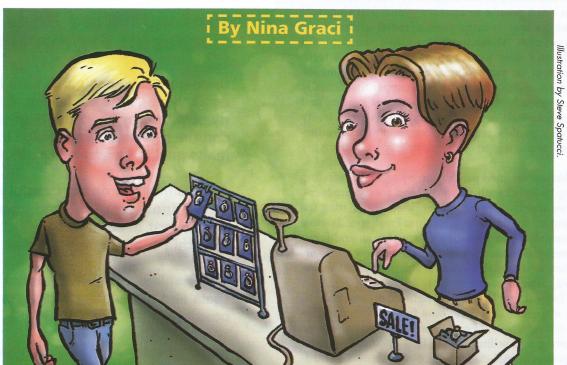
Jewelry Arts Projects, Advice & Inspiration LAPIDARY The Hope Diamond present & past Expert Photo Advice Increase **Your Output** Make a Chain with Metal Clay Enter the Gemmys New Evidence
for the at lapidaryjournal.com Hope/French Blue Connection PLUS! Facet Your Own French Blue U.S. \$4.99/CAN \$6.99 Whether you're mass producing or doing limited edition, there are lessons to be learned from applying production techniques.

First-Class Production



magine the next time the phone rings, the voice on the other end wants to order 275 bracelets.

Once you get over your moment (you're allowed a moment) of stunned disbelief, what is your reaction? Yes, or no? And once you've said yes, can you fill the order? The call can be either a dream come true or a nightmare — which it will be all depends on how prepared you are for it. And even if you don't think of yourself as a "production jeweler" per se, there are production tricks that can increase your efficiency at the bench.

Betsy Frost's call came in 1996, after she applied to the New York Gift Fair on an impulse. Fortified by adrenalin and fear, she quickly created a line of jewelry, invested in a catalog, and designed a booth. The Museum of Fine Art stores rewarded her sleepless nights with that order for 275 bracelets and a further 250 pairs of earrings. The order proved just the incentive she needed to set up her own production line. She moved out of the studio she shared with two other jewelers and into a house in Ipswich, Massachusetts. She filled the basement with tools, trained two assistants,

learned how to fill an invoice and ship jewelry, and Betsy Frost Designs was open for business.

"From the get-go I knew that I would be a production jeweler because I wanted to make a living designing jewelry," Frost says. "I am just too practical to make only one-of-akind work. If a lot of people like my designs, I would rather produce more and sell to stores."

JEWELER'S BEST FRIEND. So what kinds of adjustments were made in order to decrease time and increase volume? Frost began designing with casting and production in mind. This meant pieces had to be as solder-free as possible, easily reproduced by the caster and assem-

bled by assistants. She sent her caster, Harrison Casting in Providence, metal masters and wax models, and they returned the castings and the master. (After her master went astray during shipping, Frost began her practice of insuring all masters for the total cost of design and production.)

"They can send people to another planet but they still haven't invented a way to cast a piece of metal without parting lines!" says Frost. "When the pieces arrive, we must still sand them down before I can apply my high-polish techniques. First, I heat the piece to force the finest part of the silver to the surface, and not the nickel and copper that actually tarnish. Then I quench it in pickle. I repeat this heating and pickling process at least seven times until I achieve a frosty white look that is tarnish resistant. It does add to my production time, but I prefer this to electroplating or lacquering my pieces."

Frost further streamlined production by replacing sanding and polishing by hand with vibratory and rotary tumblers. She trained her assistants to use solder paste, eliminating the steps of cutting solder and applying flux. Frost spends most of the day assembling or soldering earring backs and jump rings. She often works into the night designing new work, ordering supplies, doing quality control, shipping jewelry, and thinking of ways to grow her business.

"The Gift Fair put me in business right away, and now all my new and wholesale accounts come from the four wholesale shows I do each year," Frost says. "Jewelers should invest in marketing and selling tools, like a great catalog, and send mailings to potential clients before each show. I also advise attending an MJSA [Manufacturering Jewelers and Suppliers Association] trade show to stay on top of jewelry production. That's where I found a company that would tumble eight pounds of sterling castings to high polish very cheaply.

