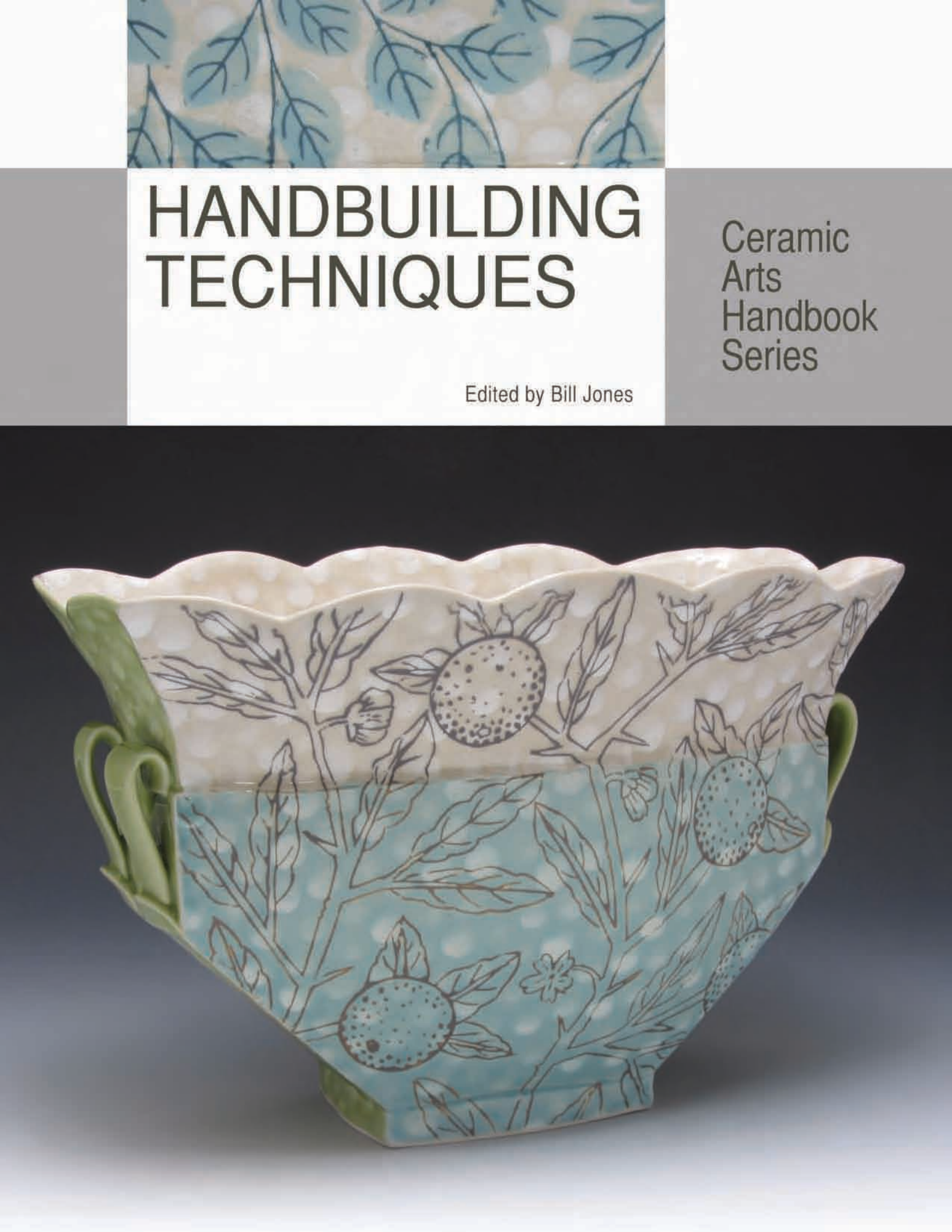


The cover of the book features a top section with a repeating pattern of blue leaves on a light background. Below this is a white rectangular area containing the title and editor's name. To the right of the title is a grey vertical band with the series name. The bottom half of the cover is a large photograph of a ceramic bowl with a scalloped rim, decorated with a blue and white botanical pattern and green handles.

