pottery throwing tools



a guide to making and using pottery tools for wheel throwing

MKM Pottery Tools

This special report is brought to you with the support of MKM Pottery Tools

Pottery Throwing Tools

A Guide to Making and Using Pottery Tools for Wheel Throwing

For many years potters had to make their own tools because commercial tools were just not available. That's all changed today as many manufacturers make a wide selection of tools to fill most of the pottery throwing needs for ceramic artists. However, for the potter with special needs or who wants a special tool, making your own tools is both creative and fun—plus you get tools that may not be available anywhere else.

How to Make and Use Bamboo Tools

by Mel Malinowski

There's a nostalgia for making handmade tools and bamboo is one of the best materials for making long-lasting durable pottery throwing tools. The material is easy to shape and readily available.

How to Make Ergonomic Pottery Throwing Sticks

by David Ogle

Pottery throwing sticks are a potters best friend when it comes to throwing tall, narrow or closed forms. Held in the hand, these versatile tools can reach places no hand could touch. And if you can't find ones to buy that work for you, David Ogle shows you the step-by-step process for making your own.

How to Use a Throwing Stick

by Ivor Lewis

Pottery throwing sticks are hand-held tools that are a potter's best friend when it comes to throwing tall, narrow or closed forms. These versatile tools help you extend your reach and help you thin, develop, and refine a form. And, if you can't find throwing sticks to buy that work for you, David Ogle shows you the step-by-step process for making your own.

How to Select and Use Throwing Ribs

by Bill Jones

Even though our fingers are pretty good throwing tools, there are times when a throwing rib just does a better job. These tools are not complicated and offer a lot of versatility for the beginning potter to the seasoned expert.

How to Make Custom Hardwood Ribs

by Robert Balaban

Making your own ribs gives you a way to create truly unique pieces on the wheel. You can make unusual profiles of any length and contour using exotic woods if you wish. The possibilities are endless and Balaban shows you the basics to get started.

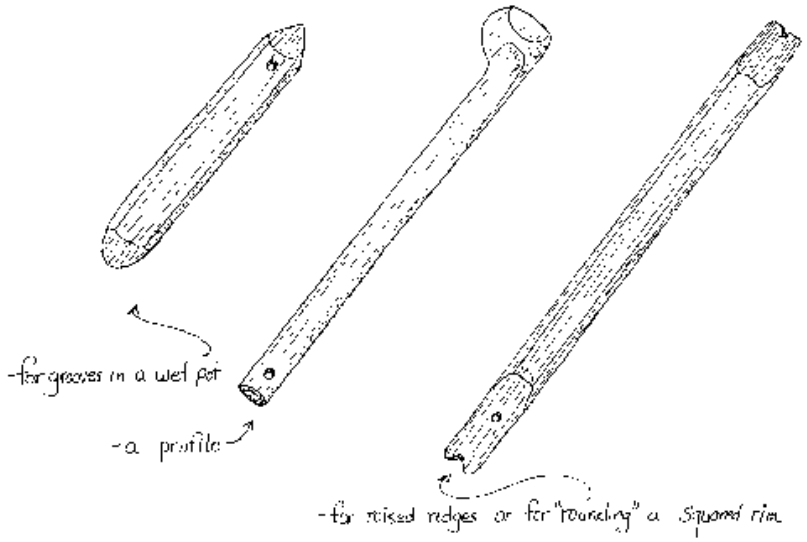
All About Throwing Gauges

by Bill Jones

If you want to throw pots that are the same height and width, then you need a throwing gauge. This handy tool can be set to measure both dimensions at once and it's simple to use. you only need to decide which style—Western or Japanese?

