classes in January 2006.

thinking Ahead

"Our classes really focus on giving students hands-on training with the industry's latest CAD/CAM technologies," says Russell Hyder, GIA manager of jewelry manufacturing arts. "With the JWX-10, students get to produce beautiful and precise wax models from their own computer-created designs." ◆

"I can do things faster and easier with the JWX-10— and I can make anything. It's been like going from a bike to a Lamborghini."

-Len Klutts