"The hard part for me is getting the accounts because once my jewelry is in the stores, it sells well and they reorder. I now sell an assortment from 30 collections to about 100 galleries. My retail prices range from \$40 to \$400, which makes my work an affordable alternative to high-end diamonds and gold."

Both Frost and her work appear to have slipped effortlessly into production work. Perhaps because her simple, elegant designs were tailor-made for the production line, and so was she.

"I'm often pigeonholed by other artists and jewelers. But I have never had any grand ideas about being an artist, so I am not offended if a design doesn't sell. I just bag it. I easily switch from designing to marketing and selling, something this business demands but which many artists shun. I set out to make a living doing something I truly love, which is designing jewelry. Now I am living my dream."

REAKING RECORDS. From his studio overlooking a trout-filled brook, jeweler Robert Beauford is breaking production records. Although he isn't training for the Jewelry Olympics, this self-taught, self-described "amateur" produces 1,500 pieces of jewelry a year, enough to stock the Wildsmith Gallery, which he owns with his wife, Wendi. Working solo, Beauford has brought 10,000

pieces of jewelry into the world over the last decade - and

he's convinced that anyone can.

"I suppose producing 1,500 pieces of jewelry a year does make me a production jeweler," he says. "I'm proud of that description, although when jewelers call me that they often imply I've 'sold out' or that I'm not a 'real artist.' Some jewelers envy my speed, but I feel they have never really pushed to improve their technique or time."

Beauford's Five Keys to Successful Production

Once a piece is designed, take it apart and analyze each step. Experiment with it by changing the tools and the rhythm. Always strive to make quality jewelry more efficiently.

> Always improve on successful designs. Know your time and money investment in each design to within seconds and pennies.

Never skimp on tools. Improve your tools and techniques whenever possible.

Know exactly what you are going to accomplish in a session before you sit down at the bench, then achieve exactly what you intended.

Review every step regularly and experiment on ways to improve upon each one.

Beauford has worked on improving both since the couple moved to Taos 11 years ago. Taos was an art colony in which every seventh person was either an artist or a jeweler. What disturbed the former archeologist was that most of these talented artists made their living chopping wood or other menial jobs. One day, Beauford found himself admiring an assortment of jewelry one minute and deconstructing the pieces in the next heartbeat. By the time he said, "I can make this," Taos had a new jeweler.

"I knew that I needed to work as quickly and skillfully as the production jewelers in countries like Indonesia if I wanted to be truly competitive in the retail environment. And that quality and speed need not be mutually exclusive."

Beauford was convinced he could earn a living from making jewelry. He had a plan.

"The economy of scales states that when a process is duplicated repeatedly, it costs less in time and resources. Going from step to step in the jewelry-making process slows it down. However, by sitting down and bezelling 1,000 stones, you not only understand the process but also save time and energy by not moving back and forth among tools. If you're going to make jewelry efficiently and quickly, you should literally be able to close a bezel blindfolded. It takes me 25 seconds to close a bezel."

Through simple repetition, Beauford perfected his techniques and improved his skills. When another jeweler challenged him to make an identical piece, Beauford took him on. He created his piece in 16 minutes. The other jeweler took five days.

Beauford leaves nothing to impulse or inspiration in the studio. He choreographs every move and preplans every job. If soldering is on the agenda, he lays out 30 pieces on six separate solder screens the previous day. When he sits down to solder, he runs his torch for 40 minutes at a time and, in a couple of days, he has performed 200 soldering jobs.

Beauford saves his hands and lungs by tumbling work overnight. He saves a second here and a minute there by bundling tasks like stamping, bail making, metal forming, sanding, and edge trimming. When he makes rings with half-round shanks, he improves his time by rolling a series of rings on a mandrel and sawing them all at once. Later, he may discover a way to use a power saw or shears to cut them even quicker. Filing may begin with a single file, but eventually Beauford will find a way to replace it with a belt sander. By making slight improvements to every project, he has been able to reduce a 30-minute technique to five minutes.

