Technologically Speaking: The Roland JWX-30 Milling Machine

September 3rd, 2008
Canadian Jeweller

Roland DGA continues its tradition of providing jewellery makers with state-of-the-art solutions by introducing the JWX-30 – a state-of-the-art desktop mill that allows designers to turn their wildest imaginings into reality.

Roland DGA has become renowned for developing technologically advanced solutions for the sign making, engraving, automotive restyling, apparel decoration, CAD/CAM and, of course, jewellry design industries. Throughout its history, the Company has unveiled a series of products including GX series vinyl cutters, EGX series engravers, MDX series milling machines, LPX series 3D laser scanners, and the MPX series photo impact printer.

Roland DGA is an industry leader in wide-format printing and integrated print/cut technology, serving customers throughout North and South America with cutting-edge technologies and skilled dealers. Today, Roland DGA has expanded its award-winning JWX series with the JWX-30 jewellry modelling solution. The state-of-the-art desktop mill comes complete with powerful jewellry design software, allowing designers across the globe to transform their ideas into highly precise wax models of rings, pendants, bracelets, brooches, earrings and cufflinks.

"The JWX-30 was designed to boost creativity," said Neil Zdunkawicz, marketing manager for Roland DGA. "It quickly mills a wide range of wax master models with intricate detail and perfect symmetry. Bundled JewelStudio™ software automates laborious tasks such as replicating left and right earrings, and reducing model weight to meet client demands."

Precision and Control
The software is a major component of the new system, which grants designers a high level of control and exactness, two characteristics intrinsic to good jewellery design. JewelStudio software, which has been specifically developed for jewellry designers and goldsmiths, allows these craftsmen to use hand drawn sketches to create precise three-dimensional electronic renderings of their designs.

Users of this advanced software can also create original digital designs quickly and intuitively, with full creative flexibility, by following simple step-by-step instructions. The software offers a host of features including GemStudio, an extensive digital library of gemstones featuring varying shapes, sizes and types of gems that can be added to designs with a single click of the mouse.

Modifying and resizing designs is just as easy. The Automatic Pave feature allows jewellers to choose the type and number of gems to be placed automatically on the jewellry's surface in a dimensionally accurate pattern for unprecedented results. If desired, designers can also manually place the stones for maximum creative flexibility. Once the design is completed, the model can be displayed on-screen and rotated, giving professionals and their clients a clear, accurate preview of the final product.

It's All in the Details
The JWX-30 offers high-speed, automated production with a powerful 30,000 rpm spindle and 100W DC Brushless motor. The desktop mill also generates fine precision up to 0.00125 mm/step to produce every subtle nuance of jewellry CAD designs. Finally, the JWX-30 comes with a unique, double-edged tool that yields exceptional detail, giving designers the confidence and ability to create virtually any detail, no matter how intricate.

For all its impressive stats and figures, the JWX-30 would not be of much worth to designers if it did not actually deliver. And it certainly does. It joins a long line of industry JWX machines, including the JWX-10, which won the AJM Innovation Award in 2005. The Innovation Awards are part of, Thinking Ahead: The MJSA/AJM innovation Initiative, which is intended to facilitate and celebrate innovation in all areas of the industry.

While winning awards is certainly nice, hearing what actual industry members have to say about products is even more important. "For flip and rotary milling, I could set up only one or two jobs a day, max," says Len Klutts, owner of Klutts Jewelers in Morgan City, Louisiana. "It was very limiting and frustrating." Creating detailed wax jewellry models on his old milling machine was a painstakingly slow and complicated process. Fortunately, the JWX-10 changed that. Since Klutts purchased the machine, 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."

It is this kind of versatility and ease-of-use that has earned the JWX-10 the AJM Innovation Award, a fact that Company members are quick to point out, just as they are eager to tell the entire industry of what they can achieve with the next generation JWX-30. "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 jewellers to begin milling jewelry within a few hours of opening the box."

Like all Roland DGA products, JWX-30 is designed and manufactured in a state-of-the-art, ISO-certified facility. Roland builds all products at its advanced Digital Factory one at a time, by a single assembler – just like the fine pieces of jewellery designers create with the machines.

For more information on the JWX-30 and other leading Roland DGA products, you can visit www.rolanddga.com/asd