

## Safety Awareness Program KDW-03 Wood Lathe

### Introduction.

This safety Awareness procedure forms part of the Knox and District Woodworkers Inc. Safety Awareness Program, and details the safety requirements to be adopted in the operation of the equipment described below.

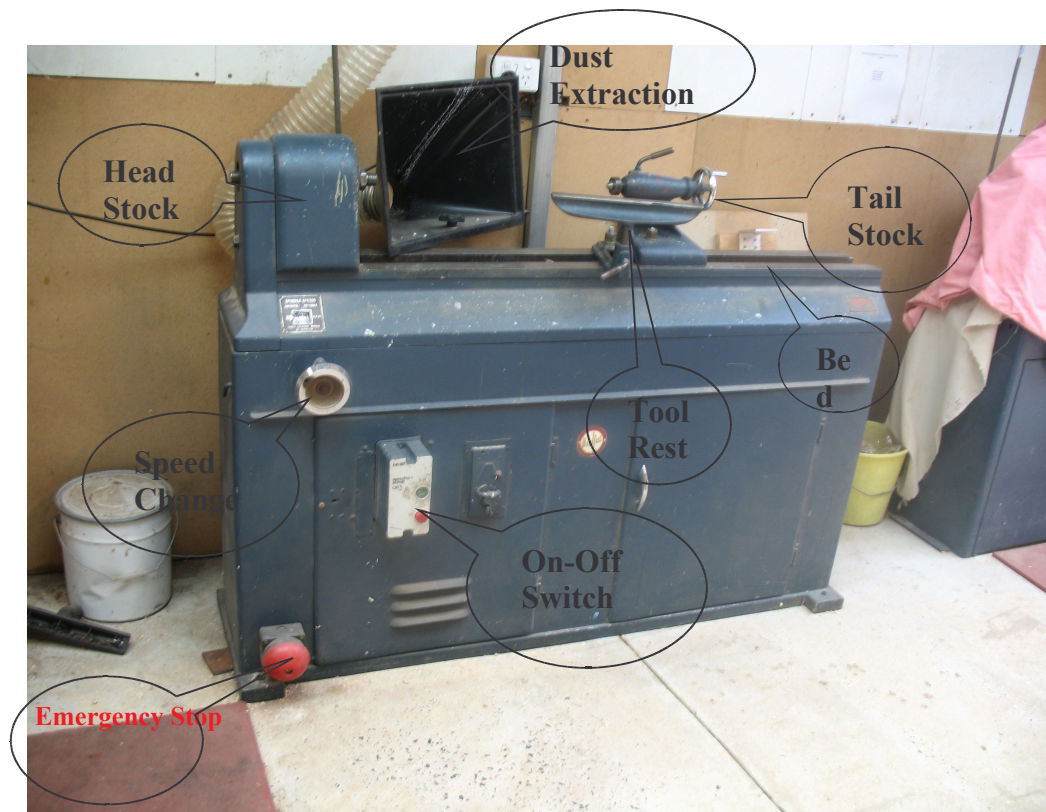
### Definition.

The Wood Lathes at KDWC are belt driven electrically powered machines that have been designed for the machining of timber through the rotation of the work piece which, may be held between the lathe centers either by drive dog, in a chuck or on a face plate.

### Description

The Wood Lathes consist of a head stock, tail stock, bed, tool rest and control switch or panel. The speed is controlled by means of a belt running on stepped pulleys, which can be adjusted to allow the belt to be moved up or down the pulley steps thus altering the speed at which the work piece is rotated.

Typical KDWC Lathe





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**Safety. (General).**

Prior to the operation of the Wood Lathe the following safety rules must be applied.

- Be aware of the emergency stop procedure. (Ref KDW-01)
- Member must ensure that the extraction outlet is open at all times when operating the equipment.
- All timber must be checked for nails, screws and other imbedded objects through the use of the clubs metal detector.
- Ensure the member always wear a face mask when operating the lathes.
- Ensure the member is aware of other members in the immediate area.
- Ensure work area is clear of obstructions that may cause tripping or falling.
- Ensure member is aware of dangers associated with the movement of the chuck.
- The dangers of loose clothing or long hair being caught in machinery is well documented, therefore when using this machine, the member must wear the appropriate clothing. (Ref KDW-01).
- Member must ensure that the extraction outlet is closed when operations are complete.

**Operation.**

When setting up the lathe, ensure the chuck is tightened securely and the work piece is centrally located in the lathe either by drive dog, a chuck or secured to a face plate and wherever possible is held firmly by the tail stock. Ensure the work piece has been roughed out by removing protruding edges or knots and it is not cracked or split. During the operation of any lathe the operator must always be aware of the dangers associated with the movement of the chuck and the work piece and ensure the extraction system is turned on, not only at the power switch but also at the lathe. ***Prior to starting the lathe, ensure the chuck key has been removed, and the work piece turns freely by hand.*** The recommended rotation speed for the lathe depends on the size and shape of the work piece. Ensure the power is disconnected prior to adjusting the speed of the lathe. When starting the lathe stand behind the head stock this, will prevent injury in the case of any dislodgment of the work piece and check for the appropriate speed setting (ref table below). The following speeds are a guide only and if you are not sure of the appropriate speed ask the key holder to confirm. When sanding the work piece a dust mask must be worn to prevent the dust being inhaled.

The following table is a guide to the appropriate speeds

<b>Between Centers</b>		
<b>Diameter</b>	<b>Length</b>	<b>Speed RPM.</b>
Up to 65mm	Less than 600mm	2000
	Over 600mm	1500
65mm – 100mm	Less than 600mm	1500
	Over 600mm	750
Over 100mm	Over 600mm	750
<b>Face Plate or Chuck</b>		
	50mm Thick	Over 500mm
Up to 200mm	1000rpm	750rpm
200mm – 300mm	750rpm	750rpm
Over 300mm	Slowest Available	Slowest Available



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**Chisels**

When using the club owned chisels, ensure they are sharp and in good condition, if unsure ask the key holder or another experienced member for advice. Always use the appropriate chisel for the operation you wish to perform. When sharpening the chisels always wear eye protection and ensure the correct angle of the rake is always maintained. All chisels are to be returned to the appropriate hook on the board on completion of the turning session.

**Housekeeping.**

When operating any machinery or equipment ensure there are no obstacles, work or any other obstruction cluttering the work area. It is part of each member's responsibility to clean up the machine and surrounding area after use and ensure an adequate level of housekeeping is maintained throughout the workshop area, ensuring the safety of themselves and all other members.

**Conclusion.**

The above safety requirement is intended to ensure the safety and well being of all club members, for detailed instruction on the operation of the above equipment refer to the appropriate club members. The above general safety requirements are intended to ensure the safety and well being of all club members.