How to Make and Use Bamboo Tools

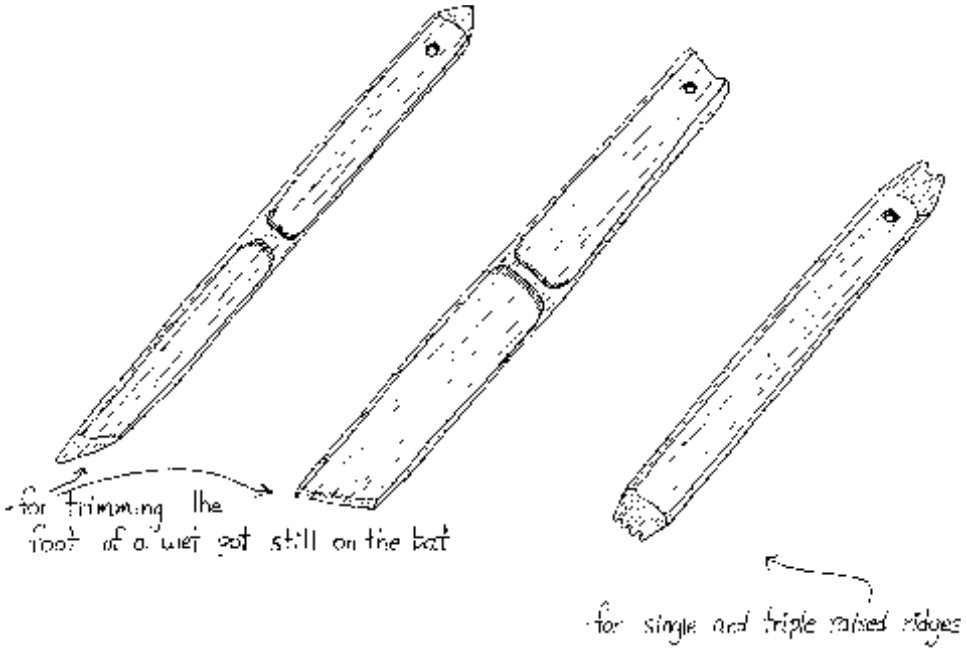
by Mel Malinowski

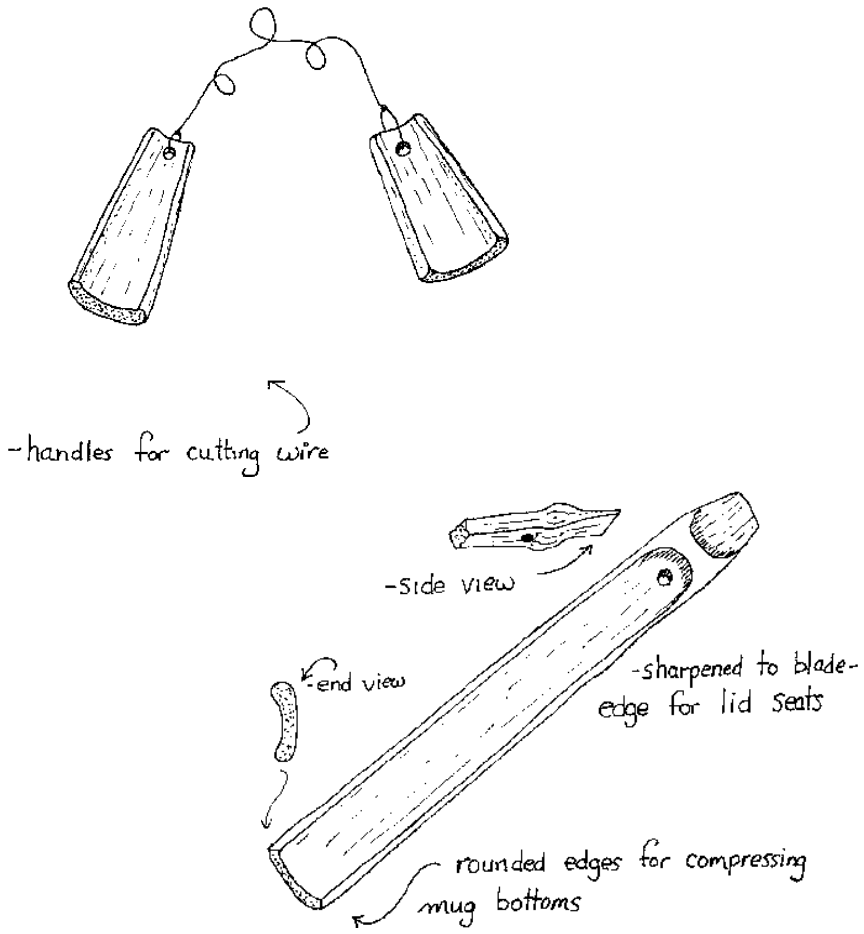


Most potters, are drawn to their craft because of the inherent simplicity of taking a piece of nondescript, unformed clay and making from it any one of infinite possibilities of shape and function. There's something pleasing in that those possibilities never go away, never lessen in spite of the passing of the years, or the intricacies of glaze recipes, firing schedules, kiln repairs and tax forms. Simply put, it's good to work with basic things with basic talent to make basic things.

This is increasingly true in our modern age as more and more become hands-off—at a distance, remote and too often machine-made and machine-controlled. There is a nostalgia in handmade things that causes you to want to reach back into the past for the simpler tools and the simpler ways of getting things done. It was this feeling that drew me to handmade bamboo tools.

I've always been attracted to the Japanese traditions, in pottery, philosophy and martial arts. In my studies, I often encountered the Japanese high regard and universal appeal of humble bamboo as a tool. It's used for everything from chopsticks to fans to scaf-





folding, rivaling skyscrapers in lashed-together height. In many books and films on Japanese potters, I often saw bamboo tools being put to use so I thought that it was time for me to give bamboo a try myself.

There's an inherent danger in reaching back into the past for traditional ways and tools. Often, these old items, while warmly nostalgic to use, are simply not up to the standards of modern materials. In other words, there's often a very good reason for change and that reason is usually improvement or greater ease of doing things.

Beethoven, you can be sure, would have used a synthesizer if he had had one. And how about Shakespeare? I am sure that he would have loved to use my computer. Still, I liked the idea of using bamboo, and gave it a try. Now, I'll never use anything else. So far, all my basic tools have far exceeded my hopes and expectations.

Bamboo is actually a grass and, as a result, has a long, running "grain" that makes for an incredibly durable and flexible material. With a sharp knife, bamboo can be readily shaped and will hold an edge that stands up to heavy usage far beyond most woods. It's also far superior to wood in terms of its water-resistant features. I've often left these tools standing in my water bucket for weeks at a time, and they never become soft, waterlogged, cracked or warped.

One final point: Bamboo isn't as readily available as most woods. There are, however, a couple of sources you can try. For smaller tools, at least, check at a local greenhouse or crafts store. You should be able to find thin bamboo in lengths of 5 to 6 feet and with a diameter of ½ inch or so. A search online will also net many sources.

