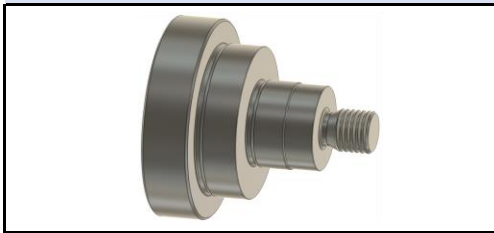


SkillsUSA 2024 Process Plan_Turning_State

| | | | | |
|--|------|----------|---------------|-------|
| Part Name: SkillsUSA 2024 Process Plan_Turning_State | DRW: | Rev: N/A | Student Name: | Date: |
|--|------|----------|---------------|-------|



| | |
|----------------|---|
| Program # | O20001 |
| Operation: | First |
| WCS: | G54 |
| WCS Location: | Front face of part |
| Work Holding: | 8" 3 Jaw Chuck, with pocket cut to 6" Dia x 2.225 Deep |
| Stock: | 6 Dia, cut to 5.7" |
| Part location: | Centered in stock axially and radially |
| Notes: | Finish machine part on first op to include the chamfer on the large OD in front of the jaws without cutting the jaws. CAD Model includes 3 bodies: Part, 1stOpJaws, 2ndOpJaws |

Tooling:

| Tool # | Tool Type | Shank | Head Length | Overall Length | Cutting Width | Holder Type | Starting Chip Load (Rough/Finish) | Max SFM |
|--------|---------------------------------------|-------|-------------|----------------|---------------|------------------------------|-----------------------------------|---------|
| 1 | Haas 80Deg CNMG 432-HUM HTP15 02-054 | 0.75 | 1.2 | 4.5 | 1 | MCLP-R (-5Deg) | .012/.006 | 1200 |
| 2 | Haas 55Deg DCGT3251-HAL HTSU10 02-034 | 0.75 | 0.945 | 4.5 | 1 | SDJC-R (-3Deg) | .010/.003 | 1600 |
| 3 | 3/4" 118Deg Drill, 3.75"LOC, 4"LBH | 0.75 | | | | CAT 40 - ER 32 | 0.012 | 300 |
| 4 | 12TPI Threading Stick tool | 0.75 | 1.28 | 5 | 2" | Streight Thread | | 500RPM |
| 5 | Haas CCGT 3251-HAL HTSU10 02-0341 | 0.625 | 1.28 | 6 | 0.406 | SCLC-R, Boring (.77Min Bore) | .010/.003 | 1000 |

| Operation: | Tool # | Stepover | Stock to leave | Notes |
|----------------|--------|----------|----------------|---|
| Face | 1 | 0.05 | 0 | .010 Finish pass at .006 chip load |
| Rough | 1 | 0.065 | 0.01 | Horizontal rough front to back. |
| Rest machine | 2 | 0.025 | 0.01 | Rest machine areas that T2 didn't reach |
| Finish machine | 2 | 0.01 | 0 | Finsih front to back. |
| Thread 3/4-12 | 4 | N/A | 0 | 5 passes, plus single spring pass |

Student notes:

Judge notes: