Moon Shadow Glass sees double-sided success with EFI LED inkjet technology

According to the company’s motto, if it can be done with glass, Moon Shadow can do it, whether it’s a tabletop or a skyscraper. The company’s work includes everything from single sandblasts to shaded, photo-realistic etching on orders as small as 15.2-by-15.2 cm all the way up to 152.4 cm wide and 330.2 cm long. Customers include the University of Oregon, the Oregon Zoo, Nike; and Tri-Met, the local transit line. The company also has done work for the University of Washington and hotels and office buildings around the nation.

Tim Frasier, who founded Moon Shadow Glass in 1978, has always been a glass person. “We started out screen printing and etching glass, then it just expanded from there, evolving into decorative glass for the manufactured home trade and then sandblasting,” he explains. “As equipment becomes available and technology grows, we grow with it.”

That growth has translated into bigger and better projects. A prime example is the Oregon Zoo’s Elephant Land exhibit, a habitat that aims to provide a world-class home for elephants and gives visitors an experience to remember. In addition to significantly expanding the area that housed the animals, the zoo wanted to include a small museum where people could go to learn about elephants and how they are faring around the world.

Frit-free and crystal clear

The project called for life-sized glass murals of Packy, Rose II, and Lilly, elephants that actually live at the zoo, so that visitors would feel like they’re standing right next to them, says Kris Iverson, Moon Shadow’s marketing and creative director. The images also needed to be 360-degrees and double-sided so visitors can see the same thing on either side of the glass.

At the time, Moon Shadow was using an EFI™ H650 printer. The company already had a tremendous advantage in that it is one of very few in North America that specialises in photo-realistic etching. The H650

Challenge:
Meet growing customer demand for high-quality, double-sided displays.
could have handled the zoo project, Frasier says, “but it would have been a lot trickier.” So he and Iverson began exploring their options.

The pair discovered the EFI H1625 LED printer at the SGIA Expo when they stopped at EFI’s booth to talk with representatives about the best way to handle the Oregon Zoo job. They were particularly impressed with the machine’s four-colour plus white and greyscale print capability and its speed. Upgrading from the H650 to the H1625 was a no-brainer, and the equipment has more than lived up to expectations.

“We can do things a lot quicker and can direct print onto glass at more weight than I could with the old machine,” Iverson explains. The largest display is 4.9 m wide, more than 3.7 m high, and weighs more than 544.3 kg. In addition to weight, they had to consider colour consistency and ensure that everything coordinated perfectly.

“There’s this other ink out there called frit, which is actually superfine, ground-up glass. On one side it looks beautiful, but on the other side it’s kind of muddied and doesn’t look as crisp and clear,” he adds. “So another great advantage with this UV printer is that we can make images look truly crystal clear on both sides in incredible colours,” he adds.

New capabilities in architectural applications

Aside from the need to reformulate one of the colours, there have been no problems with the H1625 LED printer. “It has been crystal clear sailing,” Iverson says, “and EFI has provided excellent customer service and training. EFI’s sales rep and a couple of EFI field engineers walked our staff through everything, including how to operate the software, making sure that everything was set up properly and rolling quickly and easily.

“Our employees are all on board, too,” he notes. “They like the technology.”

So does Moon Shadow’s customer base, which is largely made up of architects, designers, contractors, and manufacturers. After purchasing the EFI H1625 LED printer, Frasier and Iverson made up small samples of different images to show them what the equipment can achieve.

“They were pretty much sold on it right away, and it’s becoming the thing they’re going to,” Iverson says. “Etched glass is really cool, but you can’t get a lot of shading and depth, and you can usually get only three stages of shading: light, medium, and solid frost. With full-colour printing, your shading, depth, transparency, and opacity

Solution:

“Because we were able to do a colour-white-colour image and have it all run in one pass, we were able to achieve the double-sided image without having to print one image, then print another and try to get them exactly lined up, which would be nearly impossible.”

KRIS IVERSON, MARKETING AND CREATIVE DIRECTOR MOON SHADOW GLASS
can be whatever you want. So, it’s becoming the hot new trend people are going to in architectural firms and buildings.”

The system’s UV-curable inks have also offered surprising flexibility in terms of the surfaces the company works with. Sometimes firms will hire Moon Shadow to print images on wood. More recently, a customer wanted to print on stainless steel.

“So we’re kind of branching out into a couple of different mediums,” Iverson says. “Glass is our mainstay, but it’s an avenue to pick up a little bit of extra income here and there.”

That’s not the only way the H1625 LED has helped Moon Shadow increase its bottom line. When the company had the H650 printer, it still had to outsource some work, sending jobs to be printed on films that would then be laminated between glass.

The costs for the outsourced printing to film were running between $3,000 to $5,000 a month. Iverson estimates the company is spending about one-quarter of that now, because it can now do much of that work in-house printing directly to glass.

Adding LED inkjet technology is also opening up new doors of opportunity. Moon Shadow has pulled in several new projects with the printer, including work for a major corporation and bus shelters for Charlotte, North Carolina’s new Blue Line light rail transit line, featuring full-colour, semi-transparent images Moon Shadow produced with the EFI printer.

According to Iverson, having the capabilities of the EFI H1625 LED printer fits right in with Moon Shadow’s unique value in the marketplace as a company that provides a level of quality and service others cannot match.

**Result:**

“The H1625 LED printer helped us win a bunch of new projects that are also calling for double-sided images.”

KRIS IVERSON, MARKETING AND CREATIVE DIRECTOR MOON SHADOW GLASS
Glass display installations produced by Moon Shadow Glass on its EFI hybrid LED printer give a dynamic look to one of America’s best collegiate sports training facilities, the Mariota Sports Performance Center at the University of Oregon.

“We’re one of the only companies in the U.S. that can do photo-realistic etching — and we know that we’re the only one that can do it on a large scale,” Iverson explains. “We cater to the customer, and whatever the customer wants, we try to achieve it as closely as we can and in a timely manner.”

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