How to Make Ergonomic Pottery Throwing Sticks

by David Ogle

Examples of egotes (Japanese throwing sticks).

Being a sculptor as well as a ceramic artist, I'm familiar with all manner of wood and metalworking tools. I've made the majority of my own ceramics tools over the years of working with clay because in the early days (the 1960s) there weren't nearly as many choices of commercially-produced tools as there are today. When you wanted a "pear corer" trimming tool, you went to the local hardware store and purchased a real pear corer. If you wanted a modeling tool, you just got a piece of hardwood scrap and made one.

Another reason for making your own tools was that the tools that were available might not have been "just right" for the forming, carving, trimming or whatever task was at hand. So tool savvy ceramists just modified or made entirely new tools to suit their needs. Most of the tools available from the ceramics tool manufacturers today, potters and sculptors have invented and made at one time or another over the years.

Most recently, I've been working with saggar-fired narrow-necked porcelain bottle forms. I've always made my own pottery throwing sticks (egotes), also referred to as Japanese throwing sticks. The pottery throwing sticks available from the pottery suppliers were always too cumbersome for making the tight and narrow curves and shoulders of my narrow-necked forms.

My first attempts at curved pottery throwing sticks were very time consuming and required a lot of meticulous work for forming and sanding the rounded ends. Through experimentation, I discovered an easier method for creating these tools with "ball" ends that simulate the shape of a fingertip.

Tools

I make several variations of the pottery throwing stick, but the one illustrated at the bottom of the photo can be made with readily available simple tools and materials. The tools needed are simple—they include a scrap piece of ¾-inch hardwood (maple preferred, but a close-grained hardwood such as walnut, cherry, birch, or even pear wood can be used). Also, two ¼×2-inch hardwood dowels, a saber saw (band saw, if available, makes cutting out the form much easier), a half-round rasp, a round rasp (sculptors wood rifflers make rounding wood easier), a flat rasp, coarse and fine sandpapers, a 6-inch

CAUTION:
Follow all safety instructions when operating power tools!

Tools and supplies needed to make a curved, narrow-neck egote are common and easy to locate.

piece of ½-inch PVC pipe (used as a contouring sanding block), epoxy (or any waterproof glue), and hardwood balls (½ inch and 1¼ inch, available at local craft, hardware stores, or mail-order woodworkers catalogs). The balls may be wooden beads or drawer pulls. Not shown are a drill and a ¼-inch drill bit.

Procedure

Start by tracing the natural curve of your hand as if it were in the shoulder forming position (*figure 1*). Sketch a corresponding curve leaving equal amounts of extra material on each side of the ends (see dotted lines) to facilitate drilling the holes for the dowel rods (*figure 2*). Draw intersecting lines to find the centers. Cut out the curved form with a saber or band saw.

Mark the center with the awl and carefully drill through the center with the ¼-inch drill bit, about ½-inch deep (*figure 3*). Wooden balls intended to be used as beads often have ¼-inch holes predrilled all the way through. If not, clamp the ball in a vise and drill a ¼-inch hole through each one.

Trim off the excess wood down to the dotted lines on each end using a band saw or saber saw (*figure 4*).

Mix the epoxy according to the package instructions and fill the holes in the curved handle and the holes in the wooden balls. Insert the hardwood dowels and press the balls into place (*figure 5*). Make sure the joints between the balls and the handle are filled with the epoxy mixture.

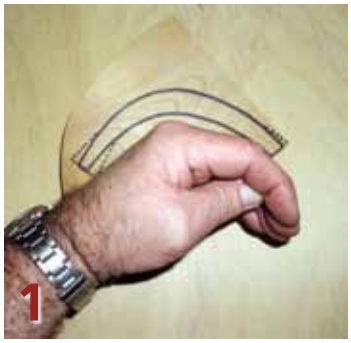
After the epoxy has thoroughly cured (when it is no longer tacky to the touch), cut off the excess dowel protruding through the ends of the balls. Begin shaping and rounding the handle with the rasps (*figure 6*).

Using the coarse and fine sandpapers, smooth the tool. Use the round rasps and sandpaper-covered PVC pipe on the concave side and the flat rasps and a flat piece of sandpaper covered wood on the convex side until the tool feels comfortable to the touch (*figure 7*).

Tip: Wipe the tool with a damp cloth to raise the grain and allow it to dry. Sand again and repeat this a couple of times for a very smooth finish.

You can finish the egote with an acrylic spray or soak it in mineral oil. Occasional sanding may be necessary after a few uses, but you'll find the tool improves with age after a little breaking in.

As a Ceramics Department founding member and program coordinator, David Ogle has taught both handbuilding and wheel throwing at West Valley College for the last 34 years. He has also maintained his own pottery studio, creating both functional and sculptural ceramic works. For questions or comments, you can reach him at brnzpnut@aol.com.



Trace the natural curve of your hand to create a tool that conforms to your throwing position.

Be sure to leave extra wood on each end of the egote to facilitate drilling the holes.

Find the center, cut out the curved form and drill ¼-inch diameter holes for the dowel connectors.

After using epoxy to attach hardwood dowels to wooden balls, test fit the parts, then trim excess wood from the ends on all four sides.

Epoxy the dowels into the drilled holes on the stick. Trim off the dowels after the glue dries.

