Southern Turners Project Sheet

Chatter Tool - Use

A chatter tool is basically a very thin scraper, and is sharpened the same, with a grinder or by hand, with a burr left on the top edge. However, unlike normal scrapers the tool is so thin that as it contacts the timber it bends and flexes back off the wood. It then flexes back into the wood, removing a small piece and flexes away again and so on. This 'chipping' of the wood surface is what you see when the chatter tool is used.

SET UP

Timber

Chattering works best on the end grain of hardwoods, making it ideal to embellish the lids of small end grain boxes, spinning tops and the like. Softwoods are too soft to resist the chatter tool and will not force the blade to flex. The tool simply acts as a normal scraper and will tear grooves.

For chattering, the surface of the timber should be smooth, not necessarily sanded, but cut clean with a gouge or similar.

Tool Rest

When turning normally you would position your tool rest quite close to your work piece, but when doing chatter work the tool rest must be brought way from the work to allow space for the chatter tool to flex.

The tool tip should be presented to the timber at a downward angle, therefore the tool rest needs to be positioned slightly higher than you would position normally.

Finally the tool rest should be set up parallel (or as close as possible) to the surface you want to chatter.

VARIABLES

There are a large range of variables which will change the chatter effect on your work, these include:

- Shape of the chatter tool tip
- Thickness of the tool material
- Stiffness of the tool material
- Distance that the tool extends past the handle – amount of flex
- Hardness and density of the wood
- Angle that the tool is presented to the wood
- Speed at which the tool is moved across the wood
- Lathe speed
- Tool rest height
- How hard the tool is pushed into the wood.

With all of these variables, you can achieve a huge range different effects.

GENERAL GUIDELINES

There are no hard and fast rules to chatter work, through practice and experimentation you will discover what works better and achieves the results you like.

Here are a few guidelines to assist:

- Lower lathe speeds will produce a finer pattern, higher speeds will result in wider spaced patterns.
- Allowing the tool to project further out of the handle will allow more flex, thereby producing a wider spaced pattern.
- The louder, the better. A good high pitched scream from your chatter tool means that you are making good chatter.
- Having the tool cut on the wood's centre line will produce lines that radiate straight out from centre, cutting below centre will produce a clockwise spiral and above centre will produce an anti-clockwise spiral.
- Patterns will stand out more prominently if 'framed' with small lines to delineate, try using the tip of a skew chisel.