

Wood News

Published by Highland Hardware, Inc.

Serving Woodworkers

Number 9, Spring 1982

E.J. Tanagerman's Carving Seminars May 21-22 & June 5-6

E. J. Tanagerman, perhaps America's best known woodcarver, will be in Atlanta twice this spring to lead hands-on seminars on woodcarving at Highland Hardware. On Friday evening May 21, Tanagerman will begin at 7:30 PM with a slide presentation of woodcarvings he has photographed around the world, followed by the hands-on carving seminar from 9-5 on Saturday, May 22. He will return for a second weekend of teaching on Saturday and Sunday, June 5-6. Turn to page 10 for additional details.

Bob Kelley's Hands-on Tool Workshop July 24-25

Saturday and Sunday, July 24-25, Bob Kelley will conduct a practical hands-on exercise at Highland Hardware devoted to developing each participant's skill in the use of planes, chisels, and handsaws. Participants are invited to bring their own hand tools to use at the vises and workbenches in our seminar room. For details, turn to page 14.

NOW ORDER TOLL FREE 800-241-6748

We are pleased to announce installation of a toll free order number for our US customers outside Georgia. By dialing 800-241-6748, you can place your order immediately and at no cost, providing payment for your order is by MasterCard or Visa. The order line is open Monday through Saturday 8:30 AM to 6:00 PM and Sunday 12:30 PM to 4:30 PM.

At present, Georgia customers outside Atlanta ordering by phone must continue to call long distance to our old number 404-872-4466. Inquiries and questions about orders already placed should also be directed to the old number.

INSIDE This Issue

	Page
Workbench and Vise	3-5
Waterstone Sharpening	7-9
WATCO Finishing	12-13



Toshio Odate's Japanese Woodworking Seminar June 18-20

Toshio Odate will return to Highland Hardware June 18-20 for his second seminar here on Japanese woodworking techniques. We have pictured inside on page 6 photographs of Toshio at work during his first seminar here last November at which he explained and demonstrated a large number of Japanese woodworking tools, and then used them to build a small shoji screen. The May-June issue of *Fine Woodworking* contains a nine-page article by Toshio on building shoji, and it gives an idea of what it is like to experience one of his seminars.

More than just explaining and sharing techniques, which he does so aptly, Toshio adds to his presentation a glimpse of the philosophy and attitude of the shokunin, or Japanese craftsman.

The June seminar will begin with a two hour talk and slide presentation at Highland Hardware on Friday the 18th at 7:30 PM, an informal session which for a \$5.00 charge is also open to those not enrolled in the full seminar. Toshio will take the opportunity to communicate how his work, particularly his sculpture, has developed during the 24 years since he came to America from Japan, exploring the question "Why do artists have to change?"

The seminar will continue Saturday from 9 AM to 5 PM and Sunday from 9 AM to 3 PM. In addition to dealing with the Japanese tools, Toshio's emphasis will be on building a Japanese glass door, which the Japanese call appropriately enough: "Garasu-Do".

CONTINUED ON PAGE 6

World Woodworking Expo '82

The eyes of the woodworking industry will once again be trained on Atlanta August 18-22, 1982, as World Woodworking Expo 82 takes place at the Georgia World Congress Center. Displays from more than four hundred manufacturers of woodworking tools, machines, accessories and supplies will be assembled representing the current state of the art in woodworking around the world.

Highland Hardware will again exhibit its top tool product lines at the World Woodworking Expo, utilizing a large space and having a number of tools set up for live demonstrations. Show specials on some tools will be in effect during the 5 day show.

We will again offer the opportunity for free pre-registration for the show to Wood News readers and Highland Hardware customers. Pre-registration forms will be included with the July issue of Wood News, and additional forms will be available at Highland Hardware. Completing and mailing this card will permit free entry to the entire show, saving the \$5.00 admission fee charged at the door. Look for more information included in the next edition of Wood News.

NEW Makita Router 3600BR



Makita has introduced a new version of its heavy duty plunge router. The new model 3600BR is identical to the well-known 3600B except for its 6 3/4" diameter round base offered as an alternative to the rectangular base of the 3600B. While for most applications either model performs equally well, some people may find a round base more adaptable to certain jigs, or more convenient when following concave patterns. Others will still prefer the somewhat greater stability provided by the wide stance of the rectangular base of the old 3600B.

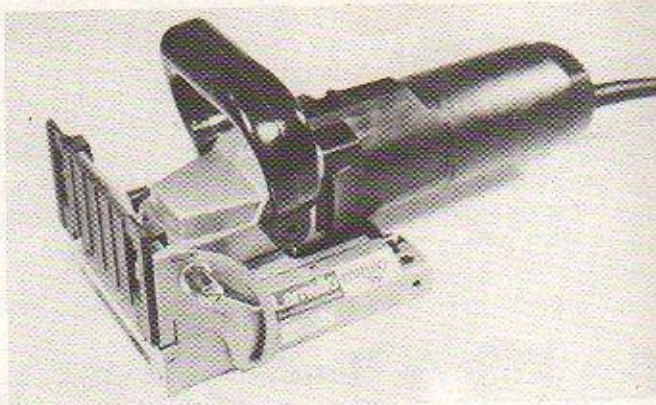
Both units use the same guide system consisting of a guide holder, straight guide fence, and ball bearing roller guide. The guide parts are available as a set for \$20.00 postpaid.

The 3600B router remains on special at \$209.00 postpaid. We are introducing the new 3600BR for \$199.95 postpaid for a limited time.

Lamello Minilo Top

The Swiss-made Lamello Minilo Top has finally been discovered by American woodworkers. After a few brief mentions in recent issues of Fine Woodworking magazine, the May-June 1982 issue devoted an entire article by Paul Bertorelli to the Lamello and one other machine used in "plate joinery".

Basically a special plunge cutter for preparing matching grooves for compressed beech jointing plates, the tool is setting about to revolutionize much cabinet and furniture production. At first thought by many to cost too much money for some obscure and specialized operation, the machine is now being recognized for its economy and almost universal application.



The two main advantages the machine offers is speed and ease of alignment to produce a perfect fit, a far cry from the alternatives of doweling or mortise-and-tenon joinery.

We have been offering the Lamello for the past year at \$580, but the manufacturer announced in April a price increase to \$625. We intend to honor our 1982 catalog price of \$580 until the end of August, after which we expect to raise the price. Judged by the writer of the Fine Woodworking article to be the better and more versatile of the two models available (also the more expensive), the Lamello was recommended for those contemplating production use.

For those who may use a plate jointer only occasionally, he made positive remarks about a lower priced competitor of the Lamello, the Elu plate jointer, which is made in England and due to be marketed in the US for the first time this summer. We are investigating distribution of the Elu tool, in addition to continuing to offer the Lamello.

Spiral Router Bits

Many people have asked us for spiral end mills, the type of router bits which Tage Frid recommends in his latest book for use in mortising with the Makita 3600B plunge router. We now have these High Speed Steel bits available in 1/4", 5/16", 3/8", & 1/2" diameter. Cost in the store is \$9.00, 9.50, 10.00, and 11.50 respectively, or \$36.00 for the set of 4. If ordering by mail, add \$1.50 for shipping.

©1982 Highland Hardware, Inc. Edited by Chris Bagby

Workbench and Vise

Although a number of tools are fundamental to woodworking, the heart of any shop is the workbench. The hand tools in your shop have no appropriate place to be used until you take the time to build a suitable bench—one that is solid, steady and level, and hung with a sturdy vise. Until you have worked for a while at a good bench, it is hard to realize how badly one is needed.

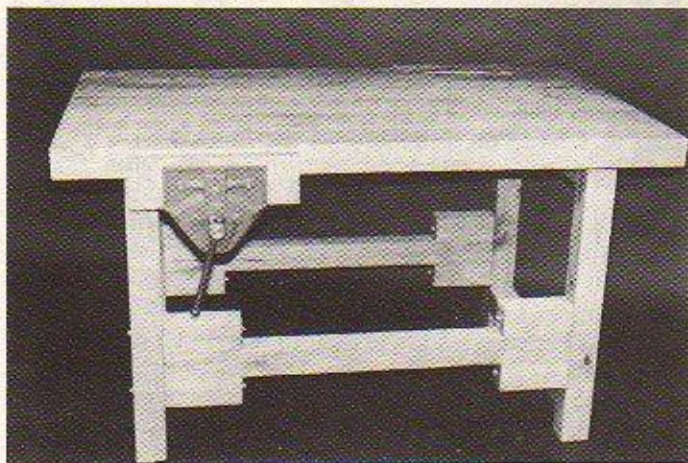
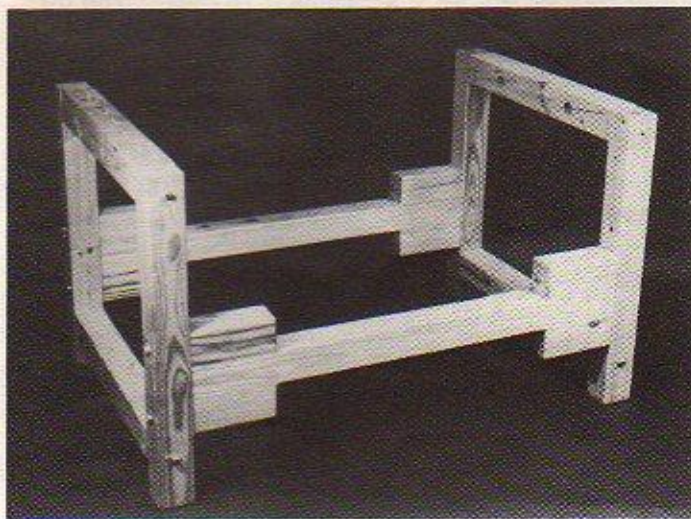
Buying such a bench can be very expensive. Buying an inexpensive bench can be very disappointing. However, for the price you would pay for a ready-made bench of average quality, you can have for yourself the satisfaction of building and owning one of the best.