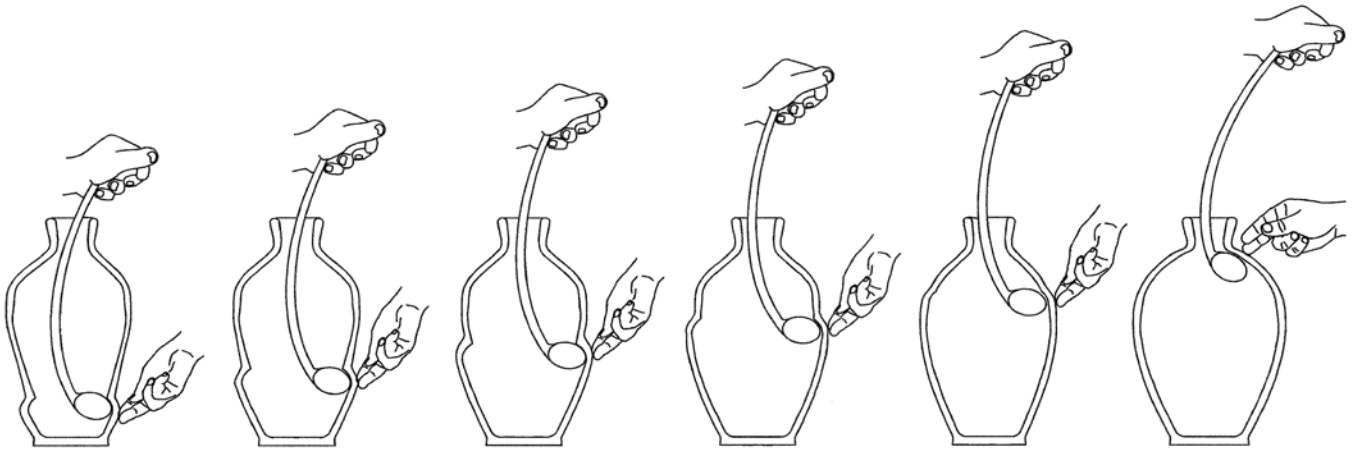
Use wood rasps to begin to rough out the final shape.

Use coarse then fine sandpaper to smooth the entire tool until it feels comfortable to the touch.

The egote extends your reach inside closed and narrow neck forms.

How to Use a Throwing Stick

by Ivor Lewis



Rotund pots with robust contours and broad shoulders blending into well-proportioned necks achieve a distinction reminiscent of ancient Greek styles. However, major problems may occur when throwing such forms due in part to the mechanics of the shape.

The first problem occurs when the shape sweeps out from the base and there is insufficient strength in the lower wall to support the weight of clay above it. This overhang is a weak point, and if formed early, the sloping clay has a tendency to fold or collapse. While buttressing the base by making it thicker or adding a concave contour adds strength, these solutions negate any intention to achieve a spherical or ovoid form with a bold convex contour.

A second problem arises when the opening at the top of the form is too small to put your hand inside to stretch and shape the clay wall. The solution is to use a throwing stick (see PMI, Spring 2000), which allows you to expand the girth of the pot, avoid slumping and to finish the shoulder, collar and neck with an opening just wide enough to accept the throwing stick.

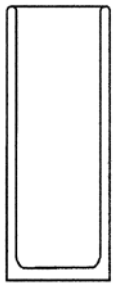


Figure 1

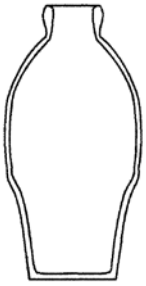


Figure 2

Begin with a well-wedged 6- to 10-lb. ball of clay. Throw a tall cylinder about three times higher than it is wide (*figure 1*). The walls should be relatively thick and uniform from top to bottom, and you should be able to get your folded hand inside and reach the base.

Draw the clay up to make a rounded shoulder using the inverted trumpet bell technique (*figure 2*). Remove excess water from the inside of the base, then collar the top to leave an opening just wide enough to insert the end of the throwing stick.

Hold the stick firmly in your left hand so that its head faces to the right (assuming your wheel turns counterclockwise). Practice moving the stick upward and outward and inward (*figure 3*), imitating in the air the track you anticipate to make inside the pot as you create your intended profile. Notice the shaft and its position in relation to the rim of the pot and think of the shaft passing though a narrow opening (see A).

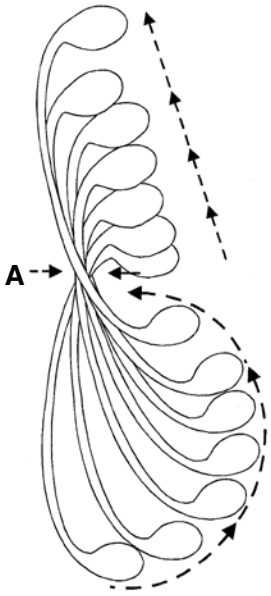


Figure 3

When you feel familiar with the weight and movement of the stick, wet one end to lubricate it, then insert it into the neck and lower the head to the bottom of the rotating pot. Let the head rest against the rotating clay right at the base, and, with the wheel turning between half and quarter speed, stretch the clay slowly outward against your right hand, which provides support (*figure 4*). Tip: Palm a wet sponge in your right hand to supply lubrication. This prevents your fingertips from snagging the clay.

