

(SPHERICAL TURNING 1.NC)  
(PETER SMID - CNC PROGRAMMING HANDBOOK)  
(GENERATED BY MASTERCAM - NO RADIUS OFFSET)

(T06 - 35 DEGREE TURNING TOOL)

```
N1 G20 G40 G99 T0600
N2 G50 S3000
N3 G96 S600 M03
N4 G00 X1.6438 Z0.1 T0606
N5 X1.6438
N6 G01 Z-2.3878 F0.005
N7 X1.7638
N8 G00 X1.8038 Z-2.3678
N9 Z0.1
N10 X1.5438
N11 G01 Z-2.3878
N12 X1.6638
N13 G00 X1.7038 Z-2.3678
N14 Z0.1
N15 X1.4438
N16 G01 Z-1.4165
N17 G03 X1.504 Z-1.6293 R0.7675
N18 G01 Z-2.3878
N19 X1.5638
N20 G00 X1.6038 Z-2.3678
N21 Z0.1
N22 X1.3438
N23 G01 Z-1.2879
N24 G03 X1.4638 Z-1.4548 R0.7675
N25 G00 X1.5038 Z-1.4348
N26 Z0.1
N27 X1.2438
N28 G01 Z-1.2018
N29 G03 X1.3638 Z-1.3088 R0.7675
N30 G00 X1.4038 Z-1.2888
N31 Z0.1
N32 X1.1438
N33 G01 Z-1.1353
N34 G03 X1.2638 Z-1.2171 R0.7675
N35 G00 X1.3038 Z-1.1971
N36 Z0.1
N37 X1.0438
N38 G01 Z-1.0813
N39 G03 X1.1638 Z-1.1475 R0.7675
N40 G00 X1.2038 Z-1.1275
N41 Z0.1
N42 X0.9438
N43 G01 Z-1.0364
N44 G03 X1.0638 Z-1.0913 R0.7675
N45 G00 X1.1038 Z-1.0713
N46 Z0.1
N47 X0.8438
N48 G01 Z-0.9986
N49 G03 X0.9638 Z-1.0448 R0.7675
N50 G00 X1.0038 Z-1.0248
N51 Z0.1
N52 X0.7438
N53 G01 Z-0.9667
N54 G03 X0.8638 Z-1.0057 R0.7675
```

N55 G00 X0.9038 Z-0.9857  
N56 Z0.1  
N57 X0.6438  
N58 G01 Z-0.9407  
N59 G03 X0.6562 Z-0.943 R0.0305  
N60 X0.7638 Z-0.9727 R0.7675  
N61 G00 X0.8038 Z-0.9527  
N62 Z0.1  
N63 X0.5438  
N64 G01 Z-0.9398  
N65 X0.629  
N66 G03 X0.6562 Z-0.943 R0.0305  
N67 X0.6638 Z-0.9449 R0.7675  
N68 G00 X0.7038 Z-0.9249  
N69 Z0.1  
N70 X0.4438  
N71 G01 Z-0.0725  
N72 G03 X0.52 Z-0.2123 R0.2755  
N73 G01 Z-0.9395  
N74 G02 X0.5356 Z-0.9398 R0.0995  
N75 G01 X0.5638  
N76 G00 X0.6038 Z-0.9198  
N77 Z0.1  
N78 X0.3438  
N79 G01 Z-0.0104  
N80 G03 X0.4638 Z-0.0911 R0.2755  
N81 G00 X0.5038 Z-0.0711  
N82 Z0.1  
N83 X0.2438  
N84 G01 Z0.005  
N85 X0.286  
N86 G03 X0.3256 Z-0.0022 R0.0306  
N87 X0.3638 Z-0.0201 R0.2755  
N88 G00 X0.4038 Z-0.0001  
N89 Z0.1  
N90 X0.1438  
N91 G01 Z0.005  
N92 X0.2638  
N93 G00 X0.3038 Z0.025  
N94 Z0.1  
N95 X0.0438  
N96 G01 Z0.005  
N97 X0.1638  
N98 G00 X0.2038 Z0.025  
N99 Z0.1  
N100 X-.0562  
N101 G01 Z0.005  
N102 X0.0638  
N103 G00 X0.1038 Z0.025  
N104 Z0.1  
N105 X-.06  
N106 G01 Z0.005  
N107 X-.0362  
N108 G00 X0.0038 Z0.025  
N109 X0.55  
N110 Z-0.2123  
N111 X0.52  
N112 G03 X0.42 Z-0.3705 R0.2755  
N113 G01 Z-0.9213  
N114 G02 X0.5356 Z-0.9398 R0.0995

