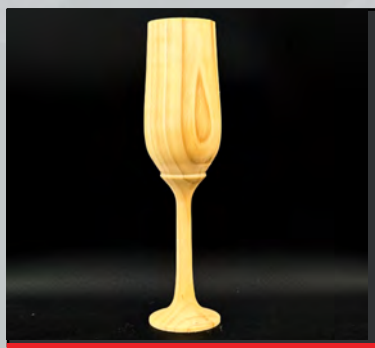


PROJECT GUIDE

Suggested Skill Level: Intermediate - Advanced

HOW TO TURN A CHAMPAGNE FLUTE

Create an elegant champagne flute with this step-by-step guide, ideal for honing spindle turning techniques. This project emphasizes precision and balance, resulting in a functional and beautifully crafted piece perfect for celebrations. Here's how:

MATERIALS & TOOLS

- **NOVA Lathe**
- **NOVA Supernova2 Chuck Bundle** with **50mm Jaws**
- **NOVA Live Center System** including the **Step Cone**
- **NOVA Drill Chuck** (SKU 9018)
- **Forstner Bit** and **Extension**
- **Basic spindle turning tools:**
- Spindle Roughing Gouge
- Standard Spindle Gouge
- Narrow Kerf Parting Tool
- **Blank:** 8.5" length x 2 ¼" diameter Poplar (or other closed-grain wood)
- **Finishes:** Mahoney's Utility Finish

Instructions by: **Jeff Hornung**, Artist and Owner of The Walnut Log Studio and Supply:

https://thewalnutlog.com/

1. Wood Selection

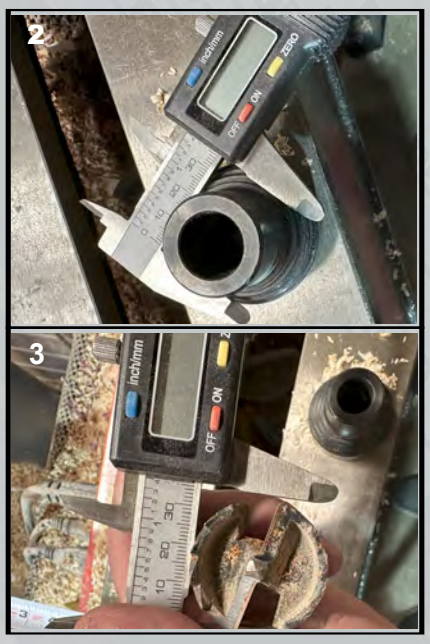
Goblets, flutes, and wooden stemware are best turned from spindle-oriented blanks with grain running parallel to the lathe. For functional stemware, choose a closed-grain wood free of cracks, voids, or defects. In this project the artist uses an 8.5" Poplar blank, yielding a finished flute approximately 8" tall. A 2 ¼" dowel blank can be securely held in 50mm Pro-Tek jaws in spigot mode, though other suitable closed-grain woods can also be used.

2. Preparing the Blank

Mark the center on one end of the blank, and use the point of the NOVA Live Center System to center the blank in the jaws. Tighten the jaws to secure it.

For larger diameter blanks, begin between a drive spur and live center to create a proper tenon, especially if standard jaws are being used. Support from the tailstock is recommended when turning thin stems, as in goblet-style projects. The step cone from the Live Center System provides reliable support.

Measure the step cone size with vernier calipers and select a Forstner bit of the same or a similar diameter. For a well-proportioned champagne flute, the stem and cup should each represent about 50% of the total project length. Mark the anticipated bottom of the flute, the centerline, and the bottom of the inside. Knowing the exact location of the bottom is essential for accurate turning. A depth gauge or marking the Forstner bit shaft with blue tape will indicate when to stop drilling. (Refer to Pics 1–3)



3. Drilling the Flute

Drill the flute to the desired depth slowly, at 250–350 RPM, and clear chips frequently to prevent heat buildup. Once drilled, use a round carbide or hollowing tool to shape the inside bottom of the flute. Sand the interior thoroughly at this stage. (Refer to Pic 4)

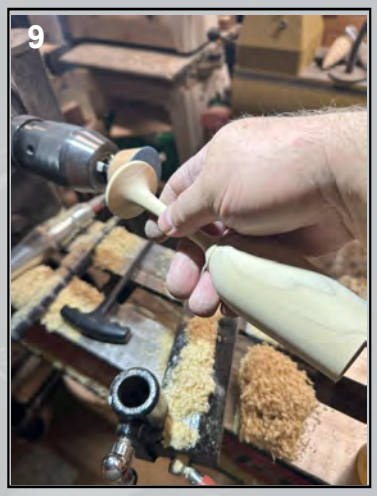
4. Shaping the Flute's Exterior

With tailstock support, shape the exterior of the flute. The step cone from the NOVA Live Center System provides stable support when fitted into the drilled flute. Once the exterior is shaped, sand it to a smooth finish. (Refer to Images 5 - 6)

5. Turning the Stem

Turn the stem in small segments, finishing each section before moving on. Make the majority of cuts toward the headstock to minimize pressure and reduce flex on the stem as it thins. Work in approximately one-inch sections to maintain control. Sand each section with light pressure to avoid breaking the stem. Once the stem is complete, turn and sand the foot.

Decide whether to part off and apply the finish off the lathe or finish the flute while it remains attached. (Refer to Images 7 – 8)



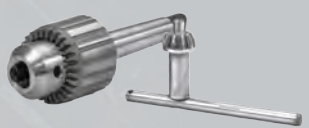
6. Final Sanding and Finishing Application

After parting off, sand the bottom of the flute and apply a suitable finish for its intended use. For an alcohol-based liquid like champagne, a wax or proper drying oil is recommended. If the lathe operates below 100 RPM, a food-safe epoxy can also be used. A drying oil is a practical choice, considering champagne is unlikely to sit in the flute for long. (Refer to Image 9)

Pro-Tips from a Turner for Success:

- Begin by drilling and shaping the inside of the flute, then complete the rest of the project with tailstock support.
- Work in sections from the tailstock toward the headstock.
- Sand each section as you go, avoiding revisiting previously finished areas.
- Wooden stemware is best crafted from spindle blanks with grain running parallel to the lathe.
- When turning in spindle orientation, always shape from the widest diameter to the narrowest to ensure the wood supports the cuts and minimizes tear-out.
- Save the toasting for after the turning is complete!

Get your NOVA Tools for this Project:



SKU 9018 - 1.2 Keyed Chuck w/ 2 MT Spindle

SKU 23108 - PRO-TEK Supernova 2 Chuck Bundle

SKU 5015 Live Center System