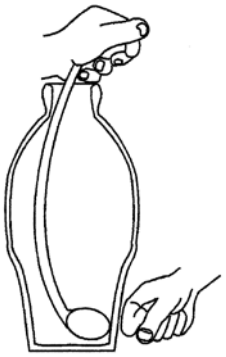


Figure 4

As the base of the wall moves outward, move the stick slowly upward until the profile merges with the curve of the shoulder (*figure 5*). Follow the new profile on the outside with only your right-hand fingertips or knuckle. Because the area of contact is small, drag is minimal and snagging, which might buckle the wall, is avoided. Try to keep the lubrication uniform inside and out.

Moving from the base and merging with the shoulder may need repeating several times until the two curves blend. If the pot has not achieved sufficient girth, stretch the belly wider on subsequent passes, but not too far (*figure 6*). Watch how the contour of your pot develops and pay attention to the shape.

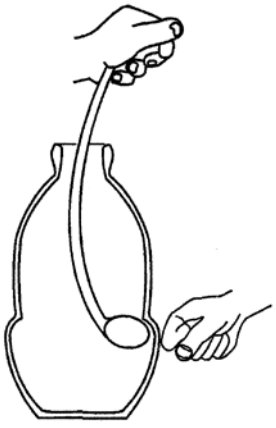


Figure 5

Because the preliminary throwing process is designed to retain a mechanically strong wall from top to bottom, it's possible to

retain height and prevent the belly, toward the foot, from sagging (*figure 7*). In addition, throwing a thick wall at the top of the pot ensures that there is clay to form firm shoulders. If the initial cylinder wall had been tapered, there would have been insufficient clay to form the shoulder. The pot would have collapsed inward and lost height as the clay was stretched.

After expanding the body to its final form and refining the profile, the collar of clay at the top of the pot can be drawn up and shaped (*figure 8*). Use a rib to assist in blending the contours as they move from convex to concave. If there is sufficient clay, decorative treatments can be added to give character and shape. Note: Slight, controlled, but efficient lubrication reduces the degree to which your clay absorbs water, further enhancing the strength of the clay. Minimum contact with the clay reduces the twisting stress so the pot is less likely to collapse.

While learning to use a throwing stick, you may experience setbacks and failures, but don't be disheartened! Size limitations are determined by the clay, your strength and controlling the moisture content. You may feel inept and awkward in the beginning, but as your skill develops through practice, you'll find that you'll eventually create pots of unquestionable merit.

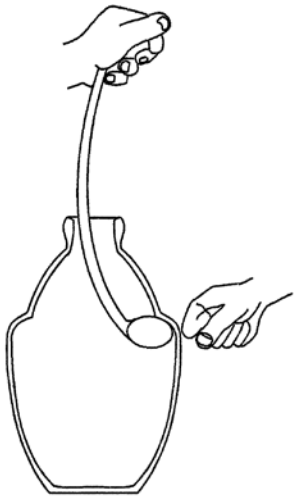


Figure 6

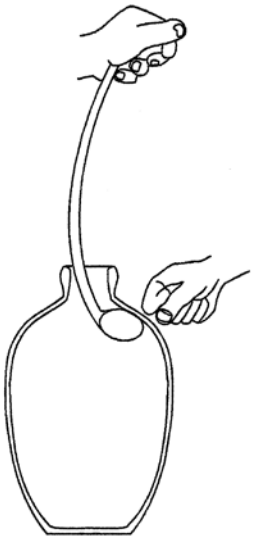


Figure 7

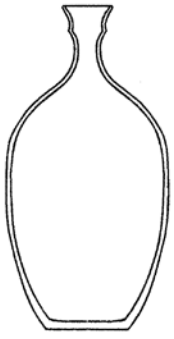


Figure 8

How to Select and Use Throwing Ribs

by Bill Jones

Even though our fingers serve as our primary throwing tools, there are times when a throwing rib does a better job. Ribs are a potter's best friend when it comes to defining profiles, wringing out water or adding decorative touches. In the beginning, actual animal ribs were used for this purpose—and hence the name—but now contemporary ribs are commonly made from wood, metal, and plastic.

Uses

There are many functions that ribs perform, which is one of the reasons they're so important. The most common uses for ribs are for manipulating profiles and removing throwing marks while compressing the clay and removing excess water. When throwing porcelain, it's often best to use a rib on one side of a pot and a sponge on the other, or even to throw with two ribs. The rib provides support, especially when making large voluminous forms.

Because of the variety of shapes available, you can find a rib to suit any profile you wish to make. Using a rib for the inside profile of a bowl can assure a continuous line from the bottom through to the rim. And using the same profile repeatedly helps in making multiples for sets. Specialized ribs with notched profiles can also be used on the exteriors of pots to add a decorative touch or even shape and refine the foot and rim.

When throwing large forms, too much water in the clay is a problem once you have the preliminary shape completed. How many times have you tried to get that final shape only to have the form collapse? To prevent this, remove all the slurry water using a sharp-edged metal rib to 'wring' the excess water out. This increases your chances of success and prevents distorting or collapsing the form. It also provides a way to get sweeping curves on bowls and platters.

Suppliers

Bamboo Tools

www.bambootools.com

Bamboo tools have been used in Asia for centuries. Durable, flexible, and lightweight, bamboo can be shaped with a sharp knife and will hold an edge that stands up to heavy use. Bamboo Tools offers a variety of curved, straight and profile ribs.