HANDBUILDING TECHNIQUES

Edited by Bill Jones

Ceramic
Arts
Handbook
Series

Handbuilding Techniques



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600 N. Cleveland Ave., Suite 210
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Frontispiece: Floral and striped pail, handbuilt earthenware, slip-trailed patterns, terra sigillata, underglaze, glaze, wire, rubber, by Liz Zlot Summerfield.



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Preface

During the many years I was editor of *Pottery Making Illustrated*, we surveyed our readers on a regular basis, and one of the things that stood out in every survey was that handbuilding was by far one of the most sought after forming methods for our readers. Why is handbuilding so popular? Simple—it's suitable for any skill level, it requires minimal tools and resources, and the range of what one can create is up to one's own imagination.

Whether you're teaching, a recreational potter, or a full-time professional, you'll find there's no barrier to tackling any of the projects in this book. From a simple molded plate to a challenging soft slab teapot, every step-by-step project provides a way to be uniquely creative while honing your skills.

As for an investment in tools, you really don't need much to get started. The essential tools are as simple as a bag of clay, your hands and a work surface. When you look at what potters have used over the past 20,000 years, you'll soon realize that your most important resource is your desire to create.

Finally, the range of what you can create is limited only by your imagination. You can combine techniques for slabs, coils, molds, and textures to serve your creative needs; or select random tips to enhance your current handbuilding style. Some of the artists in this book spend their entire time making a wide range of forms and shapes using just a single technique.

Although I was trained in the Japanese wheel-throwing tradition, I've always enjoyed the pace and variety handbuilding has to offer. While the wheel provides a way to quickly and efficiently produce multiple round forms, handbuilding allows me to slow down and enjoy the whole clay experience in a much more relaxing way. In addition, I enjoy the ability to add textures and decoration at every step of the forming process from soft slab to leather hard.

Joe Singewald (see page 84) states "Every clay maker's artistic journey unfolds like a 'Choose Your Own Adventure' book. Decisions made along the way determine our creative path and personal work. Every studio we enter and all of the potters we meet have an impact on who we are as artists and what we create. The greatest part of this self-chosen adventure is the fact that our quest is never complete."

Through this book, I hope you'll discover many adventures of your own as you travel your creative path.

Bill Jones

Pinch & Coil Techniques

PINCHED COIL VASES

by Cheryl Malone



Left: *Black and White Petal Sequence Vessel with Paisley Centre II*, 8½ inches (21.5 cm) in height.

Right: *Foliated Vessel with Beige Rim*, 8½ inches (21.5 cm) in height.

Along with the exquisite diversity of the natural environment in which I live in South Africa, the analogies found between the coil-forming process and the growth patterns of plants continues to be my most important source of inspiration. Although I did not initially follow Fibonacci rhythms and phyllotaxies and logarithmic spirals, they all inform my work and the appreciation of the end result.

Deliberate Forming

The working process begins by continuously rotating and pinching while opening out a wedged 200-gram porcelain ball that fits into your palm. Be sure that the base remains thick enough to anchor the pinched form (figure 1). After pressing the pinched pot down on to a banding wheel, use a metal kidney rib to open out the form further and smooth the outside (figure 2). Additional coils are added and simultaneously pinched and folded

onto the inside surface of the vessel (figure 3). Using the left hand to pinch the coil up and the right hand to fold it down, attach the coil to the exterior wall surface (figure 4). The wall surfaces are again smoothed and the vessel is pinched upwards with the thumb and forefinger using both hands simultaneously until the vessel gains height (figure 5) and the coil becomes integrated (figure 6). My intention here is to achieve an even wall thickness throughout the form and to unify the coils making up the piece. Again, use the metal kidney rib to smooth out the form. The more the walls are stretched and smoothed, the more translucent the final vessel will be. Each coiled layer should dry sufficiently (not quite to leather hard) but still be slightly plastic before the next coiling cycle begins. This allows the vessel to be strong enough to hold each successive layer.