Many jewelers find repetition mind numbing. But when

Beauford sits down to 200 identical tasks, he smiles. Repetition is precisely what has kept him in business. "If you want to make jewelry, jewelry-making techniques are the tools that will allow you to take it beyond a hobby and turn it into a viable business and career."

RODUCTION STRATEGIES FOR ONE-OF-A-KIND. Each year, Barbara Heinrich Studio ships out over 1,200 pieces of gold, platinum, and gemstone jewelry to 60 galleries across the U.S. Heinrich doesn't consider herself a production jeweler, but does use production techniques to make successful designs available to a larger audience. When the cost of studio labor is \$120 per hour, casting the ring shanks and bezels of the stackables cuts their cost in half.

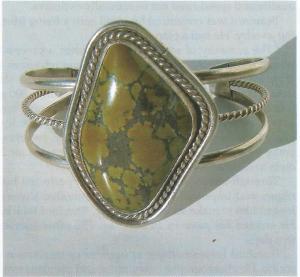
"Although casting is a real timesaver, not everything can be cast," Heinrich says. "Ring shanks, bezels, and settings can, and earrings and very thin filigree work cannot. Casting is a science and a partnership. The jeweler has to produce models that take into consideration the 20 percent shrinkage, that aren't too heavy or thick so the pieces have the perfect weight and don't look mass-produced. The caster has to cut good molds, not use too much mold release or press down on the mold so hard that he deforms the waxes. It was a relief to find a good casting company that retained our fine details and kept things really thin and unpitted. They even cast my mixture of gold so we get a consistent 18-karat gold color."

When the castings arrive at the studio, each goldsmith takes full ownership of a piece, texturing it with pumice and wire brushes and setting the stones. More details and granulation are added until the piece achieves its identity and "sings." In the pierced *Milky Way* collection, the circles are prepierced for the casting and later the triangles, stars, and squares are hand cut into the design.

"It's really a science, and each piece requires its own handling. It's not a simple formula like cast it then throw 40 pieces into the tumbler, and then set the stones. We don't tumble anything. We hand finish every little surface on







Robert Beauford has honed his production techniques to the point that he can produce 1,500 pieces of jewelry a year. By bundling jobs and through sheer repetition, he has increased his efficiency and his skill. He can now close a bezel in 25 seconds. Photos: Robert Beauford.

everything using cutting wheels and sand paper. It's the only way to get the detail we have in our work."

Though it might be tempting, Heinrich has never taken a year off and lived from her 600 successful molds. First, because her galleries would sense it, and then it would be difficult to suppress the creative sparks that fly when four goldsmiths share a studio.

"We are in the best niche there is thanks to our marketing strategies. We first identify the best gallery in each city, then ask if they want to work with us. We send slides or visit them and offer a few pieces on consignment in the beginning. But they have to love the designs, or I don't want to work with them. After three years, we ask them to buy and they do. We give them the experience first. It is a lot of administrative work but it's worth it."

Heinrich has put together a strong team, spicing the mix by sponsoring goldsmiths from around the globe to bring their talent to her studio in upper New York State. Heinrich's special approach, of finessing each piece and treating it with distinction, gives all her designs a one-of-a-kind-glow.

Adding a selection of production techniques has freed Heinrich to do what successful jewelers do best: dream and design.

TARTING IN PRODUCTION. When Janis Kerman's jewelry appeared on a princess and the wives of prime ministers and presidents, she