Chinese Clay Art USA

www.chineseclayart.com

Chinese Clay Art produces a set of five wooden ribs with different profiles and a set of three different sizes of rubber ribs. For the budget conscious or those looking to provide supplies in a classroom setting, these provide a perfect solution.

Kemper Tools

www.kempertools.com

Kemper makes eight wooden rib profiles that include the basic shapes required for opening, shaping, curving, smoothing, and trimming. Their flexible metal ribs are made for scraping, and a collection of rigid metal ribs can also be used as squeegees to remove excess water from pottery shapes.

MKM Pottery Tools

www.mkmpotterytools.com

MKM makes a variety of ribs out of wood, steel, and coconut. In both the wood and steel series, there are 22 different profiles of varying sizes, each with a specific purpose or combination of uses. Their coconut shell ribs vary in size, shape, and thickness but are durable and comfortable to hold.

Mudtools

www.mudtools.com

Developed by Michael Sherrill, Mudtools are made from a silicone plastic material in six shapes and in four different hardnesses from very soft to very firm. The softest ribs can be used even on rims like a chamois and the firmest are nearly as firm as wood. Mudtools also produces six stainless steel ribs in an assortment of profiles.

Tips

Getting the most out of using a rib is simple. While you can generally get by without using a rib for small bowls, medium to larger bowls really benefit from this tool. The best way to use the rib is to have the wheel rotating at medium to low speed (the bigger the piece, the lower the speed), work the rib up from the bottom of the bowl, curving the clay outward a little with each pass from the bottom to the top. With your right hand, always follow the position of the rib with gentle sponge or finger pressure on the outside of the bowl, supporting the clay. Continue with successive passes until the bowl takes the shape you want.

Remember, when using a rib to shape a form, always hold it at an angle to the surface so it slides smoothly over the clay rather than scraping or cutting into it. After trimming, you can use ribs to eliminate trim tool marks, but you'll need to be careful to hold the rib at an angle to prevent chattering and grog trails.

Metal ribs, while suitable for throwing, are commonly used in handbuilding for their ability to scrape clay and compress seams.

Getting Specific

After the first few weeks in pottery, you'll want to look at having more ribs on hand than what came in the basic pottery tool kit you started with. If cost is a factor, you can find reasonably priced wood, rubber, and metal ribs that can serve your needs.

As you advance, you'll find that specialty ribs for bowl interiors (from small to large and wide to steep), for making large or flanged plates and platters, defining corners, creating decorative profiles, and those designed to remove slip or trimming tool marks will make your work easier and expand your repertoire of forms.

A mixture of rigid and flexible ribs as well an assortment of metal, wood, and plastic ribs can also accommodate most any situation in both throwing and handbuilding. Luckily, even the most expensive ribs are affordable and will last a lifetime (or until lost or borrowed).

How to Make Custom Hardwood Ribs

by Robert Balaban

I've always looked for ways to improve the quality of my art by fashioning customized hand tools to facilitate the shaping my vessels. In these efforts, I've developed a simple system of constructing hardwood ribs for a variety of throwing purposes. This permits creativity to extend from the clay to the tools. Many studio visitors and students have enjoyed using or creating these tools and often leave the shop with a couple of customized ribs that make a lasting impression on their craft. Custom hardwood ribs are easy to create, and can be constructed in under one hour using skills that any potter can master.

Choosing the Best Wood

I've experimented with several types of wood, from the most exotic (mpingo, purple heart, bocote, and cocobolo), to mahogany and cherry, coming my way from a woodworker's scrap pile or from my own backyard. Maple, osage orange, black locust, and even mountain laurel also work well. Red or white oak and poplar are hard to use because they swell when wet and typically have large growth rings that make a consistent edge difficult to achieve. Usually any dense hardwood with resistance to water damage is appropriate. The best, cheapest, and locally available wood (not from the fragile rain forest) is American black cherry. The 5/16-inch thick stock is a good starting material. Slightly thicker or thinner material can be used depending on taste or task. If you buy wood, a couple of dollars of 5/16-inch wood can generate 10 to 20 ribs.

Generating & Transferring Designs

Creating different ribs for novel shapes or tasks can be done using paper, pencil, and a French curve or other guide or pattern to help generate that perfect curve or angle. You can also use computer drawing programs, draw free hand or simply copy more familiar rib designs and modify them to your needs or hands. I use a versatile French curve-style rib for working on the inside of vases and other forms. The first step in making this type of rib is to trace the template onto paper and secure it to the piece of wood.

Making the Rib

The next step is to cut the wood, using a hand coping saw, scroll saw or band saw (*figure 1*) and leaving the traced line on the rib to permit fine tuning later.

Caution: When working with power tools, read and follow all manufacturer safety materials before use. Dust from some woods can be toxic or contain allergens, therefore always work in a clean ventilated area with a respirator or dust mask for the cutting and sanding stages.

With the completed rough cut shape, the next steps are to finish the outline, taper the edge that will guide the clay, and generate a true sharp edge to create a smooth finish on the clay. The best tool to quickly accomplish all of these tasks is an oscillating spindle sander. It's a rotating cylinder of sandpaper that moves up and down with interchangeable spindles of different diameters that can be used to refine the various curves of your rib (*figure 2*). Alternatively, different size dowels with sandpaper wrapped around them also work, they're just slower.

Next, true the shape of the rib blank by sanding the rough edges using an 80-grit sandpaper. If you make a rib with an arc that's smaller than the smallest spindle available, or have a square or triangle in the rib, these will need to be hand filed. For the French curve rib, make a groove using a $^{5}/_{8}$-inch spindle to fit your index finger at the small end (see figure 2) and to allow for leverage on the clay when pushing the larger belly end to the inside of a pot. This customizes the rib to your throwing style as well as your specific grip.

Now create a tapered edge to guide the clay using the largest diameter spindle or a sanding block. This is done by approaching the spindle at an angle with the rib blank and then sanding it down to a 45° angle. Taper all outside edges of the French curve to accommodate all your throwing needs. The small circle on the end of the rib is also a very useful part, taper all

Trim and attach the paper using double-sided tape. Cut out the rib leaving the tracing in place.

Fine tune the finger groove at the small end and customize the overall shape using a spindle sander.

Sandpaper used alone, on a sanding block, or wrapped around a dowel for tight curves also works well.

Taper the edge of the rib by angling the piece as it is brought to the sander and move with long strokes.

Drill 5/8-inch finger holes where your fingers naturally grasp.

Smooth each hole then tilt the rib to mimic the marks made by your fingers.

The finished rib with customized curves and finger holes.

"Custom hardwood ribs are easy to create; they can be constructed in under one hour using skills that any potter can master."

edges here as well. Finish the taper on the larger structures, then make more severe tapers around any sharp features to help guide the clay through tight areas. Then round the all of the remaining edges for a better feel (*figures 3 and 4*).

To customize the rib even further, add finger holes to improve grip and leverage. Hold the rib as you would while throwing and mark the area around your fingers. (Clamp the rib flat to a backing board to drill the finger holes). The back up board ensures that the drill bit will not split out the back side of the rib (*figure 5*). Mark an outline of your finger's grasp with a pencil then taper the hole for a customized fit. Return to the spindle sander and insert the ½-inch sanding spindle into the hole. Sand the inside of the hole and then angle the rib while it is on the spindle to generate an oblong tapered hole that matches the angle of your fingers (*figure 6*).

Finally, sand the rib by hand using 200 then 400 grit sandpaper—only a couple of minutes with each grit is necessary. A good trick is to then wet the wood and dry it. This causes any wood grain that might rise with water to do so and then you can sand this off for a very smooth and resilient surface.

Finishing Work

The finish you use can vary. Using bare, untreated ribs is fine if they are made with a strongly water resistant wood like teak. Alternately, different oils and several different waterproof varnishes can be used to seal the surface. I have found that the oil-based Minwax Clear Shield finish or marine varnish is very strong and the clay slips nicely along this surface. Follow the oil manufacturer's directions on application and appropriate drying times. Finishes will still wear off and need to be reapplied.

Using these techniques, you can make a rib, try it out on the wheel the same day, make adjustments, finish/dry it overnight, and have it ready for the next day.

Robert Balaban is a functional potter and teaches classes in his studio. He not only creates ribs from dead trees found in the woods, but he also specializes in creating safe glazes from the natural products in his gold producing backyard in Maryland.

All About Throwing Gauges

by Bill Jones

More than likely you'll get to the point where you'd like to throw multiples of an object. Getting work to look the same when making more than one of an item takes a bit of practice because it's not as easy as it looks! To help assure you'll get some sort of consistency on your next set of mugs or bowls, you need a throwing gauge—a way of keeping track of the measurements from the first piece to the last. There are several options for throwing gauges based on designs from both eastern and western cultures, as well as ad hoc solutions that use items around your studio.

The Western Pot Gauge

Production potters in Europe and America have used throwing gauges for centuries. These usually consist of an adjustable arm on a metal or wooden stand. The arm adjusts in and out as well as up and down for both diameter and height measurements. An example of the Western pot gauge is the Fulwood Measure (*figure 1*), which features a hinged pointer that breaks away when the clay touches it. Another variation, though not as fully adjustable, can be made from a wood block base drilled at intervals with holes that dowels can slip through. Several dowels can be used at the same time for more complex forms (*figure 2*).

The Japanese Gauge

The Japanese developed a throwing gauge for making duplicates that measures the inside dimensions of a form, unlike the Western gauges mentioned above, which measure the outside dimensions. The tombo (which means dragonfly in Japanese) works well for throwing matching cups, mugs and bowls. Shaped like a lowercase "t," it consists of a thin vertical piece of wood or bamboo that has a small hole or holes bored through it to accept a stick or dowel. The tombo is held by the top of the vertical stick. The length of the horizontal stick represents the diameter and the vertical length below this stick measures the depth of a vessel. The disadvantage of tombos is that they're not readily adjustable. On the other hand, they are relatively inexpensive (and even easy to make), so potters usually have several tombos in their collection. Another advantage is that tombos can be used for throwing off the hump.

Improvised

If you're just throwing a set or two, you can get by with an improvised tool. When height is not a factor, calipers, a ruler or a marked dowel work well enough to get plates and platters to the same diameter. If height is a factor, as when you're making cups, mugs and bowls, you'll need to take an additional measurement and keep track. You can improvise a basic throwing gauge that works for both height and width or throw a piece that you want to duplicate, then set a lump of clay that's taller than your piece on the wheel worktable and stick a dowel sideways through the clay, so it is perpendicular to your wheelhead at just the right height. Position the dowel so it just touches the rim of the piece you threw.

