Turning a 5 Axis Bent Xmas Tree

Using Indexed (*captured*) Tilt & Turn Technique
- Turning Plan
- Dimensions

Turning Video

Desired Outcome



Instructions

- Choose a blank that is ≥2.25 x ≥2.25 x ~4.25 inches. (*See Diagram #1*)
- Mount and:
  - true-up
  - on the bottom, turn a tenon for a 1inch jaws (*alt is Steb Safety Center or mini spur*)
- Mark and punch 5 future tail stock center pts *(see Diagram 2 for measurements)*
- Turn the general shape of the top 2/3s *(see Diagram 3 with two different mountings)*
- Starting at the bottom **turn** then **sand** each section per Diagram # 4
- Section 5:
  - Turn hourglass to dimensions shown in **green** on diagram 4
  - Sand then cut to match the bend leaving stock to carve
- Using Dremel or sanding wheel finish the shape of the tree top
- Sand off the tenon & finish

Diagram #1

Blank Layout

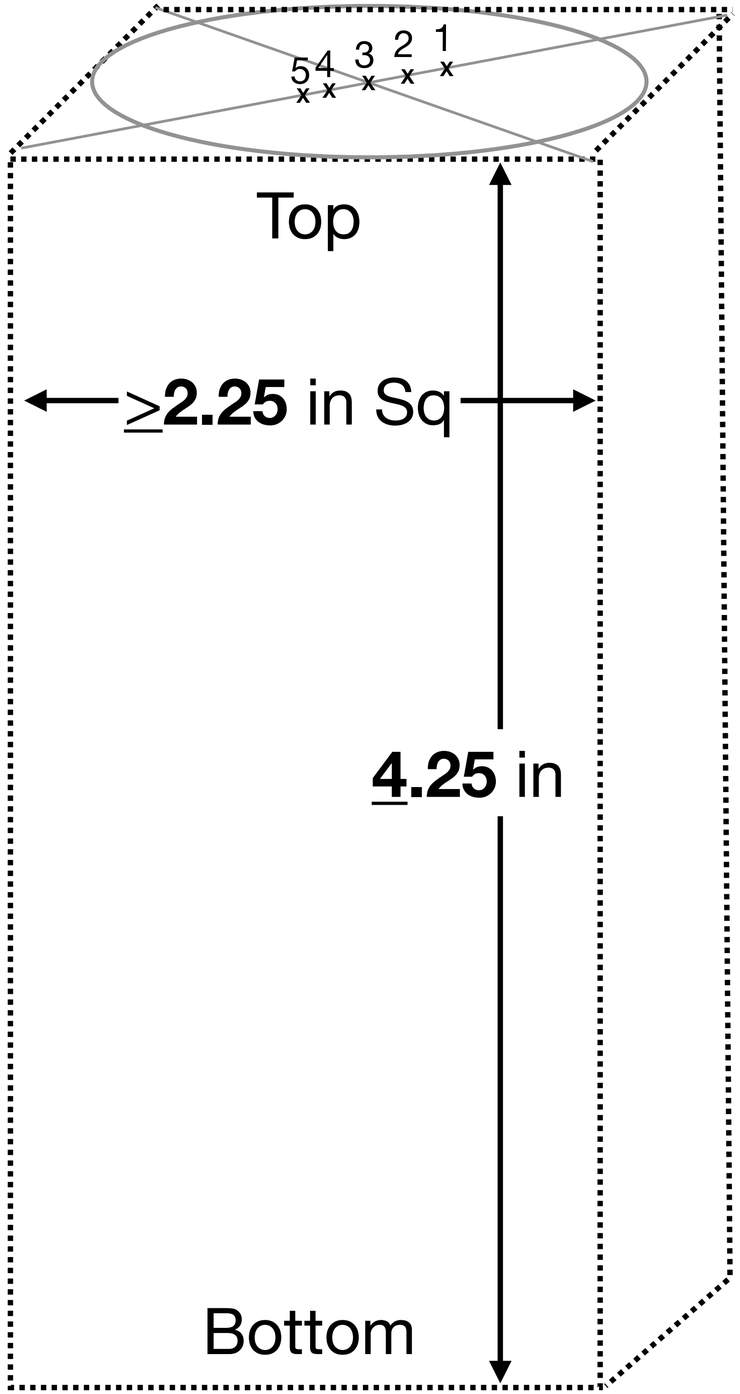
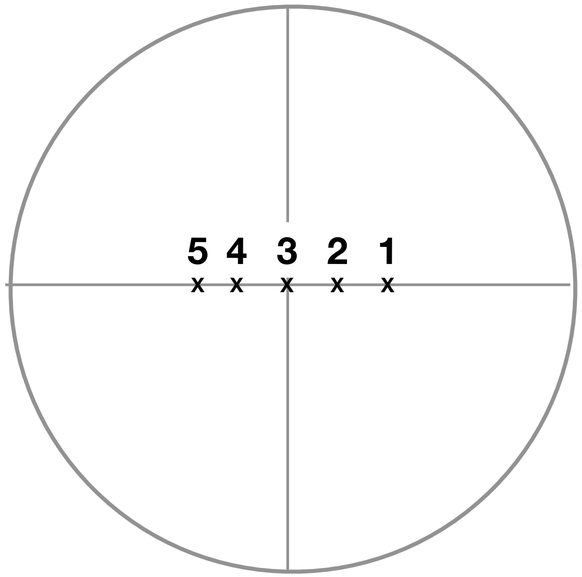


