



Photos at the Lathe - Improving Your Images

Here are some timeless tips from Bob Hawks, a retired commercial photographer and former member of the Northeastern Oklahoma Woodturners Association in Tulsa. They will help you produce simple, sharp, how-to photos that communicate clearly.

If you attempt to shoot photographs with a standard lens and a flash unit mounted to the camera, the results will no doubt be unsatisfactory because:

- Short depth of field puts either hands or the wood and tool out of focus.
- Flash on camera (FOC) burns out detail in the turner's hands, which are closer to the camera.
- See the "good" and "better" examples below, which show some differences.

Camera and Lens

There are many cameras (digital and traditional film) that will do an adequate job, but there are some requirements that should be met for good results.

- The lens should have at least a 2X or 3X optical zoom (not digital zoom).
- Your lens needs a macro capability for close-up photos. Many camera selling for \$400 or less will meet this criterion.



Flash on the camera burns out detail on the turner's hand.

- If your camera (traditional film or digital) accepts interchangeable lenses, consider macro options for the necessary detail photography.
- The camera must have some way to connect to a remote flash unit. Any camera with a hot shoe for a flash will work. Some cameras may have a socket for a PC cord, which connects the flash to the camera by a special cord.
- The camera must have manual control to make the correct exposure with the remote strobe light.
- Most digital camera have an auto white balance control. When using an additional strobe light, use the flash white balance for more accuracy.
- To have the clearest images with no blur, use a tripod to stabilize the camera.

Flash

- You'll want to get the main (key) light off the camera. Doing so will give shape to the turned



Flash off the camera improves the detail in the turner's hand, the turning block comes to life, and the image takes on depth you can't capture with flash on camera.

objects (in close-up situations, flash-on camera produces flat pictures).

- You can buy separate electronic flashes for about \$150- \$200. Vivitar is one popular brand. Many small self-contained strobe lights are available. Anything with 150-watt second or higher power will be fine.
- You'll need a light stand (\$12-\$15) to support the electronic flash off the camera. We recommend shooting a flash into a reflective umbrella (24" or 36" for about \$30), which produces a soft light ideal for how-to photos. Another alternative is a soft box—sort of a rectangular tent with the flash on the inside. Chimera makes a "Mini" 12"X16" model CH1180 for about \$65. Either way, it's wise to double check that your flash will mount to the umbrella or soft box.
- On a tight budget? You can get similar results by taping reflective mylar or white foamcore board above and behind the strobe light.

Flash Connection

- Connect a PC adapter into the hot shoe and attach a PC cord to the remote electronic flash unit.

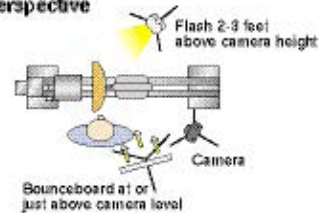


The how-to photos in this series were shot with this lighting arrangement. Notice how the light source is above the lathe.

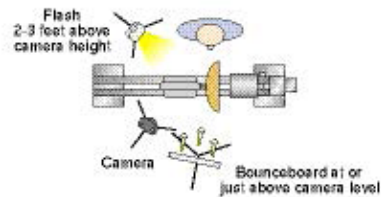
Workshop

- To simplify your photos, consider hanging background paper behind your lathe. Because you're shooting close-up photos, a 36" x 48" sheet probably be adequate. Neutral gray, white, or brown backgrounds are best, depending on your wood species.
- A sheet of brown craft paper placed over the lathe ways will help reduce clutter in your photos.
- When you shoot how-to photos, turn off other light sources in the room. The other lights,

OPTION 1
From turner's perspective



OPTION 2
Across the lathe bed



This photo communicates well. Because the hand is sharp, readers will see how the scraper is held. The background is free of clutter. A side light source gives shape to all of the key elements.

