N1 (PARAMETRIC SURFACING SINGLE PASS)

N2 (SURFACES ANY SIZE BLOCK WITH ONE SINGLE PASS)

N3

N4 REAL #qLENGTH #qDEPTH #qHEIGHT #qSTEPOVER #qSTEPDOWN #qNUMBER #qTOOL #qCOUNTER #qNUMBEROFSTEPS

N5

N6 #qLENGTH=24 (ENTER LENGTH OF BLOCK IN X)

N7 #qDEPTH=24 (ENTER DEPTH OF BLOCK IN Y)

N8 #qHEIGHT=10 (ENTER HEIGHT OF BLOCK IN Z)

N9 #qSTEPOVER=0.75 (ENTER STEP OVER OF TOOL - 75% OF TOOL DIAMETER)

N10 #qSTEPDOWN=0.25 (ENTER DEPTH OF CUT IN Z)

N11 #qNUMBER=1+[#qLENGTH/#qSTEPOVER] (NUMBER OF PASSES IN X)

N12

N13 #qTOOL=1 (TOOL: 1.000 inches dia. slot drill)

N14

N15 (TO CHANGE SPINDLE SPEED SEE LINE N33 - PLUNGE RATE SEE N40 - FEED RATE SEE N41)

N16 (DO NOT MODIFY ANYTHING BELOW THIS LINE)

N17

N18 #qCOUNTER=0

N19

N20 (STREAMLINE AUTOMATION)

N21 (Spindle Enabled)

N22

N23 (FILE SET TO RUN IN INCHES)

N24 (FILE:PARAMETRIC_SURFACING_MULTIPLE)

N25

```
N26 (MATERIAL)

N27

N28 (X-SIZE = #qLENGTH- Y-SIZE = #qDEPTH Z-SIZE =  #qHEIGHT)

N29

N30 (#qTOOL)

N31

N32 G90 (Absolute Mode)

N33 S6000 (Spindle Speed)

N34 G20 (Set Units to Inches)

N35 M3 (Spindle On)

N36 M8 (Dust Collector On)

N37 G0 X0.0000 Y0.0000(Go To X/Y Home)

N38 G0 Z1.5000 (Go To Z Home)

N39

N40 #qNUMBEROFSTEPS=0

   WHILE #qNUMBEROFSTEPS<4 DO

N42

N43 G0 X[#qLENGTH+#qSTEPOVER] Y0 Z1.5000

N44 G1 Z-[#qSTEPDOWN*#qNUMBEROFSTEPS] F150.0

N45 G1 Y[#qDEPTH+#qSTEPOVER]  F200.0

N46 G1 X#qLENGTH

N47 G1 Y0-#qSTEPOVER

N48

N49 #qCOUNTER=#qCOUNTER+1

   WHILE #qCOUNTER<#qNUMBER DO
```

N50 G1 X[#qLENGTH-[#qSTEPOVER*#qCOUNTER]]

N51 G1 Y[#qDEPTH+#qSTEPOVER]

N52 #qCOUNTER=#qCOUNTER+1

N53 G1 X[#qLENGTH-[#qSTEPOVER*#qCOUNTER]]

N54 G1 Y0-#qSTEPOVER

N55 #qCOUNTER=#qCOUNTER+1

ENDWHILE

N57

N58 G1 Y0-#qSTEPOVER

N59 G0 Z1.5000 F150.0

N60 #qNUMBEROFSTEPS=#qNUMBEROFSTEPS+1

ENDWHILE

N62

N63 G0 X0.0000 Y0.0000

N64 G53Z0 (Raise Head to Top)

N65 M9 (Dust Collector Off)

N66 M5 (Spindle Off)

N67 G0X0Y0 (Go Home)

N68 (End of File)

N69 G0X0Y0 (Go Home)

N70 (End of File)