

## LATHE SAFETY AND PRACTICE

- 1. Do Not use the lathe if you are too tired, hungry, sad, mad, or dehydrated. Never work while under the influence of drugs, alcohol, or any medication that creates drowsiness or impaired thinking.
- 2. Never use the lathe until you have been trained on and understand the safety issues and procedures specific to use of the lathe. Obtain advice from your instructor or woodshop manager if you are not thoroughly familiar with the operation of the lathe.
- 3. Pay attention to your "gut feeling" or that "little voice in the back of your head" if something doesn't feel right or if an operation feels dangerous then it probably is, so STOP and think it through and/or talk with your instructor or woodshop manager. There is a probably a safer way to do the operation.
- 4. Always wear the full-face shield when turning either spindle or faceplate turnings.
- 5. Wear hearing protection and dust mask during extended periods of turning time. Be especially mindful of dust from many exotic woods, spalted woods or any wood from which you notice a skin or respiratory reaction.
- 6. Tie back long hair or beards, do not wear gloves, and avoid loose clothing, jewelry or any dangling objects that may catch on rotating parts or accessories. Becoming entangled in the rotating equipment can lead to serious injury or death.
- 7. Like all machines you must give the lathe your undivided attention during use. Do not look up at activity that may be happening around you or engage in conversation while engaged in turning.

- 8. Use wood that is free of defects. Inspect the wood for cracks, splits, checks, bark pockets, knots, irregular shapes or protuberances. As a beginner, you should avoid these types of stock until you have greater knowledge of working with such wood.
- 9. When using a faceplate, be certain the workpiece is solidly mounted with stout screws (#10' or #12 sheet metal screws as a minimum). Do not use dry wall or deck screws.
- 10. When turning between centers, be certain the work piece is firmly mounted between the headstock driving center and the tailstock center.
- 11. Adjust tool rest so it is as parallel and as close as possible to the stock. It should also be set high enough so that tools will cut into the wood slightly above the center of the work being turned.
- 12. Check that all locking devices on the tailstock and tool rest assembly (rest and base) are tight before operating the lathe.
- 13. Rotate your workpiece by hand to make sure it clears the tool rest and bed before turning the lathe on. Be certain the work piece turns freely and is firmly mounted.
- 14. ALWAYS CHECK THE SPEED OF THE LATHE BEFORE TURNING IT ON. Use slower speeds for larger diameters or rough pieces, and higher speeds for smaller diameters and pieces that are balanced. Always start a piece at a slower speed until the work piece is balanced. If the lathe is shaking or vibrating, lower the speed. If the work piece vibrates, always stop the machine to check the reason. Refer to the chart posted by the lathe and also consult with your instructor or woodshop manager. As a starting point, consult your operator's manual for recommended speeds for a particular lathe. Make sure the lathe speed is compatible with the size of the blank.
- 15. Be aware of what turners call the "red zone" or "firing zone." This is the area directly behind and in front of the work piece the areas most likely for a piece to travel if it comes off the lathe. A good safety habit is to step out of this zone when turning on the lathe, keeping your hand on the switch in case you need to turn the machine off. When observing someone

- else turn, stay out of this zone. Lower and use the guard as much as possible.
- 16. Hold turning tools securely on the tool rest, holding the tool in a controlled but comfortable manner. Always contact the tool rest with the tool before contacting the wood.
- 17. Turn off machine to make adjustments to the toolrest.
- 18. Keep tools sharp and clean for better and safer performance. Don't force a dull tool. Don't use a tool for a purpose it was not designed or intended.
- 19. Keep the floor around you clear of a buildup of woodchips. Keep proper footing and balance at all times.
- 20. Always remove the tool rest before sanding, finishing or polishing operations.
- 21. If running a lathe in reverse, it is possible for a chuck or faceplate to unscrew unless it is securely tightened or locked on the lathe spindle. Check with the woodshop manager before running lathe in reverse.
- 22. Stay alert. Watch what you are doing, pay close attention to unusual sounds or vibrations stop the lathe and notify your instructor or woodshop manager.
- 23. Never leave the lathe running unattended. Turn power off. Don't leave lathe until it comes to a complete stop.