The Fulwood Measure from Kissimmee River Pottery (www.kissimmeeriverpottery.com) is an example of a Western pot gauge. When the rim meets the hinged pointer, it folds out of the way.

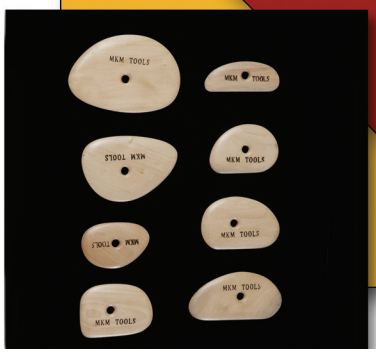
The tombo measures the inside depth and width of a form. Two sources of tombos are Bamboo Tools (www.bambootools.com) and Chris Henley (inset) at http://hominid.net/toolpage2.htm.

MKM Pottery Tools™

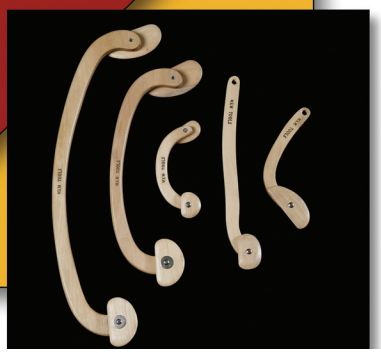
The shoulder tool

Loves big jar forms

The tall jar tool



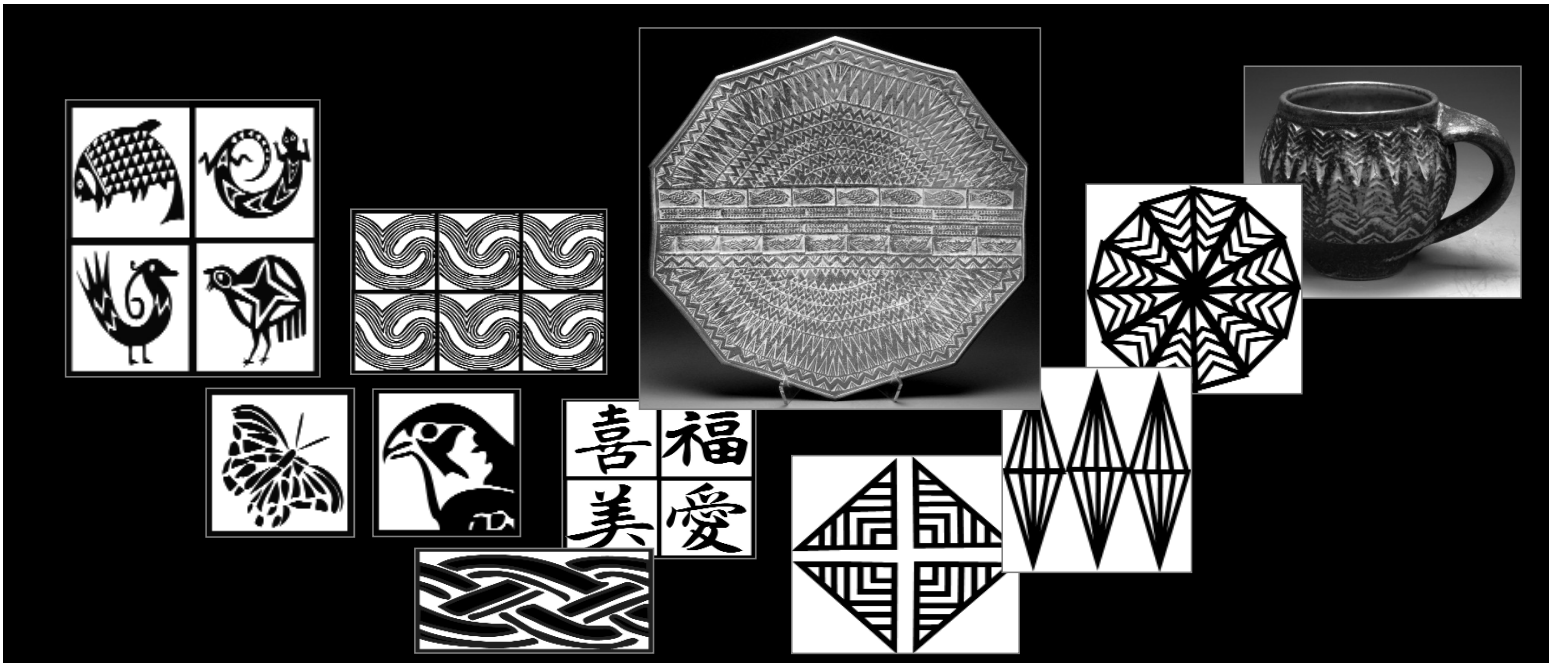
Interchangeable ribs



For different shapes and sizes

THROWING TOOLS
- Forms the wall as desired through very narrow openings.
- Rib heads can be exchanged with other ribs.
- Low friction rib heads allow for very thin walls.

MKM STAMPS4CLAY
- Many sizes, shapes, and designs.
- Made from oiled beech. Very Durable.
- Sizes designed to work together to make larger patterns.



Also available: MKM Decorating Disks™, Wood Ribs, Stainless Steel Ribs, and Wood Paddles.

MKM Pottery Tools - Email: mkmtools@sbcglobal.net • Tel: 920-205-2701 • www.mkmpotterytools.com