

(PARAMETRIC SURFACING SINGLE PASS)

(SURFACES ANY SIZE BLOCK WITH ONE SINGLE PASS)

REAL #qLENGTH #qDEPTH #qHEIGHT #qSTEPOVER #qSTEPDOWN #qNUMBER #qTOOL #qTOOLRPM #qCOUNTER

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

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

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

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

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

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

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

#qTOOLRPM=14000 (Spindle Speed)

(DO NOT MODIFY ANYTHING BELOW THIS LINE)

#qCOUNTER=0

N1 (STREAMLINE AUTOMATION)

N2 (Spindle Enabled)

N3

N4 (FILE SET TO RUN IN INCHES)

N5 (FILE:PARAMETRIC_SURFACING_ONE)

N6

N7 (MATERIAL)

N8

N9 (X-SIZE = #LENGTH- Y-SIZE = #DEPTH Z-SIZE = #HEIGHT)

N10

N11 (#TOOL)

N12

N13 G90 (Absolute Mode)

N14 S14000 (Spindle Speed)

N15 G20 (Set Units to Inches)

N16 M3 (Spindle On)

N17 M8 (Dust Collector On)

N18 G0 X0.0000 Y0.0000 (Go To X/Y Home)

N19 G0 Z1.5000 (Go To Z Home)

N20 G0 X[#qLENGTH+#qSTEPOVER] Y0 Z1.5000

N21 G1 Z-[#qSTEPCDOWN] F150.0

N22 G1 Y[#qDEPTH+#qSTEPOVER] F200.0

N23 G1 X#qLENGTH

N24 G1 Y0

WHILE #qCOUNTER<#qNUMBER DO

N25 G1 X[#qLENGTH-[#qSTEPOVER*#qCOUNTER]]

N26 G1 Y[#qDEPTH+#qSTEPOVER]

N27 G1 X[#qLENGTH-#qSTEPOVER*#qCOUNTER]]

N28 G1 Y0

#qCOUNTER=#qCOUNTER+1

ENDWHILE

N29 G1 Y0

N30 G0 Z1.5000

N31 G0 X0.0000 Y0.0000

N32 G53Z0 (Raise Head to Top)

N33 M9 (Dust Collector Off)

N34 M5 (Spindle Off)

N35 G0X0Y0 (Go Home)

N36 (End of File)

N35 G0X0Y0 (Go Home)

N36 (End of File)