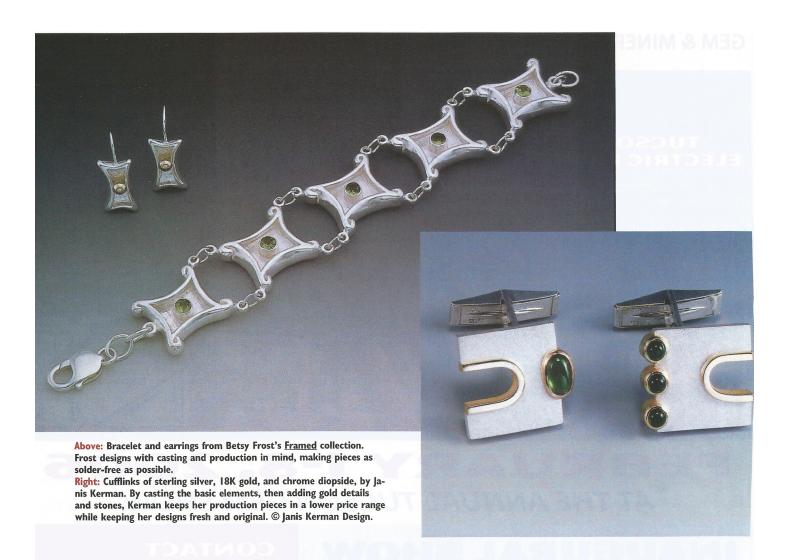
Kerman's assemblages combine bold geometric metal with gemstones in asymmetrical designs that are part cubist painting, part Art Deco design.

knew she had chosen the right career.

"The late Princess Diana wore my earrings, Madame Chrétien has a suite: ring, bracelet, earrings, and necklace, and Hilary Clinton owns a brooch," says Kerman from her studio in Montreal.

Kerman's jewelry career began in production back in the '70s, with a line of season-oriented jewelry she sold exclusively to department stores. The financial perks of this huge market were offset by the ever-changing buyers who discounted her work and the sales reps who made unrealistic promises to customers. By 1985, Kerman was ready to jump off the production treadmill. Luckily for Kerman she was armed not only with talent but a personality that never took no for an answer. She added 50 limited editions to her 265 one-of-a-kind pieces, and persistently sent out her portfolio to galleries in the United States. By 2004, Kerman had reached her gallery maximum of 24.

"There are many ways for jewelers to earn a living. They should vary their products to reach more of the market and



spend 50 percent of the time making limited editions and the other 50 percent making other things. That way, if a series doesn't take off, they're not in trouble. I still have boxes in my attic filled with pieces I had cast, finished, and plated."

After 27 years in the business, Kerman has developed her own techniques for speeding jewelry out to galleries. Once she has made a sketch, she attaches a small roll of masking tape to the page. She then places the stone, castings, its price, and other production ideas to the tape, thus keeping all the essential design elements in one place.

Kerman's assemblages combine bold geometric metal with gemstones in asymmetrical designs that are part cubist painting, part Art Deco design.

By casting the simple silver designs, then adding gold details and stones, she not only stays within her \$250 to \$500 niche but always has pieces on hand to meet rush orders.

"I always give myself a longer lead time than I need because I would rather deliver the work early than after the deadline. A customer might not remember that you got it to them early but they sure will remember if it was late. It also gives customers an excuse to cancel the order if you are past the promised delivery date!

"Research production before you embark on this as a career," she advises. "You have to be committed and produce more than one collection. I look at it like a clothing collection that changes with the seasons. Decide at the beginning how much you want to invest emotionally and financially because it is expensive. First, you have to create a set of samples, and

then decide whether you're going to go out and sell it, hire an agent, pay a showroom fee or go out and do the shows. If you do shows, know how many shows to take on and plan in advance. I need at least three months' notice [to do a show]. Most of all you need to be organized and work out a process where you're making jewelry in a financially timely and efficient manner. After I had my daughter, I no longer wanted to be part of the rat race of making 60 or 70 pieces with an unreasonable deadline. Now I consign my one-of-a-kind pieces, but I insist the limited edition pieces be sold, because I don't want to stock my lower-priced items. Most of all, don't give up!"

Jewelers venturing unprepared into production may agree with the old saying that it is better to travel hopefully than to arrive. Especially when "arriving" means enslayement to a production line and the tyranny of multiples that put the kibosh on creativity. But when a jeweler can find the Zen in mass production, then, she recognizes the process for what it is: it tests the soul at times but it can also feed the body. •

More jewelry by the jewelers included in this article can be found at: www. wildsmithgallery.com (Robert Beauford); www.betsyfrostdesign.com; www.barbara heinrichstudio.com; and www.janiskerman design.com.

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