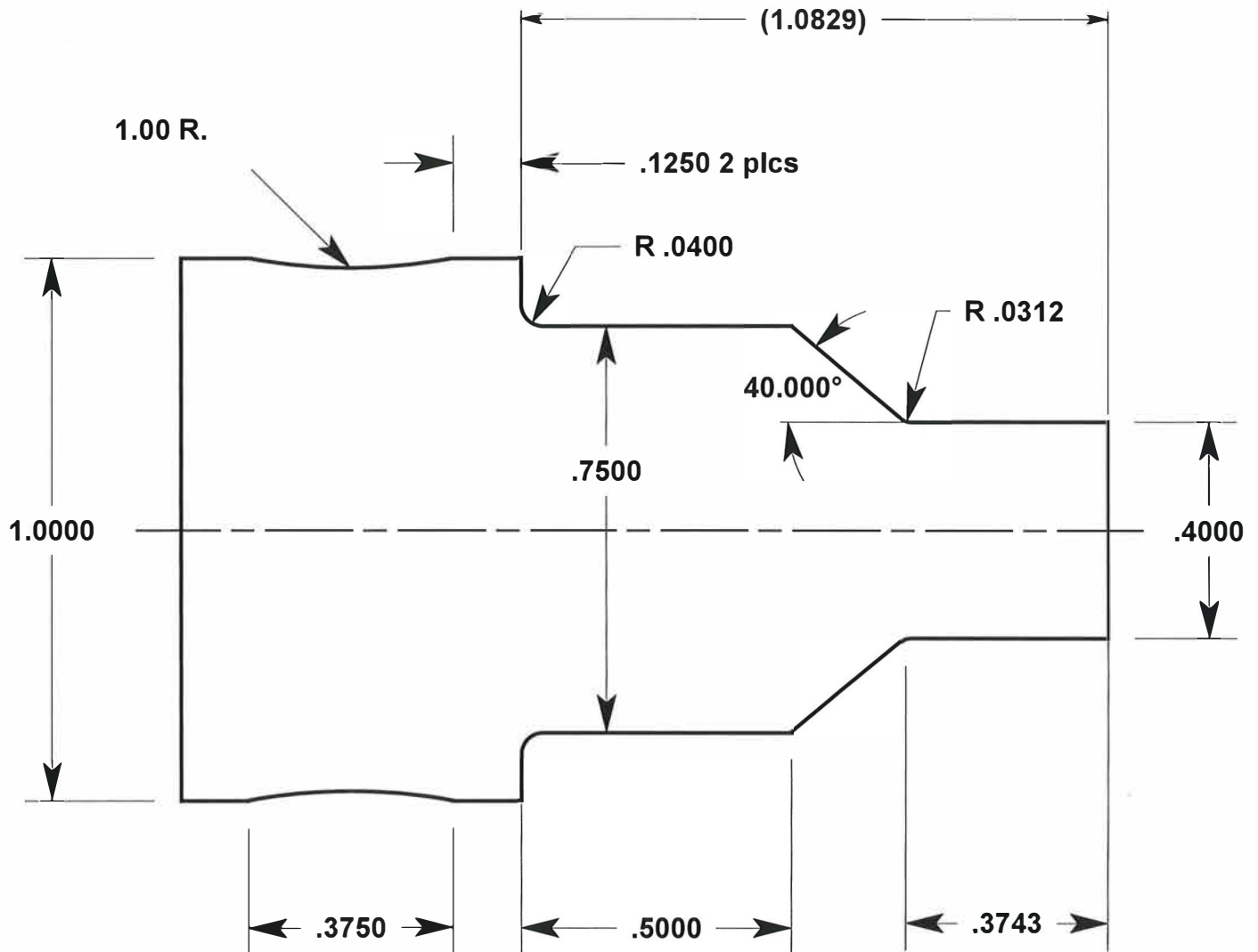


Project 2 (Bishop)



1. Tool #1 80° diamond 1/64R, Tool #2 35° profiling tool 1/64R, Tool #7 is the stock puller, Tool #10 part off tool .125 wide.
2. Enhanced G01 and circular interpolation R values instead of I and J values must be used.
3. Must stop on the 270° quadrant on the top radius.
4. Rough and finish the part leaving out the top large radius. Turn the top radius with a single finishing pass (no G71 or G70).
5. Break all sharp edges .005R
6. Stock is 1.125Ø 6061-T6 aluminum
7. The (1.0829) dimension is a rounded reference dimension.
8. Cut the part off with a .015" chamfer on the backside.