N115 G01 X0.54  
N116 G00 X0.58 Z-0.9198  
N117 Z-0.3552  
N118 X0.44  
N119 G03 X0.3596 Z-0.4066 R0.2755  
N120 G02 X0.3368 Z-0.4344 R0.0395  
N121 G01 Z-0.8403  
N122 G02 X0.44 Z-0.9276 R0.0995  
N123 G00 X0.48 Z-0.9076  
N124 X1.534  
N125 Z-1.6293  
N126 X1.504  
N127 G03 X1.404 Z-1.9017 R0.7675  
N128 G01 Z-2.3878  
N129 X1.524  
N130 G00 X1.564 Z-2.3678  
N131 Z-1.8737  
N132 X1.424  
N133 G03 X1.304 Z-2.008 R0.7674  
N134 G01 Z-2.3878  
N135 X1.424  
N136 G00 X1.464 Z-2.3678  
N137 Z-1.9898  
N138 X1.324  
N139 G03 X1.204 Z-2.085 R0.7674  
N140 G01 Z-2.3878  
N141 X1.324  
N142 G00 X1.364 Z-2.3678  
N143 Z-2.0712  
N144 X1.224  
N145 G03 X1.104 Z-2.146 R0.7675  
N146 G01 Z-2.3878  
N147 X1.224  
N148 G00 X1.264 Z-2.3678  
N149 Z-2.1348  
N150 X1.124  
N151 G03 X1.004 Z-2.196 R0.7674  
N152 G01 Z-2.3878  
N153 X1.124  
N154 G00 X1.164 Z-2.3678  
N155 Z-2.1868  
N156 X1.024  
N157 G03 X0.9556 Z-2.2172 R0.7674  
N158 G01 X0.904 Z-2.2389  
N159 Z-2.3878  
N160 X1.024  
N161 G00 X1.064 Z-2.3678  
N162 Z-2.2305  
N163 X0.924  
N164 G01 X0.804 Z-2.2808  
N165 Z-2.3878  
N166 X0.924  
N167 G00 X0.964 Z-2.3678  
N168 Z-2.2724  
N169 X0.824  
N170 G01 X0.704 Z-2.3228  
N171 Z-2.3878  
N172 X0.824  
N173 G00 X0.864 Z-2.3678  
N174 Z-2.3144

```
N175 X0.724
N176 G01 X0.6682 Z-2.3379
N177 Z-2.3878
N178 X0.724
N179 G00 X0.764 Z-2.3678
N180 X1.7738
N181 Z0.1
N182 X-.07
N183 G96 S700
N184 G01 Z0 F.003
N185 X0.286
N186 G03 X0.319 Z-0.0061 R0.0255
N187 X0.3526 Z-0.403 R0.2705
N188 G02 X0.3266 Z-0.4344 R0.0446
N189 G01 Z-0.8403
N190 G02 X0.5356 Z-0.9448 R0.1045
N191 G01 X0.629
N192 G03 X0.6518 Z-0.9475 R0.0255
N193 X0.9492 Z-2.2134 R0.7625
N194 G01 X0.6582 Z-2.3355
N195 Z-2.3928
N196 X1.7438
N197 G00 G40 X4.0 Z4.0 T0600
N198 M01
```

```
(T05 - 0.125 WIDE PART-OFF TOOL)
```

```
N199 G97 S1400 M03 T0500
N200 G00 X1.75 Z-2.3828 T0500
N201 G01 X-0.02 F0.003
N202 G00 X1.75
N203 X4.0 Z4.0 T0500
N204 M30
```

```
%
```