



Journal Of
The North Carolina Woodturners' Association

VOL. 2 NO. 3

March, 1992

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RAY KEY - MASTER WOODTURNER

Finding words to describe the work and the feelings of one who is regarded by all of his contemporaries to be a master of his craft is difficult. In the February issue of the Journal, we gave a general summary of Ray Key's background and experience, together with some of his many credits and accomplishments. Therefore, after one further comment about his experience, we will conclude this introduction with a quote from MASTER WOODTURNERS, by Dale Nish, and two statements by Ray himself.

When Ray Key gave up what was seemingly a more secure situation as an industrial designer to make a career in woodturning, he soon discovered that the market for turned objects in England was essentially for functional items such as wooden kitchen and table ware. His desire to pursue "artistic woodturning" and his need to make a living had to reach a compromise. He thus began producing a mix of purely functional items to satisfy the local market and one-of-a-kind items to satisfy his inspiration for creativity. It is safe to assume that whatever our tastes for the craft may be, Ray will surely be able to satisfy our appetites!

"Key feels that it is far easier to produce a piece with beads and coves than it is to produce a piece of pure form -correct and balanced, visually pleasing and displaying the characteristics of the wood to the fullest. He believes his challenge as a turner is to bring out the best in the timber, working with grain and color to bring the turning to its maximum potential. To Key, the grain helps dictate the form, and it is his responsibility to bring the two together in a pleasing and attractive manner."

-From MASTER WOODTURNERS, by Dale L. Nish

"The majority of my designs are of simple form, that seek to complement and accentuate nature's inherent beauty through forms that have tactile and aesthetic appeal through objects such as bowls, vessels, dishes, platters, and boxes ...My approach is a blend of realism and idealism, the desire to see woodturning obtain the greater credence and acceptance that many other crafts have in recent years, pushes me onward. The activities I undertake have this as the goal."

-Ray Key

We are confident that A DAY OF WOODTURNING WITH RAY KEY on Saturday, March 14th., will be both inspiring and educational and hope that you have made your plans to attend. If you have not already done so, please send in your reservation now, as no further reservations will be accepted after all available space has been filled.

WOODTURNERS

We are without a meeting place. Shopsmith of Placentia has changed its hours. It is no longer feasible for us to meet at that site. We are scrambling to find a place to meet. Any suggestion will be appreciated. Hopefully, we can discuss this problem at the February meeting.

...Harold Wann

LEST WE FORGET!

No, this doesn't mean us! It is a notice published in the newsletter of a California woodworkers association. But what would we do if it were us? We should all be very grateful to Tony Bradley for letting us make Bradco Wood Products our home. Many thanks, Tony!

WHEELS OF PROGRESS

"WITHOUT GUIDANCE, EVERY NEW TURNER IS, IN EFFECT, HAVING TO RE-INVENT THE WHEEL." -Martin Turner From "Woodturning is a Creative Activity....Isn't it?" WOODTURNING, Autumn, 1991

Fortunately for us, we have some first class instruction available to us from among our membership, and it is one of our stated purposes to help each other by sharing information. That was particularly true at our February meeting, especially concerning tool sharpening. Isn't it really good fortune that one wheel we don't have to invent or re-invent is the grinding wheel. I can think of no other craft that requires more tool sharpening than woodturning. Let me strengthen this point with some simple mathematics. Did you know that if you are turning an 8" diameter piece of wood at 1000 r. p. m., your tool must pass through nearly two miles of wood every five minutes? This comes close to 24 miles of wood in one hour! A woodturner turning eight hours a day, with the tool actually cutting about 50% of the time, would be cutting through 90 to 100 miles of wood in one day! This may not be an exaggerated example, but even if it were, take whatever you think is more reasonable and compare it to what a carver's chisel might do in a whole lifetime. I think that you will have to agree that tool grinding is a critical and regular part of the woodturning craft.

With that point in mind, then, consider how important it is to have the right grinding wheel for use with woodturning tools. During his part of the program, Rodger Jacobs made reference to an article by Jerry Glaser which appeared in a 1986 issue of FINE WOODWORKING. The article dealt with what kind of grinding wheel is best for woodturning tools, how to understand the manufacturer's codes when selecting a wheel, and how to mount, dress, and use a wheel.

1. Use only a white or pink aluminum oxide wheel. Aluminum oxide wheels come in many different colors, gray being commonly supplied with bench grinders for general purpose use,; the colors apparently have something to do with the type and quality of the aluminum oxide.
2. These wheels should be of a vitrified bond, which is a ceramic material fused together by heat, resulting in a wheel that is essentially glass imbedded with aluminum oxide.
3. Test a new wheel for cracks before installing it. Slide it over a dowel and tap it with a piece of hardwood. It should sort of ring and not have a flat sound.
4. Vitrified bond wheels are waterproof, and a spray of water can be applied while grinding, but do not let the wheel stand partly in water, as it might soak up enough water to become unbalanced.
5. Do not overtighten the arbor nuts when mounting the wheel and be sure that any paper residue from the previous wheel has been removed from the flange washers.

