

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
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_ONE)
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)

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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 G0 X[#qLENGTH+#qSTEPOVER] Y0 Z1.5000
N40 G1 Z-[#qSTEPDOWN] F150.0
N41 G1 Y[#qDEPTH+#qSTEPOVER] F200.0
N42 G1 X#qLENGTH
N43 G1 Y0-#qSTEPOVER
N44
N45 #qCOUNTER=#qCOUNTER+1
    WHILE #qCOUNTER<#qNUMBER DO
N47 G1 X[#qLENGTH-[#qSTEPOVER*#qCOUNTER]]
N48 G1 Y[#qDEPTH+#qSTEPOVER]
N49 #qCOUNTER=#qCOUNTER+1
N50 G1 X[#qLENGTH-[#qSTEPOVER*#qCOUNTER]]
N51 G1 Y0-#qSTEPOVER
N52 #qCOUNTER=#qCOUNTER+1
    ENDWHILE
N54
N55 G1 Y0-#qSTEPOVER
N56 G0 Z1.5000
N57 G0 X0.0000 Y0.0000
N58 G53Z0 (Raise Head to Top)
N59 M9 (Dust Collector Off)
N60 M5 (Spindle Off)
N61 G0X0Y0 (Go Home)
N62 (End of File)
N63 G0X0Y0 (Go Home)
N64 (End of File)
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