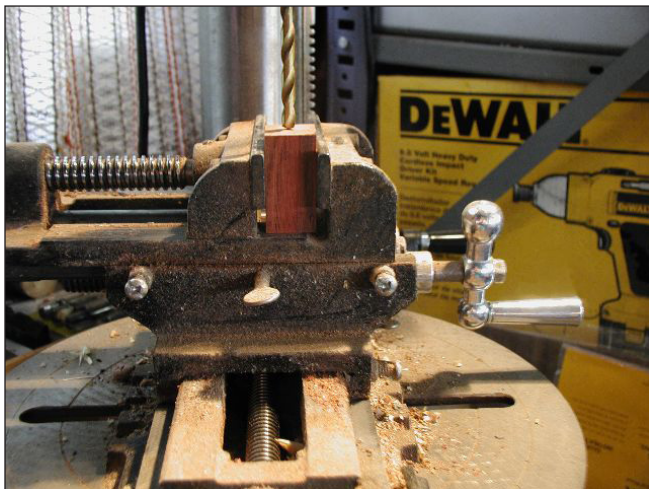
especially fluorescent tubes, destroy the color balance of photos.

You, the Woodturner

- Review the AAW's safety guidelines. Chances are your face won't show, but you'll certainly want to wear eye protection, for example. Be sure to eliminate loose clothing that may be considered unsafe.
- Wear solid-color apparel, which will be less distracting (you want the reader to focus on the wood, not your colorful shirt).

Shooting Photos

- Set up your main light about 3 feet from the lathe action, as shown in the drawing. A bounce card set about 2 feet on the left or opposite the main light will help fill in shadows on the left side of the image. The light reflecting off the bounce card will be about half the intensity of the main light, producing a 2:1 light ratio. Professional photographers would consider this a good starting point to setting up lights.
- See the accompanying drawings for two starting points for how-to photography.
- The great advantage to digital photography is that you can view the image immediately after the exposure. Look at the image on your camera screen and make any adjustments necessary. Then for a critical look before you start your shooting



Bad. Move in closer so you can clearly communicate your turning instruction to the reader.

session, look at the set-up on a computer screen. Why? You may correct an "oops" too small to be seen on the camera screen. Digital photographers call this "chimping."

- Experiment with moving the light to different positions to see what gives the best result for the photo you are taking. A little extra time spent in planning the shots and experimenting with the lighting and exposure will produce much better results for your photos. Just keep shooting and experimenting until you're happy with the set-up. Keep notes ... your set-up will probably work again in later photo sessions.
- By shooting on the aperture priority setting or manual setting (see your camera instruction book for details), you'll have the best depth of field control to keep hands, tool, and wood in focus.

Choose Key Turning Steps

- Identify a dozen or fewer important turning steps that will assist your fellow AAW members succeed at turning your project. We are fortunate to publish more than eight photos surrounding the typical turning project.
- Unfortunately, it's not unusual for members to submit 50 or more photos for one project. That's too much work for you to photograph and for our staff to sort out the key steps.



Better. This is an improvement, but notice how you are drawn to the background. Keep the background simple.

Prepare Digital Photos

- If you have a photo program in your computer, download the photos. Before you begin correcting an image, open the file and immediately resave it in a tif format. Unlike the default jpg format, the tif format doesn't attempt to compress the image each time you save, so you'll end up with better images down the road. I like to convert them to 300 dpi (this size prints nicely).
- You'll no doubt want to rename the photo something other than the number assigned by your camera. Then make a copy of your original image and add "rev" to the file name. By establishing this routine, you can always go back to your original unaltered image if you get lost in the correction options.
- Many publications, including "American Woodturner," require high-resolution images (file size should be 750 KB to 1.5 MB).
- If you shoot traditional negative film, please consider having a CD of the images prepared at the same time (cost is \$2-\$3). Supplying this will simplify our production of the journal.

Sample Photographs

How to mount a piece on a waste block

1. Rough out the piece between centers and cut a tenon on the bottom.
2. Mount a waste block on a faceplate, make a pencil mark on waste block after measuring tenon with calipers, and cut out dado just inside the pencil line.
3. Cut square shoulder on dado with side of scraper ground on end and left side. Test tenon to dado size for a snug fit.
4. Apply medium thick Hot Stuff super glue to waste block. Keep rotating the block to keep the glue evenly distributed around the edge of the dado.
5. Apply accelerator to tenon on piece.
6. Insert tenon into waste block and bring in tailstock to be sure piece is centered in waste block. Note the paper on lathe bed to protect it from any spilled glue.



Opportunity for improvement. A simple background would improve this photo. If you shoot across the lathe, make sure the woodturner wears a one-color smock. The blue AAW smock is ideal. Moving in closer would improve this photograph. The key information is between the parting tool and the right fingertips.