%
O01502 (ELI GONZALEZ, BISHOP
PROJECT, FALL 2021)
(T0101 80 DEG 1/64R TURNING AND
FACING)
(T0202 35 DEG 1/64R PROFILING)
(T0707 STOCK PULLER)
(T1020 .125 PART OFF TOOL)
(3 INCH STOCK STICK OUT)
(1.7079 + .250 + 1.0 = 2.9579)
N10 G00 G18 G80 G40 G99
(ROUGH AND FINISH FIRST 8 POINTS)
N20 G28 U0
N30 G28 W0
N40 T101 (80 DEG 1/64R TURNING AND
FACING)
N50 G97 S300 M03
N60 G00 Z0.25
N70 X1.325 M08
N80 G50 S4500
N90 G96 S500
/ N100 G71 P110 Q220 U0.02 W0.003
D0.075 F0.01
N110 G42
N120 G00 X-0.0313 (POINT 1)
N130 G01 Z0 F0.005
N140 X0.4 R-0.005 (POINT 2)
N150 Z-0.3629 (POINT 3)
N160 G02 X0.4146 Z-0.383 R0.0312
(POINT 4)
N170 G01 X0.7477 Z-0.5815 (POINT 5)
N180 G03 X0.75 Z-0.5847 R0.005 (POINT
6)
N190 G01 Z-1.0829 R0.04 (POINT 7)
N200 X1. R0.005 (POINT 8)
N210 Z-1.9579
N220 G40 X1.325
N230 Z0.25
/ N240 G70 P110 Q220
N250 M09
N260 G00 Z0.25 M05
N270 G28 U0
N280 G28 W0
N290 M01
N300 G00 G18 G80 G40 G99 (1.00 TOP
RADIUS)
N310 G28 U0
N320 G28 W0

N330 T202 (35 DEG 1/64R PROFILING)
N340 G97 S300 M03
N350 G42
N360 Z0.25
N370 X1.325 M08
N380 G50 S4500
N390 G96 S500
N400 G00 Z-0.8329
N410 G01 X1. F0.005
N420 G01 X1. Z-1.2074 (POINT C)
N430 G03 X0.9998 Z-1.2084 R0.005
(POINT D)
N440 G02 X0.9645 Z-1.3954 R1. (POINT B)
N450 G02 X0.9998 Z-1.5824 R1. (POINT E)
N460 G03 X1. Z-1.5834 R0.005 (POINT F)
N470 G01 Z-1.9579
N480 G40 G01 X1.325 M09 F0.02
N490 Z0.25 M05
N500 G28 U0
N510 G28 W0
N520 M01
N530 G00 G18 G80 G40 G99 (PART OFF
AND .015 CHAMFERING)
N540 G28 U0
N550 G28 W0
N560 T1020 (.125 PART OFF TOOL)
N570 G97 S300 M03
N580 G00 Z-1.7079
N590 X1.325 / M08
N600 G50 S3500
N610 G96 S300
N620 M36
N630 G01 X0.95 F0.003
N640 G04 P0.144
N650 U0.25 F0.02
N660 W0.1209
N670 U-0.2418 W-0.1209 F0.003
N680 X0
N690 X1.325 F0.02 M09
N700 M37
N710 G00 Z0.25
N720 G28 U0 M05
N730 G28 W0
N740 M01
N750 G00 G18 G80 G40 G99 M05 (STOCK
PULL)
N760 G28 U0
N770 G28 W0

N780 T707 (STOCK PULLER)

N790 G00 Z-2.3329

N800 X4.125

N810 G01 G98 X0 F50.

N820 M11

N830 G04 P0.5

N840 W1.8629

N850 M10

N860 G04 P0.5

N870 G99

N880 G28 U0

N890 G28 W0

N900 M30

%