We offer hard maple benchtops and the Record vises along with a plan for building a traditional English craftsman's bench much like those used in the shops of Gimson and the Barnsley's during the years of the Arts and Crafts Movement. Its powerful simplicity and massive design provide a foundation for careful workmanship meant to be achieved with a large measure of joy and satisfaction.

Of course, many other functional designs exist, reflecting the various schools of woodworking thought. The benchtops offered can be adapted to incorporate a number of alternate designs.

We have learned that Ian Kirby of Kirby Studios in Vermont is preparing a book on the workbench due for publication by the Taunton Press in the spring of 1983, thoroughly exploring the subject and offering guidance in the construction, use, and maintenance of the bench. We look forward to seeing the book, as precious little has been written on the subject in the past, and Kirby's book will be a major effort to fill this void.

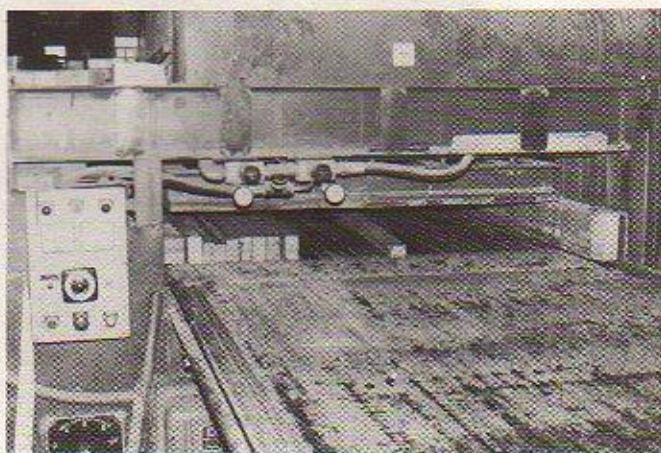
In the meantime, for those ready to start building a workbench now, we are offering here basic instructions for mounting one of the heavy duty Record vises, and information on ordering a premium quality maple top. Also, for those wanting to assemble a solid base to support a benchtop, we have available on request a plan for building the stout, simple structure illustrated here.



Benchtops

Benchtops are available from us in hard maple either 1 3/4" thick for light and medium duty use, or 3" thick for all manner of heavy duty use. Six different sizes of each thickness are available (from 2' x 5' up to 3' x 8') to fit the size of your shop and the scope of your work.

Our benchtops are produced at a commercial operation whose custom equipment and quality control permit us to offer a one year guarantee on the tops against any major de-lamination. Pictured here is the glue press, which automatically clamps the pieces of the top together while a high frequency electric charge is passed through the glue joints, fully curing the glue in a matter of minutes. After the tops are thickness planed, they are smoothed on successive passes through a three drum thicknessing sander, and sprayed with a thin coat of shellac before being packed for shipment.

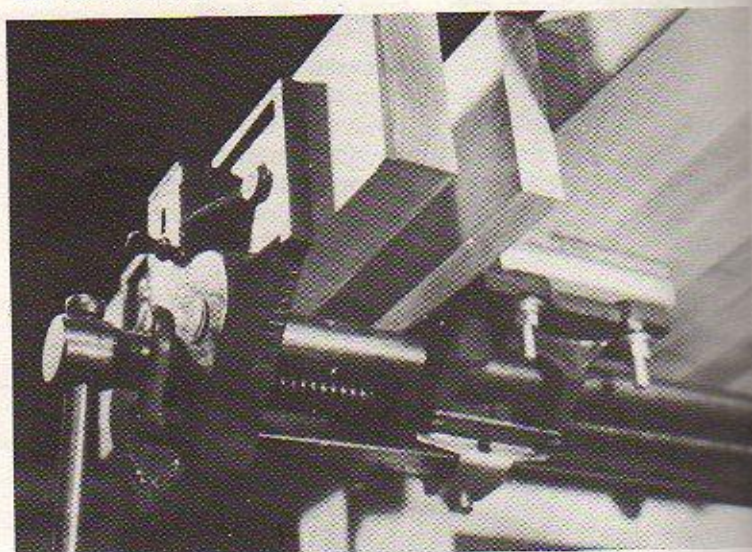


The real object of the bench of course, is to serve as a large clamping block. Thus, when ready to use, you want it to be rock steady and perfectly level. If the top is not first made perfectly true with a jointer plane, while working the eye will attempt to compensate for any slope, and vertical cuts will tend to be out of square. If any winding or warp should be left present, accurate planing is impossible. After the top is mounted to the under-frame and planed dead level, a penetrating oil is applied to seal and harden the surface. For about the first two years, trueness of the top should be checked every six months and any variation corrected by planing and the top resealed with oil.

Mounting the Record Bench Vises

The Record Ridgway bench vises available from Highland Hardware are tough, dependable tools that will give you a lifetime of service with a minimum of maintenance. As with most other fine woodworking tools, the most important step you take comes before you ever put the tool to use; precise, reliable work is possible only when the vise is securely and accurately mounted on your workbench, and wooden jaws installed.

The Record vises are available in several different sizes and styles, but the mounting is essentially the same for any model. Generally the vise is mounted at the left side of the bench, though if you work left-handed the right side might be more convenient when the vise is used in conjunction with planing operations. The fixed metal jaw is set into a mortise in the edge of the bench so that its face is flush with the edge, allowing the body of the bench to offer support for a wooden jaw used to protect your work. The upper edge of the fixed jaw should sit $\frac{1}{2}$ " or more below the top of the bench, both to protect the work and offer greater jaw depth.



RECORD BENCH VISES

	JAW WIDTH	MAXIMUM OPENING	WEIGHT	PRICE
WITH VISE DOG				
52D	7"	9"	20 lbs.	\$89.50
52½D	9"	13"	36 lbs.	115.00
WITH NO VISE DOG				
52E	7"	9"	19 lbs.	79.50
52½E	9"	13"	35 lbs.	105.00
53E	10½"	15"	38 lbs.	120.00

Add \$5.00 shipping charge when ordering vises by mail. Vises are delivered promptly from stock.

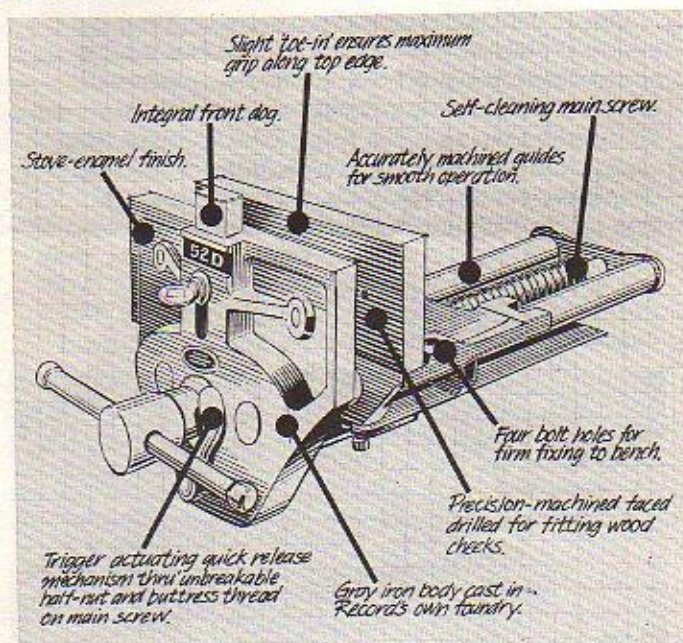
MAPLE BENCHTOPS

HEAVY DUTY TOPS	WEIGHT	PRICE
2 Ft. x 5 Ft. x 3" Thick	105 lbs.	175.00
2½ Ft. x 5 Ft. x 3" Thick	130 lbs.	225.00
2½ Ft. x 6 Ft. x 3" Thick	157 lbs.	250.00
3 Ft. x 5 Ft. x 3" Thick	157 lbs.	275.00
3 Ft. x 6 Ft. x 3" Thick	190 lbs.	300.00
3 Ft. x 8 Ft. x 3" Thick	250 lbs.	425.00

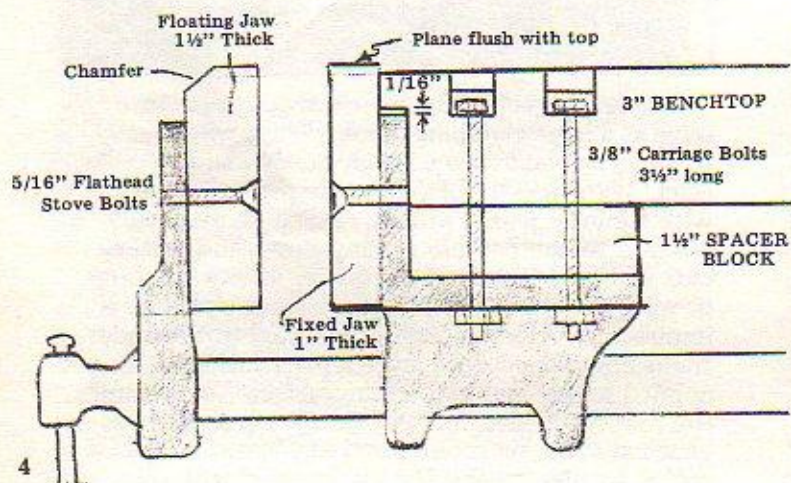
MEDIUM DUTY TOPS

2 Ft. x 5 Ft. x 1½" Thick	61 lbs.	125.00
2½ Ft. x 5 Ft. x 1½" Thick	77 lbs.	150.00
2½ Ft. x 6 Ft. x 1½" Thick	92 lbs.	175.00
3 Ft. x 5 Ft. x 1½" Thick	92 lbs.	200.00
3 Ft. x 6 Ft. x 1½" Thick	110 lbs.	225.00
3 Ft. x 8 Ft. x 1½" Thick	147 lbs.	275.00

Workbenches can be shipped by truck, freight collect. Allow up to 3-4 weeks delivery. Prices listed here on vises and benchtops are in effect through August 31, 1982.



MOUNTING THE RECORD VISE



Mortising the Benchtop

When deciding exactly where to mortise the benchtop, you must bear in mind that the vise's mounting plate and guide rods have to clear the bench leg, which means you must have either already built your base or at least have its dimensions very firmly in mind. Locate the left edge of the mortise as close as seems reasonable to the edge of the leg. The mortise may of course be chopped out by hand with a stout mortising chisel, and then pared carefully to its final dimensions, but it is very quick and easy to use a router, which is also quite precise. The operation may be performed freehand and the ragged edges cleaned up by paring, but it is probably just as easy to build a simple jig to guide the router so that you cut exactly the size mortise you want, leaving only two rounded corners to pare square. For the larger Record vises (52½ and 53) the depth of cut should be precisely 21/32". Mortising is most easily accomplished with the benchtop on edge.

The mortise should be very close to exactly the width of the fixed jaw of your vise; since wood doesn't shrink appreciably along its length a snug fit won't cause any problems later, whereas a sloppy fit might make it more difficult to position the vise during actual mounting. To determine the height of the mortise, add 1/16" to the height at which the fixed jaw will sit when mounted. The resulting gap between the top of the jaw and the edge of the mortise will accommodate any shrinkage in the thickness of the bench without forcing the benchtop out of true.

Unless your benchtop is 4" or more in thickness, you will need to insert a spacer block between the underside of the bench and the vise's mounting plate in order to position the fixed jaw correctly in the mortise. This block should be glued up from ½" thicknesses of medium-density fiberboard (barrelboard), particleboard, or masonite, all of which are highly resistant to crushing under pressure.

Plywood may be used if you don't have any of the above materials laying around, but be prepared to re-tighten your mounting bolts occasionally as the material gives way. Solid wood is to be avoided at all cost because of inevitable problems associated with its equally inevitable dimensional changes. Generally, a 1" thick spacer is suitable for a model 52½ vise being mounted on a 3" thick benchtop, and a 1½" spacer for the model 53E vise. Make the spacer block the same length and width as the mounting plate.

Boring the Top

Mark holes for spacer block directly from vise mounting plate (indicate for reference which edge goes against the jaw). Drill 7/16" hole through spacer block and use block to mark for drilling through bench top. When drilling through the benchtop itself, the first consideration is the 1" diameter counterbore in the top of the bench, about 1" deep. Two reliable methods apply:

a) Bore 7/16" hole all the way through, drift in 7/16" dowel to flush with top, (dowel must fit tightly!) then center spur of 1" counterbore bit in dowel, then knock out dowel with 3/8" steel rod. Or b) Drill through with smallest bit long enough for the job, then counterbore top with spur centered in small hole. Then drill all the way through with 7/16" bit.

Hanging the Vise

Use 3/8" carriage bolts (the small square section under the head prevents rotation when tightening nuts) long enough to give at least 1/2" below mounting plate. Tap bolt head down firmly from above to seat properly. Slip spacer block onto bolts, then slip vise into place. Use one or two heavy washers and a lock washer on each bolt before tightening nut. Tighten securely, then check vise for accuracy with relation to bench top—it should be dead flush with the edge and the jaws exactly parallel to top. If not parallel, remove nuts and install masonite shims between mounting plate and spacer. Tighten and check. When everything is right on, you're in business for the next hundred years.

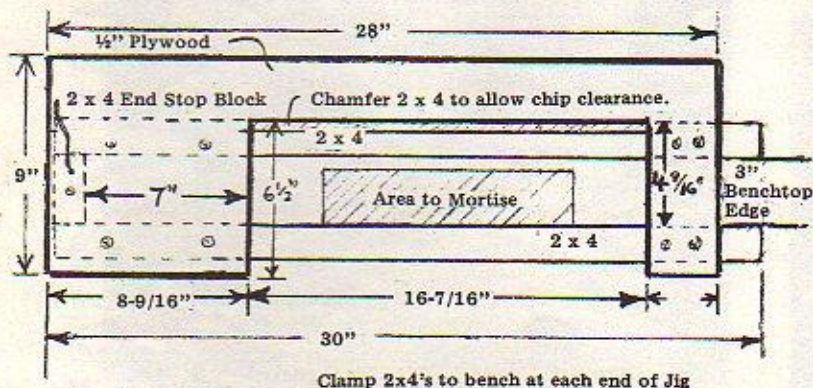
Mounting the Wood Jaws

For the larger vises (52½ and 53) use 1" thick fixed jaw and 1½" floating jaw. Jaw may be 6" wider than vise jaw. For smaller models thinner stock may be used, but only 3-4" wider than the vise. Stock must be heavy enough to resist bending under load. Cut jaws to length but leave about ¼" too high to allow for planing flush with bench top after installation.

To install jaws, use 1/4" dowelling centers in the screw holes in the vise jaws; position wooden jaws, and close vise. Countersink 3/4" by 1/4" deep; then drill through with bit by 5/16" flat-head countersunk stove bolts. Finally, mount wooden jaws, plane both wooden jaws flush with benchtop, chamfer outside edge of floating jaw, and get to work.

Router Jig for Mortising the Top

Jig for mortising for Record 53E Vise mounted on 3"-thick benchtop, using Makita 3600B Router with 1/2" straight router bit.

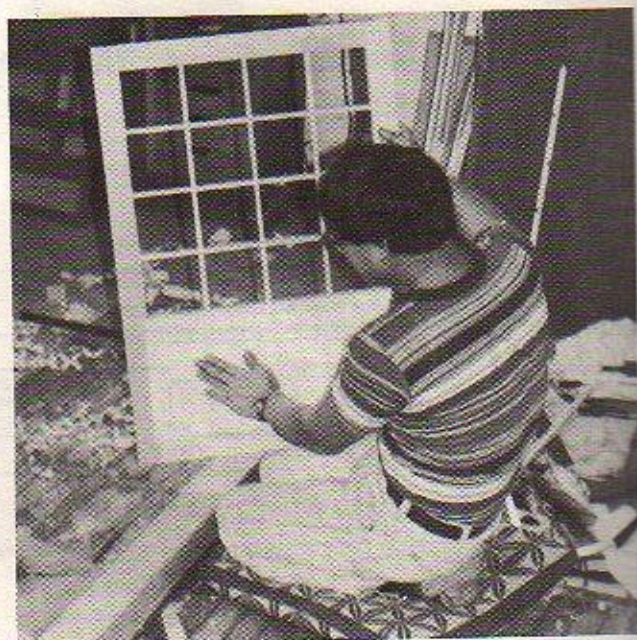
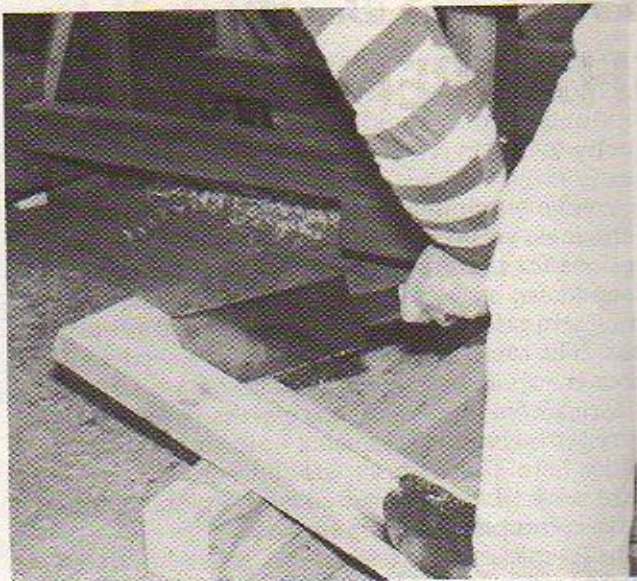


Japanese Tool Seminar

June 18-20 CONTINUED FROM PAGE 1

Pictured here is Toshio Odate at his Japanese tool seminar at Highland Hardware last November. Toshio has been sculpting and teaching art for most of the time he has been in the US, after serving an apprenticeship as a shoji builder during his youth in Japan. He has reached a point in his life where he finds it especially rewarding to share the elements of his Japanese background with American woodworkers who are interested. Besides having begun teaching seminars around the country, he is also working on a major book on Japanese woodworking due for publication by the Taunton Press around the fall of 1983.

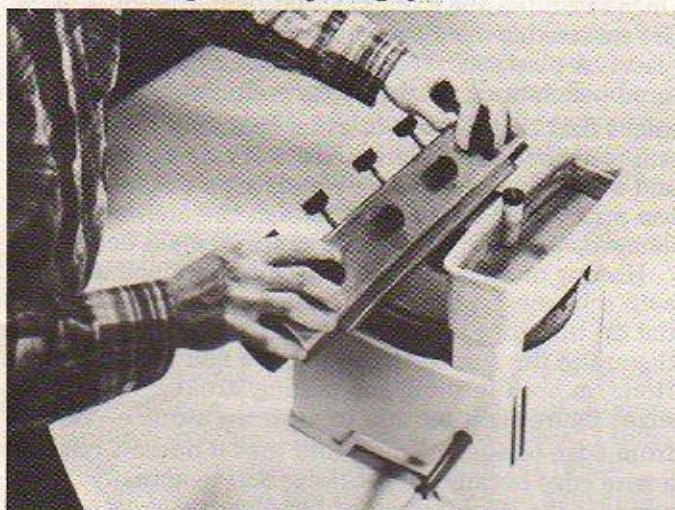
Cost for enrolling in the full seminar June 18-20 is \$60.00. A \$10.00 deposit will reserve a spot for you, with the balance payable by the week before the seminar. Use the enclosed registration form to enroll.



WATERSTONE SHARPENING

By ZACH ETHERIDGE

If you've purchased one or more of the Japanese waterstones, you've probably noticed that the instructions for their use are either non-existent or written in Japanese, which for most of us isn't much help. Fortunately, the stones are remarkably easy to use. The same is true of the Makita electric sharpener, which uses the same kind of water-lubricated stone for even faster results. I'll review the proper techniques for using both sharpening methods here. Both are superb in their own right, but are particularly well suited as complementary units in a complete sharpening system.



Makita 9820-2 Sharpener

The Makita electric sharpener is equipped for sharpening planer and jointer knives with great speed and accuracy. It will handle knives up to 16 inches long. The machine was designed for use with the relatively wide knives found on Makita planers. Because some brands of planers use knives too narrow to fit on the standard 9820-2 sharpener, we modify each 9820-2 that we sell at Highland Hardware to accept knives as narrow as 1/2".

We also offer an optional accessory jig (not manufactured by Makita) for use in positioning the cutting edge while grinding and sharpening chisels and plane irons.

Provided with the machine is a 1000 grit stone which I've found is quite suitable for very fast sharpening of even the dullest knives. Two other stones are available: a 60 grit grinding stone which cuts as fast as a conventional grinder, and a 6000 grit stone for polishing to an extremely fine edge.

The great advantage of this machine used as a grinder is its use of waterstones: the combination of sharp, fast-cutting abrasives found only in waterstones and the cooling action of the gravity-fed water lubrication which completely eliminates the danger of burning the cutting edge of a knife and ruining its temper.

For sharpening of any straight-edged cutting tool the sharpener's tool rest must be set with the left side about 1/8" higher above the stone than the right side. Thus there will be a relatively narrow area of contact between knife and stone at the right margin of the stone, assuring you of uniform, clean cutting. The stone will slowly be bevelled off at the outside margin, and this may be allowed to continue until the bevel is about an inch or so wide, at which time the stone should be dressed flat once again.

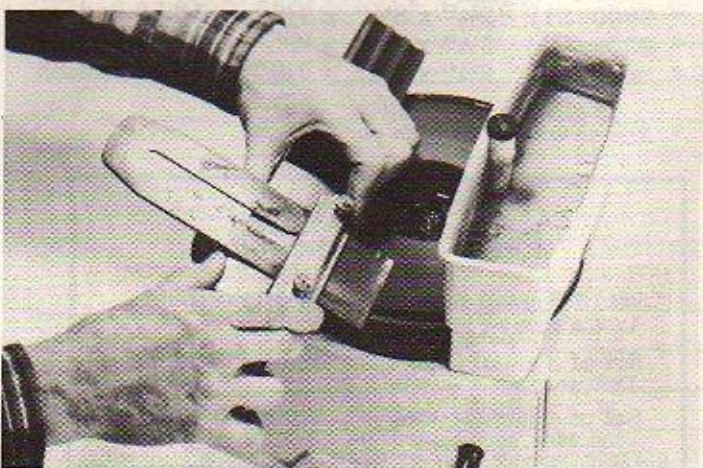
Water flow from the reservoir should be set so the surface of the stone just remains wet, without excessive flooding (which results in a wet face and muddy clothes for the user.)

The sharpener can be used without the toolrest and knife holder for hand-held sharpening of carving and turning tools (out-cannel only, of course). For this operation the inside half of the wheel should be used, saving the outside edge for straight work.

Recently I've begun to take advantage of the 9820-2 for grinding new bevels on my plane irons, and have been delighted with the results. I've never developed a tremendous expertise on the conventional grinder, and have had to resort to leaving a pretty fat edge on my irons in order not to risk burning them. That left me a lot of hand-held work to get the whole bevel down to a sharp edge, and the usual result was at best less than perfect. Now, however, I can confidently grind to a straight, sharp bevel without worrying about anything more pressing than keeping the water flow adequate.

I grind first with the 60 grit stone until a new bevel is established across the full width of the iron, then fine-grind with the 1000 grit stone to smooth the steel and minimize hand-honing time. The bevel ground in this manner is only very slightly hollowed, leaving as much mass as possible for strength and rigidity immediately behind the cutting edge.

The final steps of honing can be done either by hand with the 6000 and 8000 grit sharpening stones, or by machine using the 6000 grit honing wheel mounted on the 9820-2.



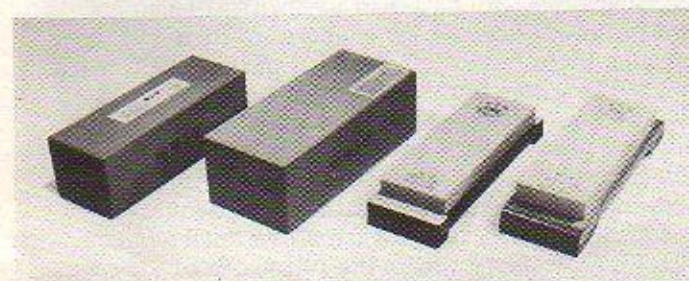
9820-2 SHARPENER	195.00 Postpaid
Accessory jig for chisels and plane irons.	10.00 Postpaid
60 grit coarse stone	30.00 Postpaid
Spare 1000 grit stone	30.00 Postpaid
6000 grit fine stone	40.00 Postpaid

HAND SHARPENING

People buying sharpening stones from us these days are choosing waterstones over oilstones by a ratio of more than 10 to 1. Why the massive and sudden switch from the trusty old Washita, soft, hard, and black hard Arkansas stones of days past to the newly introduced (to the West) Japanese waterstones?

The answer lies in the increased speed and quality of edge readily possible with the waterstones. If you maintain your waterstones flat and use them sequentially up to the finest grit, you achieve a superb mirror edge in a matter of minutes. This translates into less frustration and better results from your cutting tools.

With the arrival of our latest shipment from Japan, Highland Hardware has become one of the best sources in the country for a full range of waterstones, from a very coarse 700 grit stone the size of a brick up to the 8000 grit final finishing Gold stone.



The full line consists of the following grits and sizes:

* 700	3" x 8 1/4" x 2 1/4"	\$24.50 Ppd.
800	2 1/2" x 8" x 1 1/4"	11.95 Ppd.
1000	2 1/2" x 8" x 1 1/4"	11.95 Ppd.
* 1000	4" x 9 1/4" x 3"	29.50 Ppd.
1200	2 1/2" x 8" x 1 1/4"	11.95 Ppd.
6000 (S3)	2 1/2" x 7 1/4" x 1 1/2"	12.95 Ppd.
* 6000 (S1)	2 3/4" x 8 1/2" x 7/8"	18.50 Ppd.
* 8000 (G3)	2 1/2" x 7 1/4" x 1 1/2"	19.95 Ppd.
* 8000 (G1)	2 3/4" x 8 1/2" x 7/8"	38.50 Ppd.

* New arrivals not listed in our catalogue.

Save on Sets

Set of 2 small stones 1200 & 6000 S-3 Finish	24.50 Postpaid
Set of 3 small stones 1200, 6000 S-3, 8000 G-3	39.50 Postpaid
Set of 4 large stones 700, 1000, 6000 S-1, 8000 G-1	98.00 Postpaid

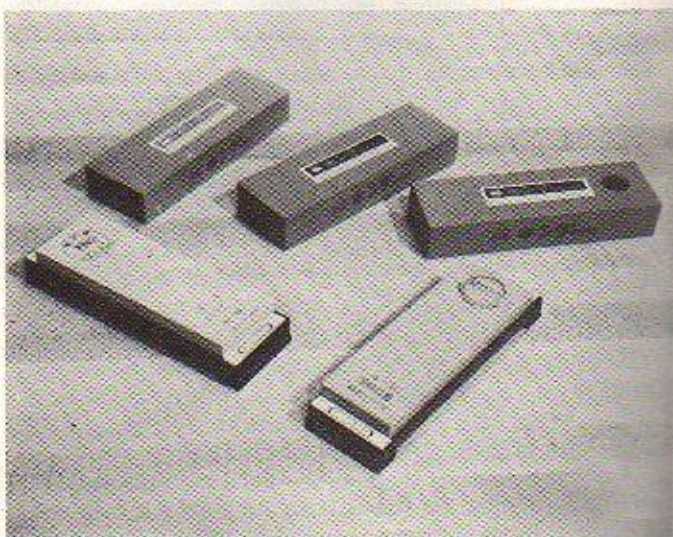
The Japanese waterstones and Makita sharpener described here are available by mail or phone order from Highland Hardware. Use the enclosed order form or (from outside Georgia with MasterCard/Visa) ORDER TOLL FREE 800-241-6748.

We're very pleased with the large new 700 and 1000 grit stones, which are so thick that they actually provide four working surfaces and a very long useful life. They are ideal for removing a lot of metal in a hurry, as when backing off a plane iron to make it dead flat prior to honing. The 700 grit stone is also excellent for grinding out nicks in a cutting edge or hand-grinding a new bevel.

All these stones should be prepared for use by immersion in water until they are saturated (20 minutes to an hour, depending on the size). The manufacturer recommends storing them in water as well—that is, not drying them out between each use, in order to avoid salt deposit build-up on the surface, particularly if you're using hard water. Once saturated the stones should be placed on a flat surface between two stops to hold them in place. A plastic-covered workbench with a tailored bench hook works pretty well, but you might find that a made-to-order sharpening bench will provide a more convenient working height and a waterproof surface. Waterstones are not less messy than oilstones, although the merits and demerits of muddy versus oily mess remain debatable.

Honing on these stones is performed much as with oilstones: place the bevelled edge of the tool flat on the stone, establish a comfortable grip, and then raise the rear of the tool just a hair (approx. 5°). Hone on both pushing and pulling strokes, with a slight figure-eight motion to wear the stone evenly from edge to edge. You'll find that it doesn't raise a wire edge because the abrasive action actually removes the steel instead of bending it over as on the oilstones. One light backing stroke is all that is required to complete the process.

Don't bear down too hard while honing. The sharp abrasives in waterstones will cut very quickly without a great deal of pressure, and you'll also avoid damaging the relatively soft surface. Rinse the surface regularly with clean water to continually expose new grit.



TECHNIQUES

When a good, clean and straight secondary bevel is established and you feel ready to move on to a finer stone, continue honing for a little while, adding water very sparingly so that you build up a slurry of loosened grit. This pads the cutting action and essentially provides an intermediate grit to ease the next step upward. Please note that both the finishing stones do have fairly delicate surfaces, and care must be taken to neither raise the tool to too sharp an angle nor to bear down too hard, or you'll find yourself gouging the stone in a rather severe way.

If you've dug a hole in one of your stones, or when you find them hollowed by a fair amount of use, they may easily be made flat again by lapping them on fine sandpaper backed by a piece of 1/4" glass. I start with 150 grit sanding screen, which cuts very quickly and doesn't load up with worn stone, and then finish the job with 220 grit wet-or-dry. Rinse thoroughly to remove any stray silicone carbide from the stone, and you're back in business. For very light lapping of the finishing stones to make sure you have a perfect surface, you may rub them face-to-face on a 1000 or 1200 grit stone which has been flattened as just described, again rinsing well afterward.

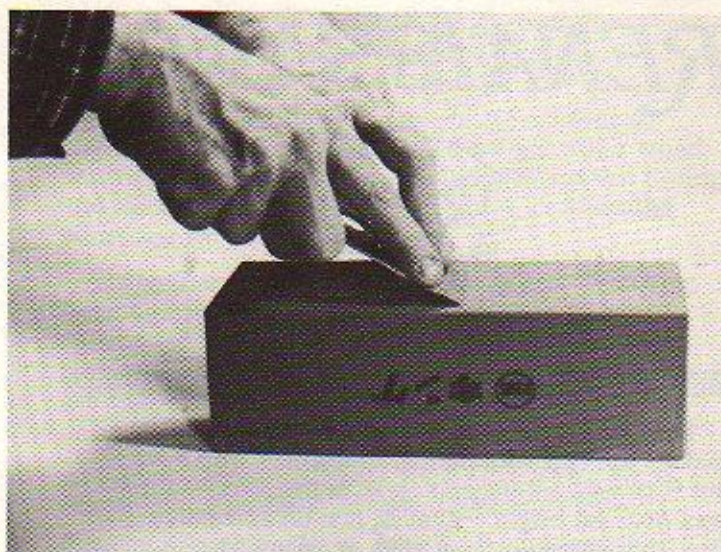
Now you may have been wondering about which of these many stones you really have to have to obtain a good edge. Generally, of course, you need a coarse, medium and fine stone—which you choose depends on your specific needs and purposes. I like the large new 700 grit stone very much for rough work, but you'll find the smaller 800 cuts almost as fast and is a bit more economical. From the 700 I proceed to the 1200 because that's what I have in my shop, though the 1000 might actually be a better intermediate step. You might think that jumping from 1000 or 1200 to 6000 will leave you a lot of work on the finishing stone, but that turns out not to be the case: in less than ten minutes you can go from the 9820-2 grinder to a razor edge polished to an almost unbelievable mirror shine on the 8000 grit Gold finishing stone.

Is the 8000 grit finishing stone really all that much better than the 6000? Absolutely. I wouldn't try going directly to the 8000 from a medium stone, but the improvement offered by the 8000 after already obtaining a beautiful edge on the 6000 is utterly astonishing. A plane iron honed on the 8000 will give you a better finish than you have ever seen on a piece of wood. That may sound a little over-enthusiastic, but when you find you can read the fine print in a legal contract reflected on the surface of a piece of walnut, I think you'll wax pretty enthusiastic too.

I think that covers the Japanese waterstones fairly well. If you have any questions that have gone unanswered here, or any tips from your own experience, drop us a line or give us a call—we'll be glad to hear from you.

HIGHLAND HARDWARE
1034 N. Highland Avenue, NE.
Atlanta, Georgia 30306

9



March 14

Highland Hardware
Atlanta, Georgia

Dear Sir:

I recently purchased upon your recommendation two Japanese sharpening stones. In accordance with the enclosed instructions, I have immersed these stones in water, and in accordance with paragraph 1, line 2, made a sharpening bench of wormy chestnut. I hope this is a suitable substitute as you will note that the Japanese recommend wormy 入木用石. I have also oriented the bench toward the rising sun; I have purchased a pair of Nippon sandals and have had Madelyn make me a suitable Kimono.

But before I attack the stone with my plane blade, is it absolutely necessary that I yell out "Tora! Tora! Tora!"?

Regards,
L. W. Colwell

ORDER FORM

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____

Enclosed is \$3.00. Send 1 year subscription to Wood News, your quarterly newsletter.

QTY.	DESCRIPTION	PRICE	AMOUNT
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Prices listed in Wood News No. 9 are valid through 8/31/82

Unless Postpaid, add 5%
Shipping (Minimum \$1.50,
Maximum \$5.00).

Sub-Total _____
Sales Tax (in Ga.) _____
Shipping _____

Visa/Mastercard Number _____
Exp. Date _____
TOTAL _____
Amount Enclosed _____

Cut here



RENAISSANCE®



Furniture Polish



The ebullient claims of this new wax's British makers are corroborated by craftsmen who have put it to use. Renaissance is "a micro-crystalline wax of fossil origin"—that is, it is an extremely fine, thin-spreading wax with excellent cleaning and polishing properties. It offers a very hard, durable surface for any fine piece of work, and is completely water, alcohol and smudge resistant. It may be used over any kind of sealer, oil, or varnish finish, or may be applied directly to unfinished wood when absolutely no color change is desired. This makes it a superb choice for dark woods such as some of the rosewoods which lose their character entirely under application of even the clearest oil.

A little wax goes a long way. The most experienced user we know says he applies the wax with a paper towel folded into a small pad, rubbing thoroughly over a small area at a time in order to assure a very thin, even coating. The wax may be buffed to any desired degree of gloss almost immediately after application. Three coats are recommended for maximum protection and visual gratification. (A note from one dedicated user: be SURE to spread the wax evenly in the thinnest possible coating; it's so hard when dry that removal of any too-thick lumps or blobs presents quite a challenge.)

RENAISSANCE WAX
230 ML CAN

\$11.50 Postpaid

Seminar Registration Form

Name _____

Address _____

City _____ State _____ Zip _____

Phone (Day) _____ (Night) _____

I wish to register for the following seminars:

Name of Seminar	Price
1. _____	_____
2. _____	_____
3. _____	_____

TOTAL _____

Amount paid, Deposit _____

Balance Owed _____

Cut here

Tangerman Carving Seminar

E. J. Tangerman, well known for his numerous books on the subject of woodcarving, will be in Atlanta May 21 and 22 and June 5 and 6. His slide presentation Friday, May 21 at 7:30 PM will include woodcarvings he has photographed around the world, including some from his recent trip to Japan. Discussion of these exotic carvings along with some recent ones he has done himself is sure to stimulate new ideas among carvers and would-be carvers who attend.

The seminar will continue Saturday morning, with an opportunity for participants to develop and experiment with knife techniques while undertaking a whittling project under Tangerman's guidance. The afternoon session which runs until 5 PM will move the participants on to low relief carving, and a project will be begun which the participant can continue working on over the following two weeks.

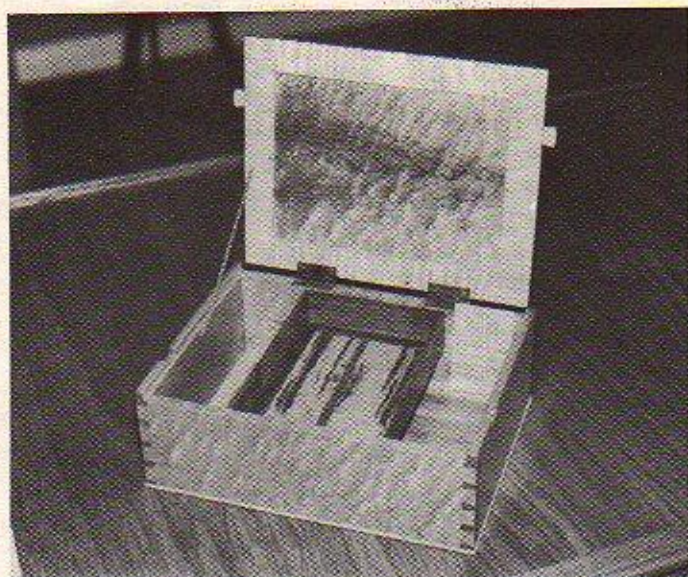
Tangerman will return to Atlanta on Saturday, June 5 (after teaching a two week session at the John C. Campbell Folk School in Brasstown, N.C.) to complete the seminar. Relief carving work done by participants during the two week break will be critiqued at the Saturday session which runs from 1—5 PM, and work will begin on a project involving carving in the round. The seminar will continue Sunday morning June 6 at 9 AM and run until about 2 PM.

The class is designed for both beginners and experienced carvers alike, as special project assignments will be based on ability, and individual attention given.

Although ample time will be given for instruction and demonstration, most of the seminar time will be devoted to carving, with the opportunity for direct feedback and guidance from the instructor. Participants should bring with them a carving knife and carving tools, including a parting tool, gouge and skew. Carving materials will be furnished by Highland Hardware, along with equipment for sharpening.

Carvers participating are invited to bring along to the seminar one or more carvings they have already completed, to share and discuss with other members of the seminar.

Although we encourage participants to attend both weekend sessions, you can enroll for either the first or second weekend alone. Cost of the seminar is \$20.00 per weekend, or \$35.00 for the complete two weekend event. (Admission to the May 21 slide presentation only is \$5.00 for those not registered in the seminar.) Because space will be limited, we encourage you to register now. A \$10.00 deposit will reserve a space for you, with the balance due the week of the seminar. Use the registration form enclosed.



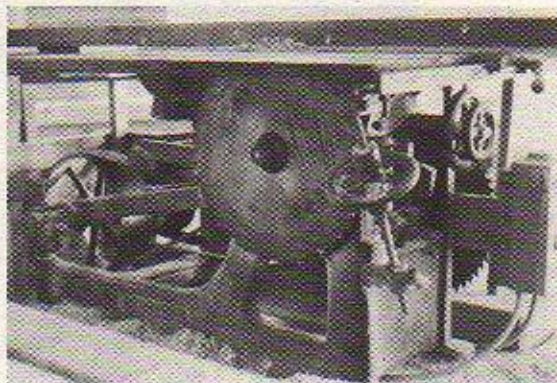
John McGee's "Little Box" exhibited at 1981 Woodworker's Guild Show

GUILD SHOW

The Woodworkers Guild of Georgia is sponsoring participation by its members in the Atlanta Decorative Arts Center (ADAC) Show May 6 and 7. This event which is open to interior designers and buyers from around the southeast at the ADAC facility on Peachtree Hills Avenue NE is a chance for excellent exposure for many of the furniture makers who are members of the Guild.

To participate in the show, Guild members must submit their work to a jury and win approval prior to the ADAC event. Of the pieces accepted by the jury, Guild members will select a "best in show" award during the exhibition at ADAC.

The Guild's first show of members' work was held at the Highland Gallery in June 1981. Plans are being made for another show, open to the public in the fall of 1982. For information on Guild membership, write to the Guild, care of PO Box 5592, Atlanta, Georgia 30307.



FOR SALE: 22" Tablesaw. "Big Otis", a magnificent machine by Fay and Egan with re-built ball bearing arbor, shown here with 22" carbide dado. (Extra blades hang from bracket on far side, lower right. Cost of the saw is \$1000.00.

Available also: 10 HP single phase motor, in excellent condition. Cost is \$500.00.

Contact Darry Wood, Hayesville, N.C.
Telephone (704) 389-6428.

LEARNING

In addition to the seminars we are offering at Highland Hardware, we know of several other woodworking learning opportunities coming up this Spring and Summer. For more information, contact the addresses we have listed.

We welcome information on other woodworking learning opportunities for publication in future editions of Wood News. Please send to Highland Hardware, 1034 N. Highland Avenue, NE, Atlanta, Georgia 30306.

APPALACHIAN CENTER FOR CRAFTS. Rt. 3, Smithville, Tennessee 37166. (615) 597-6801.

Courses. Steambending, June 7-18. Beginning woodworking, July 5-16. Advanced woodworking, July 19-30. Furniture design, August 2-13. Canoe building, August 16-27.

COUNTRY WORKSHOPS, Rt. 3, Box 221, Marshall, NC 28753 (704) 656-2280.

Hand tool techniques July 5-9 and July 12-16.
Chairmaking with green wood July 26-30, \$175.

KIRBY STUDIOS, BCIC Building, Water St., North Bennington, Vermont 05257. (802) 442-3119.

Weekly intensive courses taught by Ian Kirby, \$375 each. June 7-12, Conservation and Restoration of Furniture (guest lecturer Ken Bowers). June 14-19 and July 19-24, Woodworking Skills. June 21-26 and August 2-7, Carcase and Drawer-making. June 28-July 3, Frame and Panel Construction, Design and Use. July 26-31, Furniture Making Techniques. August 9-14, Seating and Chair Making.

Courses by Rosalind Kirby, \$275 each. June 14-19 and July 19-24, Learning to Draw for Woodworkers. June 21-26 and July 26-31, Learning to Design for Woodworkers.

JOHN MCGEE, McGee's Woodworks, 218 South Boulevard, Carrollton, Georgia (404) 834-7373

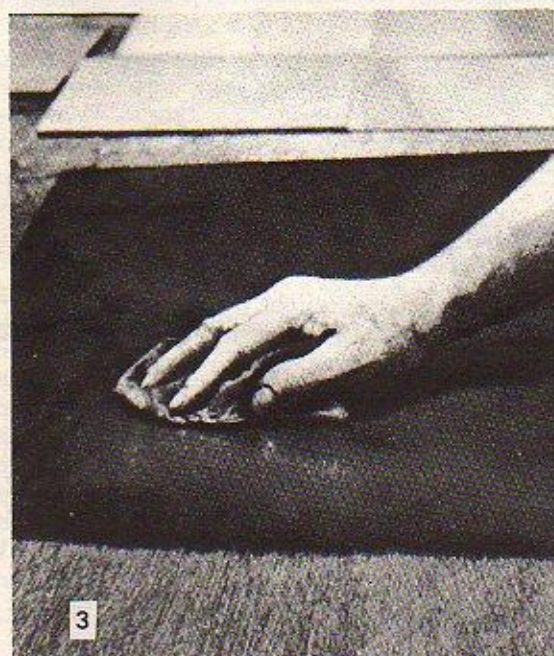
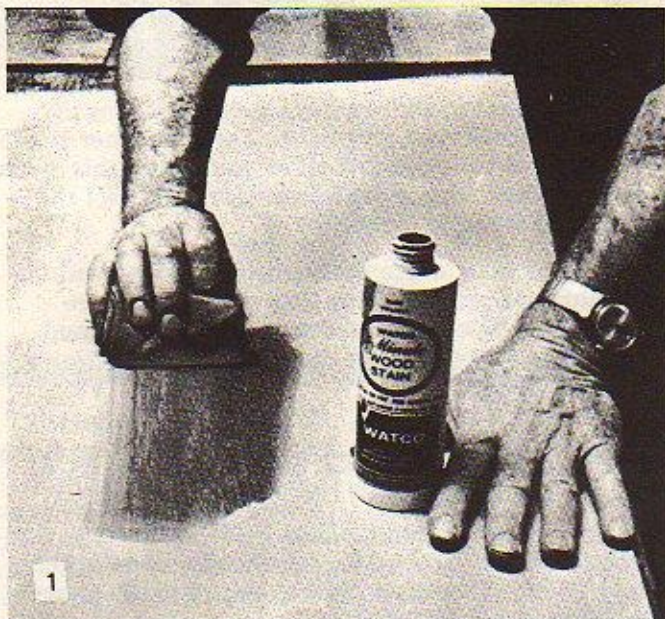
Hands-on Seminars. May 22-23, Machine Joinery, \$60.00. June 12-13, Frames and Panels, \$60.00. July 17-18, Carcase and Drawermaking, \$60.00. August 14, 21-22, Planemaking, \$96.00 including all materials for making a wooden plane.

ROBERT MEADOW SCHOOL OF HAND WOODWORKING, 2449 W. Saugerties Rd., Saugerties, NY 12477 (914) 246-5207.

One year program in joinery, design, with emphasis on Japanese hand tools. Japanese tool workshop, May 15 and June 19.