I often work on two or more pieces simultaneously (figure 7). I choose to work on a form from



1. Begin by pinching a small pot from a ball of clay, rotating it while pinching to keep the walls even.



2. Put the pinch pot on a flat surface. Open it out with a flexible metal kidney rib while supporting the outside.



3. After smoothing the outside, place a coil around the rim then pinch and fold it to the inner wall.



4. Use the left hand to pinch the coil up and the right hand to fold it down to the exterior wall surface.

my Petal Sequence Vessel series while also working on one from the Foliated Vessel series. Although each series is quite different, an interesting dialog and subtle resonance evolves between the vessels by working in this way, which would otherwise not occur.

Incorporating Colored Layers

The stratified colored layers (figures 7 and 8), are made visible by wedging dry measures of oxides (or commercial body stains) into the porcelain clay body prior to coiling. The color of the green band is achieved by adding a quarter teaspoon of chrome oxide and half a teaspoon of tin oxide to

400 grams of porcelain body. Wearing gloves and a mask, the two are wedged until fully integrated and plastic (makes about 4–5 coils). For the rim, $\frac{1}{8}$ teaspoon of black iron oxide is wedged into 200 grams of porcelain body (makes 3 coils). The colored coils are added to the vessel and incorporated just like the previous porcelain coils were added. Keeping layers visible and separate takes practice and patience (figure 9). To remove unwanted smudges or fingerprints of colored clay from the white areas of the vessel, use a sharp metal kidney rib to scrape the colored clay off of the surface, then use the same rib or a rubber rib to smooth the surface. After the last coil is added,



5. Pinch the coiled rim upward between your thumb and fingers to raise the height of the pot.



6. An integrated coil and raised rim. The wall should have an even thickness throughout.



7. Building two or more pieces simultaneously, adding coils to one while the other stiffens up.



8. Add stratified layers of colored clay coils using the same technique.



9. Blend the coils and leave an undulating rim, but smooth out any sharp edges.

smooth the rim to remove any sharp areas but leave the contour so it remains naturally undulating.

Finishing

With the building process complete, the pieces are left to completely dry. I then bisque fire the pieces to 1832°F (1000°C) in an electric kiln, after which the vessels are lightly sanded with silicon carbide sandpaper or fine sandpaper, to remove any roughness to make them ready for decorating and glazing.

2

Plates & Platters

FOOTED SLAB PLATES

by Liz Zlot Summerfield



Footed plate with underglaze, slip-trailed, and sgraffito decoration.

Handbuilt slab plates are a lovely addition to any potter's repertoire. They are versatile in use, and offer an open canvas to play with a variety of surface treatments. Although they only consist of two components, a slab and a foot, they are often loaded with pesky little problems. Here's a technique that is sure to provide you with a proud product.

The Issues

The weakest link in a slab plate is the foot. It's often uneven, off center, and unconvincing. A common technique is to add a coil, place the plate on a potter's wheel and throw it onto the slab. This often leaves a bump where the coils are joined and it has a tendency to crack. The fix to these issues is to create a foot ring and apply it as one cohesive piece.

Constructing the Plate

Starting out, consider keeping the plate shape simple: try a square, circle, or rectangle. Draw and cut out the shape of your plate on paper and make two copies of this shape. Save one to cut out the plate shape, and on the other draw a foot ring—this may take some experimenting as the size of the foot ring will alter the look and stance of the plate.

Cut out the foot ring by folding the paper in half, then cutting along your drawn lines. Once the paper foot is cut out, you'll be left with a stencil to help center the foot ring on the slab (see figure 1).

Roll out a slab large enough to trace around one plate template and one foot ring template. For smaller plates, I roll to a thickness of about $\frac{3}{8}$ – $\frac{1}{2}$ inch. This thickness alleviates warping during the drying and firing processes. After rolling your



1. Create a pattern, stencil, and foot ring out of paper. Trace and cut the pattern and the stencil on a slab.



2. Attach the foot ring and refine its form to eliminate any unevenness and help connect the foot to the plate.



3. Gently press down in the center of the slab to shape the plate. Rotate the plate and gently lift all four sides.



4. Use a slip from your clay body to create a raised line with a slip trailer. Allow the lines to dry.

slabs, it's important to run a rubber rib along the surface of both sides of the slab. This compresses the clay particles and removes any canvas texture from the working surface. Throughout the rest of the process, work on untextured surfaces such as drywall boards or a smooth fabric.

Trace the patterns with a needle tool before cutting them out with a knife. Hold the knife perpendicular to the slab and cut in one even motion (figure 1).

Applying the Foot

Place the stencil onto the cut out slab and trace the interior ring with your needle tool. This traced line will act as a guide as to where to place the foot ring and keep it centered (see figure 1). Since both the clay slab and foot ring are the same consistency and

very wet, you only need water to attach the foot ring to the slab. Brush water onto the slab and put the foot ring in place using the traced lines for guidance. Gently apply pressure with your thumb and index finger to affix the foot ring to the slab. Refine the finished foot ring to follow your aesthetic. Avoid using any additional water as you refine it and smooth just with your fingers. A rubber-tipped tool is useful in cleaning and blending the connection between the slab and the foot ring. The final step in applying the foot ring is to use a small roller to eliminate unevenness (figure 2). Leave the plate upside down until it's ready to be flipped and formed.

Shaping the Plate

Success in handbuilding functional forms is about knowing the correct timing to touch the clay. When



5. Apply 1–2 coats of underglaze then gently scrape underglaze off the raised slip-trailed lines to expose clay.



6. Carve subtractive lines using a sgraffito tool or sharp pointed tool.



7. Add accent colors by applying underglaze using a slip trailer or brush.



The completed plate illustrating how the foot ring becomes an essential element of the whole design.

the plate reaches soft leather hard, flip it over onto its foot and place it onto a small board. Next, place the board on a banding wheel. Place your fingers under the plate and your thumbs on top of the plate and gently press down in the center (figure 3)—you'll feel the foot ring under your thumbs. Press against the foot ring to create more depth in the plate. Use your fingers to gently lift the sides of the plate. Slowly work your way around the plate by spinning the banding wheel. Finally, look at the edges of the plate from eye level and make sure there is an even curve on all four sides. Gently cover the plate with plastic until it becomes stiff leather hard and appropriate for surface decoration.

Slip-Trailing and Carving Surfaces

When the plate reaches leather hard, it's at the appropriate stage to slip trail, carve, and apply un-

derglaze, if desired. To create a raised surface, but not a change in color, use a slip with a yogurt-like consistency for slip trail application (figure 4). Allow the lines to dry before brushing the entire plate with 1–2 coats of white underglaze. Once the underglaze is dry to the touch, take a metal rib and gently scrape it off the raised slip-trailed surface (figure 5). This exposes the red clay and accentuates the slip-trailed drawing. To contrast the raised surface, carve accent lines using a sgraffito tool (figure 6). Apply colored underglaze using a slip trailer or a brush for a small amount of accent color (figure 7). Allow the plate to slowly become bone dry under thin plastic to eliminate warping.

Once the plate is bisque fired, damp sponge to clean the surface before applying glaze. For brushing, apply 1–2 coats of glaze the consistency of skim milk with a soft moppy brush and fire.

