

**Process Sheet –Cam 1109 Lab 2- Lathe Widget 2**  
(Page 1 of 2)

- 1) Chuck part in 1" collet with 2 1/2" sticking out
- 2) Face end of part (Bare Minimum Clean Up)  
654 RPM with carbide insert
- 3) Turn .747/.753 diameter x 2.25" length  
654 RPM with carbide insert
- 4) Turn .491/.498 diameter x 1.00" length  
654 RPM with carbide insert
- 5) Groove .420 diameter at 1 inch location  
654 RPM with carbide insert
- 6) Groove .630 diameter at 2.25 inch location  
654 RPM with carbide insert
- 7) Use lathe to make a line at 1.220" for end of 60 degrees  
654 RPM with carbide insert

(continued on Page 2)

**Video Resources**

**2.1 – Setup of Lathe**

ADD A QR CODE  
HERE TO PROVIDE  
EASY ACCESS TO  
THE LAB VIDEO

**2.2 – Turn Main Diameter**

ADD A QR CODE  
HERE TO PROVIDE  
EASY ACCESS TO  
THE LAB VIDEO

**2.3 – Turn Thread Dia.**

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**2.4 – Groove 1&2**

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EASY ACCESS TO  
THE LAB VIDEO

## Process Sheet - Lab 2- Lathe Widget 2

(Page 2 of 2)

- 8) Turn 60 degree taper  
654 RPM
- 9) Set up lathe to chase  $\frac{1}{2}$  - 20 UNF 2 B  
95 RPM
- 10) Use lathe to make line for overall length at 2.75 plus  $\frac{1}{16}$  use cut off  
tool  
654 RPM
- 11) Chuck part in  $\frac{3}{4}$  inch collet & face to 2.75 overall length
- 12) Center drill end  $\frac{3}{8}$ " wide
- 13) Drill with Q drill  $1 \frac{1}{8}$  inch deep
- 14) Tap hole  $\frac{3}{8}$  – 24 thread  $\frac{5}{8}$  deep with tap wrench & tail stock
- 15) Knurl head to print specs, chamfer as indicated and deburr

### Video Resources

#### 2.5 – Line & Taper

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#### 2.6 – Thread

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#### 2.7 – Cut Off

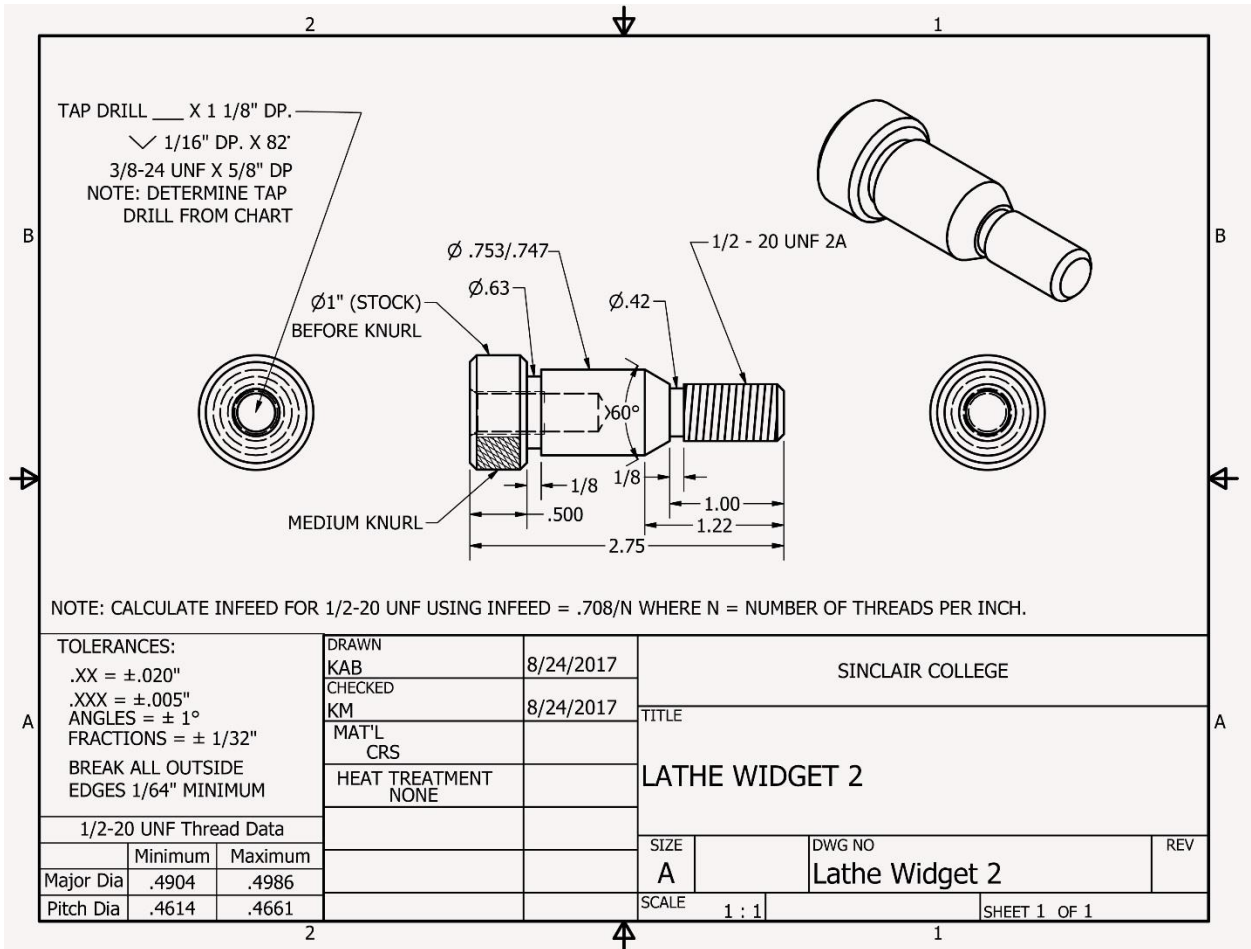
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#### 2.8 – Lathe Tapping

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#### 2.9 – Knurling

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