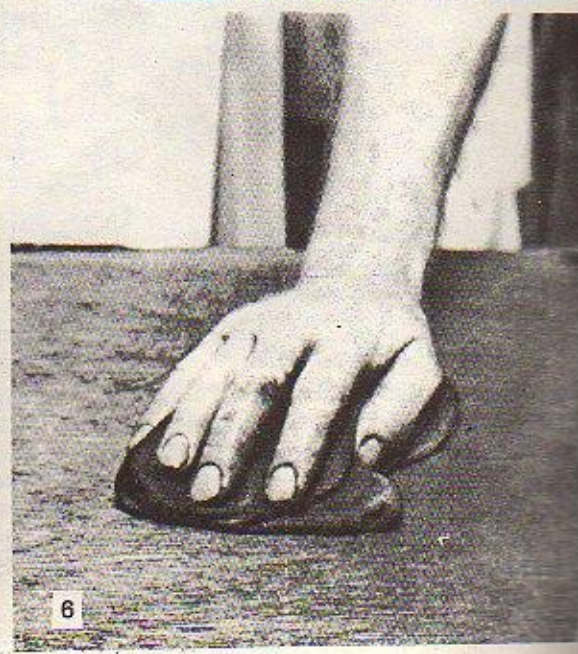
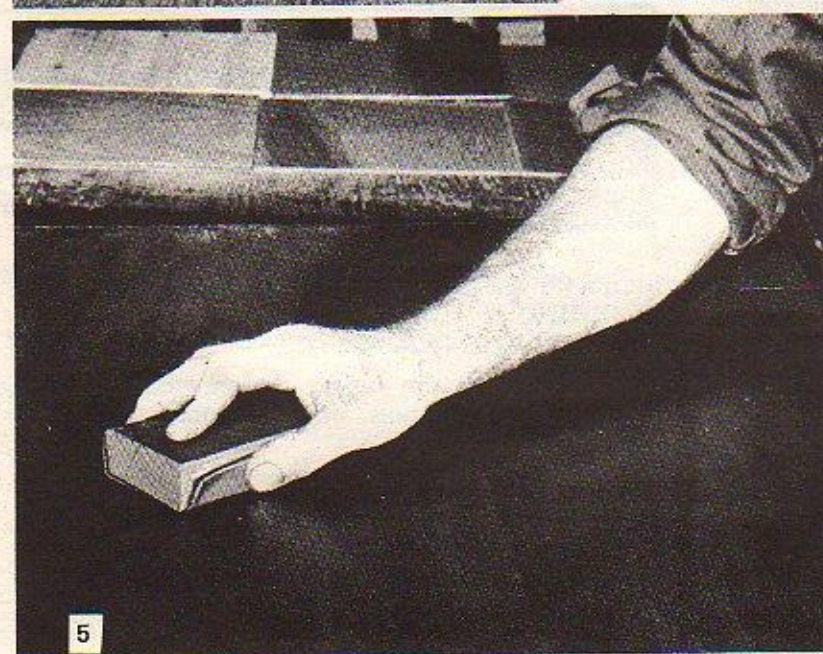
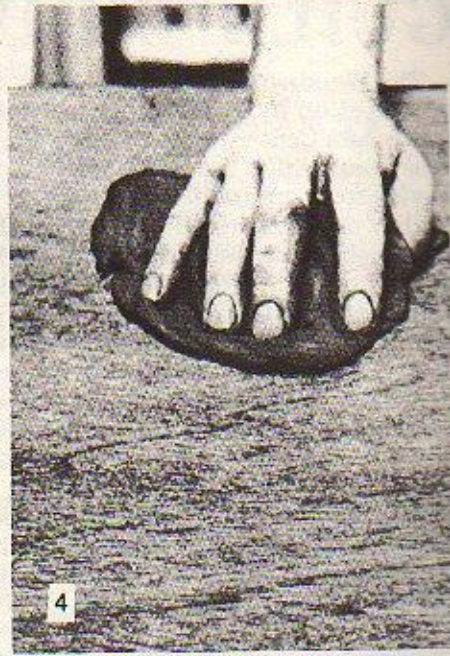
MEMPHIS STATE UNIVERSITY, PO Box 81360, Memphis, TN 38152.

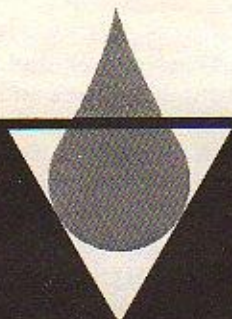
Weekend woodturning symposium May 20-22, \$150.



The advantages of resin-oil finish are ease of application, beauty of finish, long life and easy repair. Just follow these few simple steps.

1. After sanding with 4/0 garnet sandpaper and 6/0 for final cut, wipe clean and apply Watco 5-Minute Stain with clean brush or cloth.
2. Let stain dry for about 45 minutes, then apply penetrating Watco Danish Oil Finish, completely flooding all surfaces.
3. Let penetrate 30 minutes, adding fresh Watco Danish Oil to dry areas.
4. Re-apply Watco Danish Oil Finish, allowing additional 15 minutes penetration on plywood, 30 minutes on solid wood. Then wipe off any excess material, leaving dry, finished surface.
5. For added lustre, let dry four hours, then wet-sand lightly with small amount of Watco Danish Oil Finish.
6. After wet-sanding, dry wood thoroughly with clean cloth, then polish briskly with another clean cloth.





WATCO

NOW
AVAILABLE
BY
MAIL ORDER

New Finishing Products

WATCO Penetrating Oil Finishes and Stains

In response to considerable public demand, Highland Hardware is now carrying in stock a complete line of Watco oil finishes and alcohol-based stains.

Watco has for decades attracted a loyal corps of users all over the world, and with good reason. The proven reliability and durable results afforded by the product's penetrating oil-resin process have convinced countless woodworkers that there is no better treatment for fine wood.

The Watco oil finishes consist of a high solids content oil-resin mixture with superb penetrating properties: with proper application the finish exists in rather than on the wood, and can actually harden the surface by up to 25%. An object to be finished is first flooded with Watco, then wiped completely dry after the product has had sufficient time to achieve maximum penetration. Additional coats may be applied at user discretion, or the object may be waxed, varnished, or left as is with complete confidence.

Once a finish coat is applied, any other treatment may be used after twenty-four hours, but the actual hardening and complete polymerization process that makes Watco so durable takes place over a thirty-day period. After that time there is a solid layer of sealed and stabilized cells at and under the surface of the wood, leaving no surface finish to chip, crack, or obscure the natural beauty of the wood itself.

This sealing and hardening action also makes wood more resistant to dimensional movement, though of course the wood will inevitably continue to exhibit some degree of this natural process. The finish is non-toxic when dry.

If surface damage does occur in the form of water spots, stains, scratches or even minor burns, it can usually be removed with fine steel wool, and the area replenished with Watco oil.

These Watco finishes are now available from Highland Hardware:

DANISH OIL FINISH. Available in Natural (clear), Medium Walnut, Dark Walnut, and Black Walnut tones. Creates a smooth, pleasing low-lustre finish. 1/2 Pt. \$3.00. Pint, \$4.50. Qt. \$6.00. Gallon, \$16.50.

TEAK OIL FINISH. A super-penetrating formula especially suited for teak, rosewood, cocobolo and other naturally oil woods. Pint, \$4.20

MARINE TEAKWOOD FINISH. Specially formulated for use on teak or other fine woods used on or near the water. May be used as an excellent sealer under varnish or paint as well. Quart, \$5.50

EXTERIOR WOOD FINISH. A very tough clear finish for use on exterior wood or in areas subject to extremes of humidity and temperature. Quart, \$5.50

WOOD FLOOR FINISH. Seals, finishes and protects wood floors. Easily maintained by periodic buffing, it may be used with or without waxing or varnishing. Increases dimensional stability of parquet and hardwood floors. Gallon, \$16.80

SATIN OIL. A penetrating oil compound for the maintenance of any oil finished furniture, paneling, interiors, and wood floors. Re-oils and rejuvenates all oil finishes as well as Watco wood oil finishes. Pint \$4.59. Quart, \$6.19.

LIQUID SATIN WAX. A liquid solvent wax for finishing and maintaining all wood and similar hard surfaces. Provides a highly wear- and stain-resistant soft satin finish. Pint, \$4.59. Quart, \$6.19.

WATCO FIVE MINUTE WOOD STAINS.

The Watco Five Minute Wood Stains feature a non-grain-raising alcohol base which provides even penetration, clarity, and very fast drying time. They may be applied by cloth, brush or spray. Colors currently available in half-pint and quart sizes include: American Cherry, Danish Walnut, Dark English Walnut, Mahogany, Maple, Natural Walnut, Scandia Teak, and Walnut Sap Stain. Half Pint, \$2.80. Quart, \$5.75

STAIN REDUCER. Mix with Watco Stains to achieve lighter shades. Half Pint, \$1.80.

When order Watco finishes by mail, add 5% shipping (minimum shipping charge \$1.50, maximum \$5.00).



Hand Tool Seminar July 24-25

Bob Kelley will present a revised approach to teaching basic hand woodworking tool skills during a two-day exercise at Highland Hardware July 24 & 25. While lecture and teaching demonstrations will be included, most of this event will be devoted to the participants working sufficiently long at the workbenches with saw, plane and chisel to undergo an appreciable change in skill level with these tools. Specific goals will be set for the use of each tool, and individual attention will be given to see that everyone has the opportunity to obtain the transference of skills sought in the seminar.

Participants should bring a bench plane (smooth, jack, or jointer plane), a bevel edged chisel (3/8", 1/2", 3/4" or 1") and a backsaw (dovetail saw or tenon saw). Equipment for sharpening the plane and chisel will be provided. You should have your saw sharpened before coming. Wood for use in the exercise will be provided.

Emphasis will be placed on choosing the right tools, correctly tuning and sharpening them, correct body stance, holding and moving the tool, feedback from the tool, and finally achieving the best results possible from a tool.

The exercise will be an excellent opportunity to troubleshoot problems you have been experiencing, and to change habits which have limited successful use of specific tools in the past.

The seminar will run from 9 AM to 5 PM on Saturday July 24 and 9 AM to 4 PM Sunday July 25. Cost of the event is \$50. The fee includes a copy of Charles Hayward's classic *Tools for Woodwork*. Space will be strictly limited, so please register early. A \$10.00 deposit will reserve a space for you. To enroll, complete the enclosed registration form and return it to Highland Hardware with your deposit.