Slab Construction

USING BISQUE-MOLDED SLABS

by Nancy Zoller



Using bisque molds both as templates and for texture allows you to easily create decorative forms

Making a vase from a bisque mold using your own designs, and adding textures and marks that speak to you personally, is a joyous adventure! Making impressions in clay never grows old for me. This technique continues to offer endless possibilities in my studio, as well as an avenue for personal discovery for my clay students. The first bisque mold served as a studio tool to make simple, utilitarian pieces such as platters, large and small dinner plates, small bowls, and the ever necessary soap dish. This line of work was designed as a signature body intended as

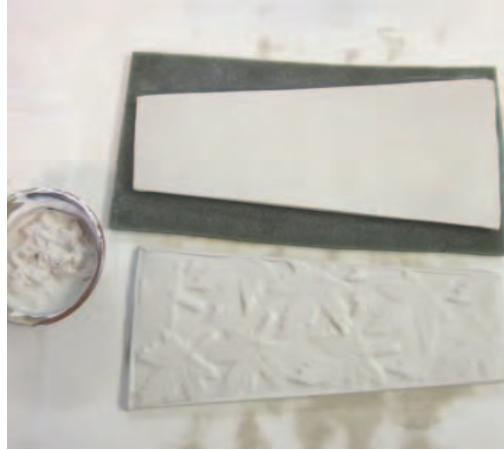
an offering to my wholesale galleries. To keep the pieces affordable, they are not labor intensive, while still appearing visually interesting and unique.

Making the Bisque Mold

To make your initial vase bisque mold, roll out a ¼-inch thick slab of clay. Stamp your design on the surface then determine the dimensions of the finished piece. First cut this pattern out of paper then transfer it to the rolled clay. Cut or impress a pattern in the clay that is ½-inch larger than your



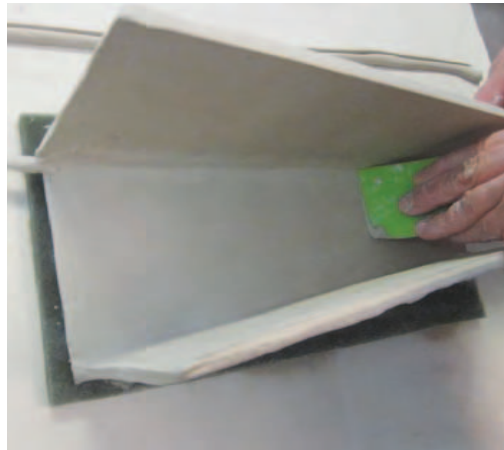
1. Cut out the four sides, then use a small roller to press the pattern from the bisque mold into each one.



2. Place one side face down on a piece of foam to protect the pattern, then join the other sides one at a time.



3. Cut a coil into four strips to create quarter-round beads to reinforce the inside seams.



4. After adding the coil, blend it into the seam and walls using a stiff rubber rib.



5. Extend the coil over the top corner of the two joined pieces to strengthen the corners of the top rim.

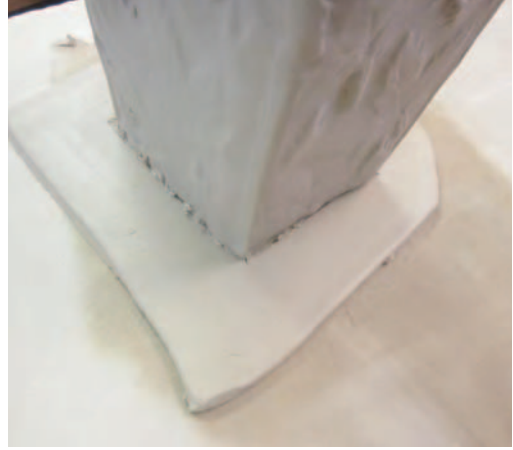


6. Score the edges, apply slip, then add the final leather-hard vase wall to the top of the two side walls.

Slab Construction



7. Reinforce and compress the outer seams using the rounded edge of a stiff rubber rib.



8. Place the vase right-side up on a small slab, mark the location for the bottom, then score and apply slip.



9. Cut around the outside of the vase, and use a stiff rubber rib to finish the edge.



10. Press the original stamp used to make the bisque mold into the rim and over the seams if desired.



11. Add a coil to the bottom of the vase to create a foot. Angle the two ends to create a strong, even join.



12. Carve out indentations in the foot using a fettling knife to make it visually lighter.

desired finished piece. The dimensions of my vase mold are 5 inches across the top edge, 11 inches along the sides, and 3 inches along the bottom. Allow it to dry slowly so that it does not warp, then fire the slab in your next bisque kiln.