Diagram #2

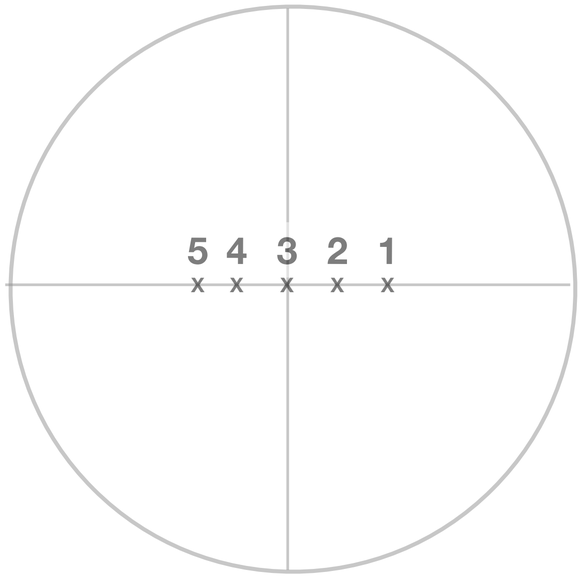


Distance between 1 & 2 = 5mm
Distance between 2 & 3 = 5mm
Distance between 3 & 4 = 5mm
Distance between 4 & 5 = 3mm

Tailstock Center Points

Diagram #3

Forming The General Shape Of The Tree Top



Turn the general shape of the top 2/3s
- Bottom Center to Point 5
- Bottom Center to Point 1

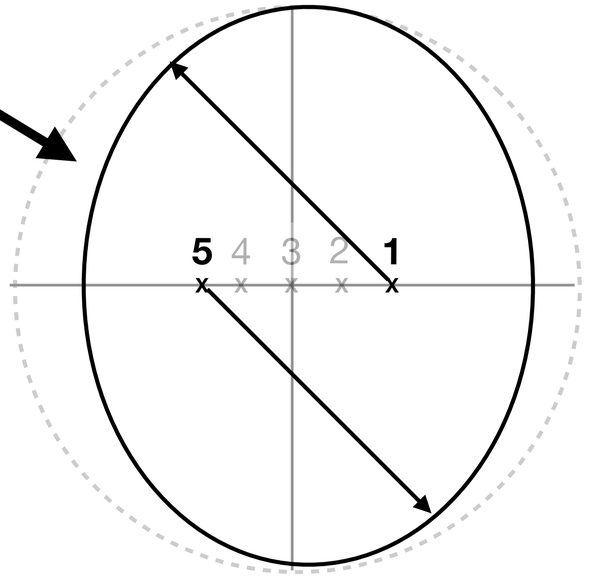


Diagram #4

Section 5

Section 4

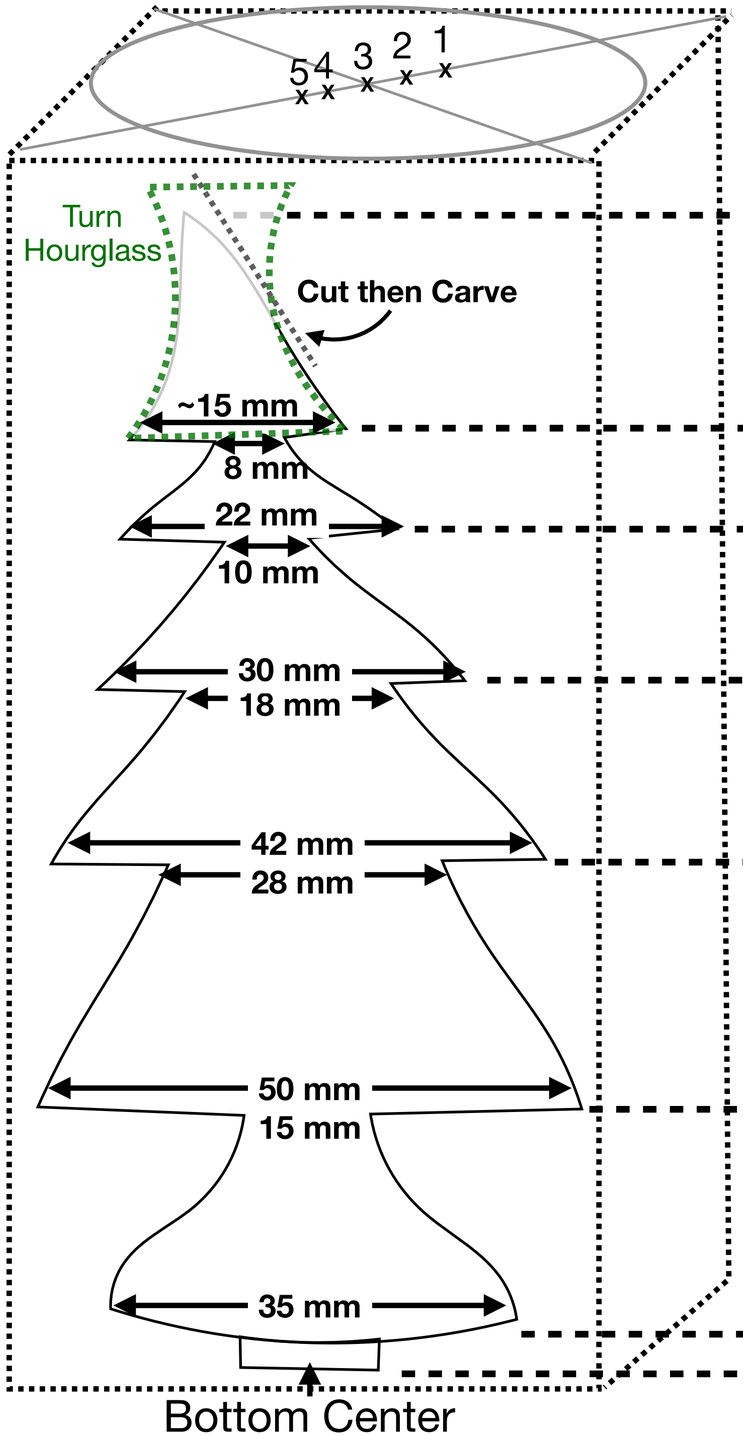
Section 3

Section 2

Section 1

Base/Trunk

Lathe Mount



Dimensions

Turn Setup By Section

Bottom Center to Pt 5 ~ 22 mm

Bottom Center to Pt 4 10 mm

Bottom Center to Pt 3 13 mm

Bottom Center to Pt 2 14 mm

Bottom Center to Pt 1 22 mm

Bottom Center to Pt 3 18 mm

Tenon

≥ 99mm
(3.9 in)