Bob Kelley's spring seminar series included weekends devoted to finishing, turning, routers and jigs. Among the most well-attended seminars we have offered, these workshops have provided a measure of stimulus and direction for a large number of people, many of whom returned for each new topic.

In the finishing seminar February 13, Bob dealt on a survey basis with virtually every common finishing method currently in use, stopping to dwell on some in particular with on the spot demonstrations—applying stains, oils, waxes, making shellac sticks, sharpening a scraper blade, etc.

As the one-day seminar got underway, it became obvious that among the members of the group, many had experimented with various finishing methods and had something useful to share. By the end of the day, everyone's favorite method had been spoken, and those who took notes had a lot of recipes to try. Pam Armstrong-Hunt, a reporter for the Atlanta Journal who was in attendance later compiled her notes into a half-page article aimed at refinishing buffs who read the Home and Garden Section (which appeared April 25, 1982).

Since any finishing formula applied to a particular situation is endowed with vagaries perhaps unpredictable in advance, the best summation of the day is to test any method on a scrap first, before committing yourself (perhaps in a costly way) to the actual workpiece.



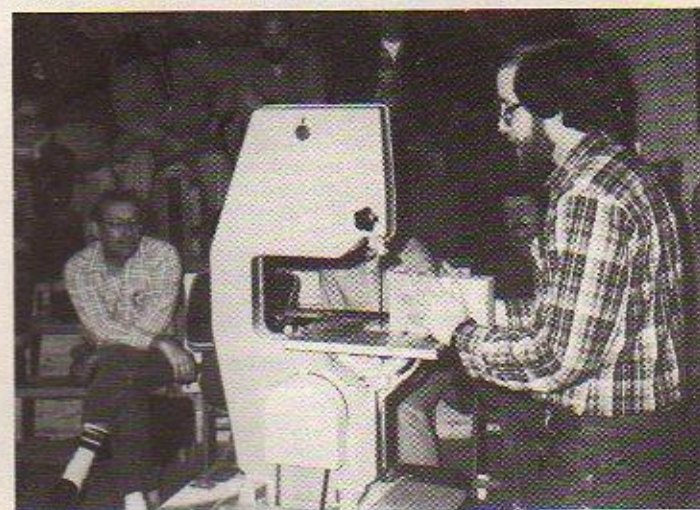
The turning seminar March 27 attracted a diverse but genuinely congenial group, who exchanged names and phone numbers and included individuals who had turning tricks of their own which they talked about in the seminar. After a full rundown on fundamentals of the lathe and each kind of turning tool, Bob demonstrated scraping and cutting techniques for producing spindles and bowls on the Arundel lathe. One seminar participant in particular, Clarence Cook, had done extensive bowl turning work on his own, and added significantly to the seminar with his demonstration of outboard turning.

The seminar on routers and jigs April 10 was one of the most creative and stimulating group sharing experiences we have witnessed in a long time. Bob Kelley with the help of Dave Tripp and Zach Etheridge had a large number of jigs to exhibit and demonstrate, both for the router and other tools, particularly the tablesaw. As the class progressed however, the theory of jig making began to be exposed and ideas for new jigs invented by the participants either in the past or at the moment were discussed with enthusiasm.

INCA TOOL DAY

More than forty power tool enthusiasts turned out for our third annual Inca Tools Day February 27. Demonstrations of the Inca planer-jointers, tablesaw, and bandsaws were given by Bob Kelley and Zach Etheridge. Participants took advantage of the Inca Day specials and purchased a record ten Inca machines by the end of the day. Newly introduced at the event was the Inca 20" bandsaw, which is rapidly becoming one of our most popular large power tools.

Pictured below is Bob Kelley planing on the Inca planer-jointer and Zach Etheridge cutting on Inca's smaller 10 1/2" bandsaw.



Other Seminars

John Wermescher conducted his second seminar on Marquetry and Veneering March 12-14. Each person attending had the opportunity to complete an entire marquetry project to take home, while exercising the techniques involved in successful marquetry. Carlton McLendon of Carlton's Exotic Hardwoods, 1144 Hemphill Ave., again donated a nice selection of veneer for the participants to use, and John's excellent organization and presentation of the material contributed to a well-paced hands-on seminar.

John is laying plans for a course on Boatbuilding to be offered perhaps in the fall. If you are interested and would like to be notified, give your name and address to us at Highland Hardware.

Ian Kirby spent the weekend of March 5-7 at Highland Hardware building and explaining an example of the classic English drawer. The depth of Kirby's presentation instilled a sense of appreciation for quality among the 20 aspiring drawer makers in attendance, in addition to providing insight into the time-consuming process of drawer construction.

Interest has been expressed for another Kirby seminar in Atlanta this fall, this time on frame and panel construction. Details will be announced as they develop.



15

Hardwood Lumber

Here are current prices for the hardwood lumber on hand at Highland Hardware. The prices include planing on two sides, and the boards are displayed so that you can easily select the wood you want from our large assortment. Price breaks are available on quantities of 50 board feet and 200 board feet. All wood sales are cash and carry; wood is not offered for sale by mail order.

Prices are subject to change without notice.

	1"	2"
ASH	2.10	2.30
BASSWOOD	1.60	1.60
BIRCH	2.10	2.50
CHERRY	2.75	2.95
WORMY CHESTNUT	2.95	2.95
HONDURAS MAHOGANY	3.00	3.00
HARD MAPLE	1.90	2.10
OAK	2.20	2.60
WHITE PINE	1.80	1.80
POPLAR	1.30	1.60
WALNUT	3.95	4.25

HIGHLAND HARDWARE
1034 N. Highland Avenue, NE
Atlanta, Georgia 30306

NOW ORDER TOLL FREE
800-241-6748

MasterCard/Visa users outside Georgia

BULK RATE
U.S. POSTAGE
PAID
ATLANTA, GA
Permit No. 2596

THE BEST BUY IN CARBIDE SAW BLADES

freud

WOODWORKERS
WHO KNOW SAW
BLADES BUY FREUD.
HERE'S WHY.

The 3 things to look
for in a Carbide
Circular saw blade.

Tips. Carbide tungsten tips are available in four different grades and many thicknesses. Most other blade manufacturers use softer, smaller carbide tips because softer tips can be brazed to the saw body by hand. Really hard carbide must be brazed by induction heating on sophisticated machinery. Freud takes the hardest carbide, induction brazes it to the saw plate, and hones it sharp with 400 grit diamond wheels. Freud's blades start sharper and they stay sharp longer. Another advantage-Freud uses carbide tips that are 50% larger than most of their competitors'. Everytime you have your blade sharpened you grind away some of the carbide. Freud's larger carbide tips allow for more sharpenings and a longer blade life.

Plate. The body of a premium blade is made from milled tool steel, cheaper blades are made from stamped cold-rolled steel. After a premium Freud blade is machined, it is heat treated twice and then surface ground on both sides. Finally, each premium Freud blade is hammered on automatic equipment to tension the blade and checked by hand for trueness. A properly tensioned blade, with its stresses relieved, will stretch evenly at high running speeds while a cheaper blade will distort and vibrate.

Price. We believe that premium blade is a better value. It will cut better and lasts longer. Freud makes their blades on computer controlled






equipment in huge production runs. At Freud's industrial price these premium blades are a "best buy". Now you can buy these same clean cutting blades from us at discount prices.

Choosing the right
blade for the job.

Because no one blade can make a perfect cut in all materials and applications, Freud blades are available in job-designed patterns. To eliminate some of the confusion often encountered in selecting a blade, we have performance rated 5 of our favorite blades. These are the blades used by almost all of our professional customers, the blades we recommend that you use.

The Three Blade Set every woodworker should own.

We have put together a package of three 10" blades every woodworker should own. This set consists of a LU73M 60-tooth crosscut blade (also excellent for cutting fine plywood veneers), a LM72M 24-tooth rip blade for ripping hard and soft lumber, and a LU84M 50-tooth combination blade. You'll find that one of these blades is the right blade for virtually any job. In most wood shops the LU73M will go on the radial arm saw, and the LU84M on the table saw. When it's time to rip, take off the combination blade and put on your rip blade, the LM72M. These three blades list for \$208.58 and are offered separately on this sale for \$165.00. We are offering this 3 blade package for \$149.00. Order today. Quantities are limited.

	Rip Solid Wood	Rip Plywood	Cross Cut Wood	Cross Cut Plywood	Particle Board	Plastic Laminates	General Purpose	Diameter	Teeth	List	Sale
LU73M								8"	48	\$ 68.24	\$ 54.00
								9"	54	75.86	60.00
General Cross Cutting								10"	60	75.86	60.00
Excellent Value								12"	72	107.95	86.00
								14"	84	131.59	105.00
LU82M								9"	54	82.29	65.00
								10"	60	82.29	59.00
Precision Cross Cutting								12"	72	117.49	94.00
Wood & Veneers											
LU78M								10"	80	111.45	89.00
								12"	96	134.16	107.00
Chip Free Cutting											
Plastic Laminates											
LU84M								8"	40	68.12	54.00
								9"	40	67.61	54.00
Combination Blade								10"	40	67.61	49.00
4 ATB Teeth & 1 Square Tooth								10"	50	70.96	56.00
								12"	60	107.24	86.00
LM72M								8"	24	54.27	43.00
								10"	24	61.76	49.00
Straight Line Rip											
Hard & Soft Woods											
Three Blade Set: LU73M-10x60, LU84M-10x50, LM72M-10x24								10"		208.58	149.00

Excellent E Good G Fair F Not Recommended NR

8, 9 and 10" blades have 5/8" bore.
12 and 14" blades have 1" bore.