6. Dress the wheel before using it. A newly mounted wheel will almost surely not run true until it is dressed. A star wheel is the best tool for dressing a wheel, and a carbide matrix stick is good for keeping the wheel true and clean without removing a lot of material.

7. Learn to read the codes so that you can take advantage of lower prices available from industrial supply houses.

What the codes mean

There are five parts to the codes that appear on the wheels and in the catalogs.

- (1) Abrasive type AA-36K4-V10
- (2) Grit size 38A-46L5-V
- (3) Bond grade 32A-60K5-VBE
- (4) Grit structure AA-80L6-V40
- (5) Bond type 9A-100L8-V

NOTE I have divided the codes into three parts. They are not so done on the wheels or in the catalogs. Wheel sizes are given: Dia. X Thickness X Arbor hole
Example: 7x1x5/8

1. Abrasive type may be aluminum oxide, silicon carbide, etc. The type most recommended for turning tools is aluminum oxide. The letter which precedes the grit size indicates the abrasive type. Just be certain this letter is A. Any other letters or numbers preceding it are unimportant.

2. Grit size is the same as for sandpaper. Grit sizes for grinding turning tools should be from 36 to 100, 60 grit being the best for overall use. Lower grits for shaping tools, higher grits for very fine edges. 60 is the most common grit used for turning tools.

3. Bond grade refers to the density of the bonding material used. A is the least dense, Z is the most dense. H, I, J, K, L are recommended for turning tools.

4. Grit structure is similar to open and closed-coat sandpaper and refers to the number of grit particles over a prescribed area. They run from 1 to 15. The smaller the number the closer the particles are together. The larger the number, the farther apart they are.

5. Bond type is shown by the letter which follows the grit structure number. There are many kinds of bonding materials, but the only one for use with turning tools is (V) vitrified bond. Other letters or numbers following this letter are unimportant.

Since you always want an aluminum oxide wheel with a vitrified bond, it is then important to remember what the middle part of the code means. Also remember to stay with white or pink wheels.

One other thing to watch for in the catalogs is the shape of the wheel. Wheels may be straight, cupped, cone shaped, dished, saucer shaped, etc. Be sure the one you get is straight.

GRINDING YOUR TOOLS

Once your tools have been shaped as you want them to be, only frequent sharpening is necessary. A very light touch will produce the sharpest edge and lessen the chances of burning your tool. Honing the edge of a gouge may not be necessary if a light touch is used when sharpening.

I'm sure we'll have more about this in later issues of the Journal.

OOPS! I FORGOT SOMETHING.

Regarding (3) bond grade and (4) grit structure, it should be noted that the denser the bond, the harder the wheel and the more likely it is to run hot. The softer the bond, the faster the wheel wears away. The grit structure has a somewhat similar effect in that the more particles of grit, the smoother the cut - fewer particles, faster cut and cooler running but shorter wheel life. It's all a compromise!

PRESIDENT'S NOTES

In this modern age of high technology, miracle machines, and instant tax refunds, it is difficult to maintain perspective of values. Today, a middle-of-the-road family auto costs more than a very adequate home sold for just 30 years ago. There's another side, however, that many do not consider. A \$19.75 wrist watch will perform better than watches costing \$200.00 30 years ago. For \$19.75, you can purchase a pocket calculator that outperforms the \$400 giant of past eras. You can also purchase video tapes on almost any field of information from making dovetail joints to building your own GEODESIC dome. We can also take advantage of a world class woodturning demonstration for the cost of a family meal at the local steak house. Our March 14th. program with Ray Key will be a tremendous bargain to look forward to. -Tony Bradley

COMING EARLY OR STAYING LATE?

Many of us will have to make the trip to Hickory on Friday afternoon in order to attend the meeting on Saturday. For your convenience, here is a list of motels near our meeting place:

Ramada Inn, US-70 & US-321, (704) 322-5533

Holiday Inn Express, 2250 US-70 S. E., (704) 328-2081

Hickory Motor Lodge, 484 US-70 S. W. at 4th. St., (704) 322-1740

Econo Lodge, US-70 East, (704) 328-2111

Red Roof Inn, I-40 Exit 125, (704) 323-1500

Comfort Suits, I-40 Exit 125, (704) 323-1211

FOR SALE For more info and prices call Tom Fitz (704) 324-6346

Craftsman 19" radial arm saw on movable cabinet

Craftsman shaper and cutters, on stand

Old 6" Craftsman planer on stand (collector's item)

Old scroll saw (18" throat)

4" jointer (AMF) never used

2 opaque projectors for pattern enlargement (school models)

WANTED Would love to have some red maple. Maple where I live is not the greatest. Bill Johnston, Box 2047 Seven Lakes, 2239 Lancashire Rd. West End, NC 27376 (919) 673-0500

SOURCES OF SUPPLY

Sheldon's Hobby, 2135 Old Oakland Road, San Jose, CA 95131 (408) 943-0872

Posi-Cure + Thick (gap filling) cyanoacrylate glue

Super Thin Posi-Cure

Insta-Set + (accelerator)

\$4.79 per 2 oz. bottle when ordering 12

\$5.29 when ordering 6