Elements of Hand Chased Threads in Wood

With Sam Angelo

Demonstration for the Wood Lathe

- **Introduction to Thread Chasing**: Explanation of thread chasing and its applications in woodturning.
- **Traditional thread chasing tools**
    - My Thread Chasers: 10-12-16-18-20 TPI
    - Armrest tool
    - Point Tool
    - Recess tool (for cutting stop gap in female recess)
    - Inside Tool or 90° tool (Re: Alan Batty)
- **Elements for successful Thread Chasing**
    - Lathe speed
    - Tool rest height/position
    - Properly sharpened tools
    - Suitable wood: Hard, dense, Close-grained wood
        - Blackwood, ebony, cocobolo, lignum vitae, rosewood, Mopane, cocobolo, other wood with a specific gravity of 1. and over....
    - Specific Gravity: explained and its importance in selecting wood for chasing threads (see sidebar below):
- **Preparing the Blank**:
    - **Turning square blank to a cylinder**
    - **Cutting female threads first in the lid**
    - **Cutting the male thread on the base**
    - **Connecting the male and female threads**
    - **Completing the profile of the box**

Sidebar: **Specific Gravity**:

Specific gravity is a measure of the density of wood compared to water. A cubic foot of water at sea level weighs 64 pounds. So, a cubic foot of wood weighing 64 pounds would have a specific gravity of "1". It indicates how much mass a given volume of wood contains and is an important factor in determining the wood's strength, durability, and suitability for thread chasing. Wood with a higher specific gravity, such as ebony or lignum vitae, are typically harder and denser, making them ideal for precise thread chasing and fine detail work. This measurement is commonly used as a reference point when comparing the density of different materials, such as wood, for specific gravity calculations.