Constructing the Vase

Roll out a large $\frac{1}{4}$ -inch thick slab of clay. Smooth it with a rubber rib, making sure there are no other textures on the clay. Place the bisque mold under the smoothed slab and roll over it vigorously with a small roller. Repeat this four times (figure 1). Flip the large slab over and cut out the forms with a needle tool.

Allow the slabs to dry to leather hard so that they are firm enough to stand up straight on their own. Place the first side (pattern side) down on a piece of foam to preserve the convex leaf pattern (figure 2). Score and add slip to the edge of both pieces, then connect them. At this point, extrude a $\frac{1}{2}$ -inch coil of clay. With your fettling knife, cut the coil in half and then in quarters (figure 3), giving you a lovely 90°-angled, quarter-round piece to place in

the inside corner of the two joined slabs.

Place something behind the upright slab as you connect it to the bottom piece to provide support as you add this coil. A brick or a 4×4 piece of wood works well.

Smooth the coil evenly along the seam and blend into both slabs, reinforcing this interior connection. I like to use a flat-edge wooden tool, finishing with a firm rubber rib to finish the seam (figure 4). Repeat this on all inside edges while constructing. Extend the coil over the top corner of the two joined pieces (figure 5) to strengthen the corners of the top rim where cracking is likely to occur. Repeat this step, joining all four pieces together (figure 6).

Connect the outside edges in the same manner using a rubber rib. I use a Mudtools green rib that I cut in half, using the small round side (figure 7). This small rib fits into small spaces.

To create the bottom of the vase, roll out a small slab of clay the same thickness as the vase form and place your hollow, four-sided vessel on top (figure 8). With a needle tool, mark a square piece outlining the bottom, leaving a $\frac{1}{8}$ -inch overhang on each side. Score and slip the bottom piece as well as the vase body and attach them. Use a rib tool to move the extra clay up and over the outside of the vase bottom (figure 9).

At this point, I use my leaf stamp to enhance the top rim and portions of the side edges of the vase, adding a concave leaf design (figure 10).

Allowing the vase to firm up a bit, extrude another $\frac{1}{2}$ -inch coil. Add the coil to the bottom, creating a raised foot (figure 11). I like to carve the foot (figure 12) then stamp it with my original leaf stamp to give a sense of continuity, visually connecting the body of the vase and the foot. Adding a foot gives you a place to play with different designs. A foot also gives you the opportunity to glaze part of the bottom of the vase.

As a finishing touch, I like to slip trail over portions of the raised leaves adding another dimension to the clay's surface.



Handbuilt soft slab cup features relief decoration created using bisque mold template.



Bill Jones received a Bachelor of Fine Arts in studio ceramics from The Ohio State University, and operated a pottery studio during the 1970s. He joined the American Ceramic Society in 1997 to serve as editor of *Pottery Making Illustrated* as well as manage the Ceramic Arts Daily Book program. He currently lives and works in Gambier, Ohio, where he continues to edit ceramic art handbooks and operate Pine Row Studio with his wife, Pamela.

If you enjoy handbuilding, then *Handbuilding Techniques* is one book you will definitely want in your collection. This Ceramic Arts Handbook brings together the best techniques, tips and projects from more than two dozen experts published in *Pottery Making Illustrated* and *Ceramics Monthly*.

You'll discover how to make challenging pots from coils, create plates and platters with a twist, design and use complex templates, and construct functional pieces from both soft and leather-hard slabs. And, when you mix and match techniques to suit your own style, the possibilities are endless.

Illustrated with hundreds of step-by-step images, *Handbuilding Techniques* gives you all the how-to information you need to explore new methods and expand your skills. Written for intermediate to advanced potters, this book promises to move you out of your comfort zone into a world of inspired creativity.



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