Instructional Video Series
GENMILL
Video Support Document

Contents

Introduction

The Purpose of this document is to give additional information for the instructional videos. Please click on the Table of Content to jump to the desired information.

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G Code List

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M Code List

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M46	Chip conveyor stop
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M49	Coolant Through System off
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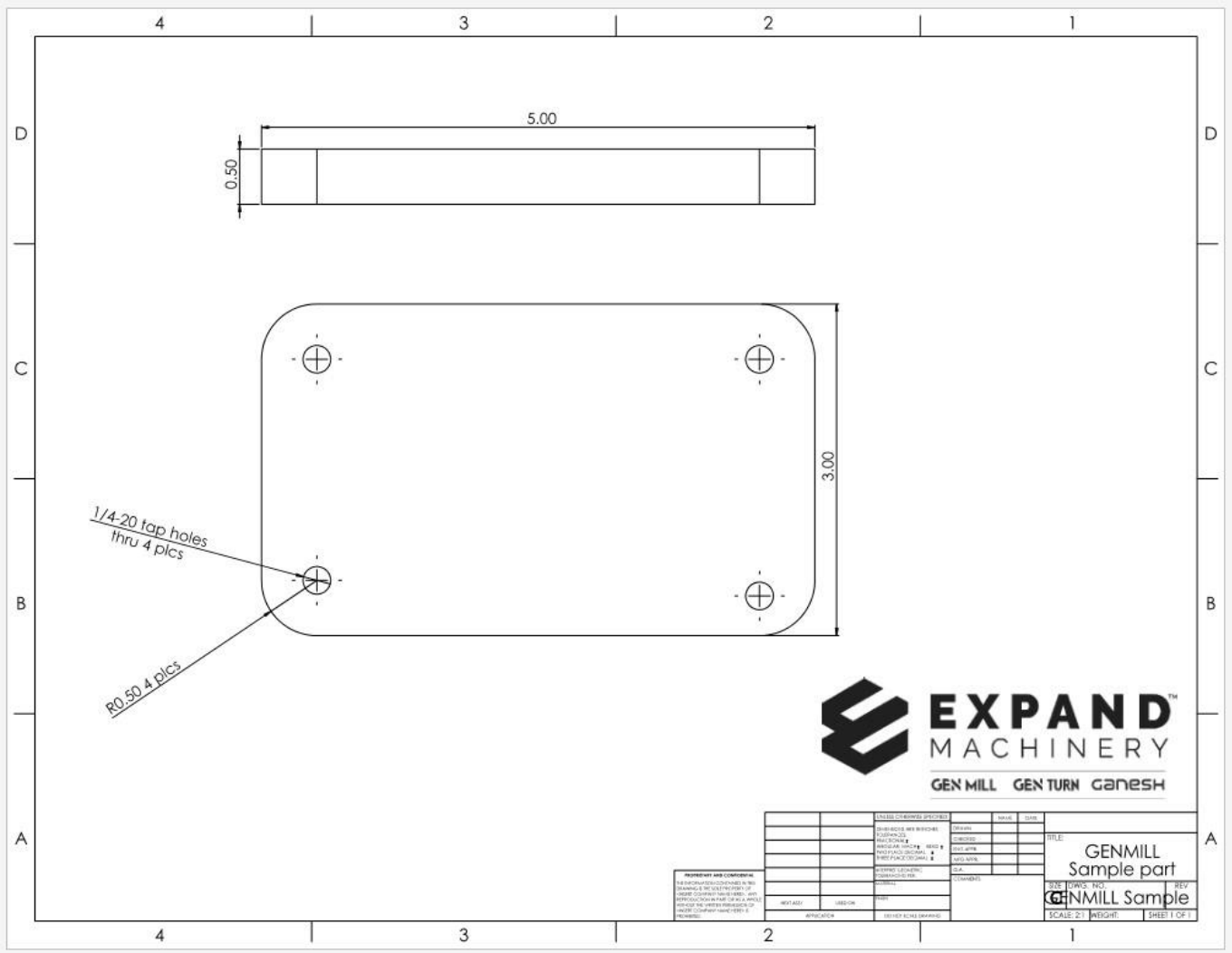
Sample Part



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Sample Program

```
O00001 ( PROGRAM )

(** Tool List **)
(T1:FM 2.0 IN - Length:-3. )
(T2:EM 0.5 IN - Length:-4.25 )
(T3:1/2 CHAMFER TOOL - Length:-2. )
(T4:DR 0.201 IN - Length:-2.75 )
(T5:TD 1/4 - 20 - Length:-2.75 )

(** Operation List **)
(OP1:FACE Z ZERO - T1)
(OP2:Outside Contour - T2)
(OP3:Spot Drill 1/4-20 - T3)
(OP4:Drill 1/4-20 - T4)
(OP5:Spot Drill 1/4-20 - T5)

N1 (OP1:FACE Z ZERO - T1)
T1 M06 (FM 2.0 IN)
G00 G90 G54 X-1.1408 Y-.3442 S1528 M03
T2
G43 H01 Z.21 M08
Z.2
G01 Z0. F40.
X6.0411
G00 Z.408
X-1.1408 Y-1.5442
Z0.
G01 X6.041
G00 Z.408
X-1.1409 Y-2.7442
Z0.
G01 X6.0409
Z.2
G00 Z.21
G91 G30 Z0
M09

N2 (OP2:Outside Contour - T2)
T2 M06 (EM 0.5 IN)
G00 G90 G54 X2.5 Y.4147 S12002 M03
T3
G43 H02 Z.1 M08
```

```
G01 Z-.5 F48.01
G01 G41 X2.4507 Y.123 D02
G03 X2.5 Y.0647 R.05
G01 X4.5
G02 X5.25 Y-.6853 R.75
G01 Y-2.6853
G02 X4.5 Y-3.4353 R.75
G01 X.5
G02 X-.25 Y-2.6853 R.75
G01 Y-.6853
G02 X.5 Y.0647 R.75
G01 X2.5
G03 X2.85 Y.4147 R.35
G01 G40 X2.5
Z.1
G00 G91 G30 Z0
G28 X0 Y0
M09

N30 (OP3:Spot Drill 1/4-20 - T3)
T3 M06 (1/2 CHAMFER TOOL)
G00 G90 G54 X4.5 Y-2.8262 S2498 M03
T4
G43 H03 Z.1 M08
G81 G98 X4.5 Y-2.8262 R.1 Z-.125 F5.
Y-.6853
X.5
Y-2.6853
G80
G00 G91 G28 Z0
G28 X0 Y0
M09

N40 (OP4:Drill 1/4-20 - T4)
T4 M06 (DR 0.201 IN)
M08
G00 G90 G54 X4.5 Y-2.8262 S3500 M03
T5
G43 H04 Z.1
G83 G98 X4.5 Y-2.8262 Q.01 R.1 Z-.5416 F7.
Y-.6853
X.5
Y-2.6853
G80
G00 G91 G30 Z0
```

```
M09

N50 (OP5:Spot Drill 1/4-20 - T5)
T5 M06 (TD 1/4 - 20)
G00 G90 G54 X4.5 Y-2.8262 S500 M03
G17
G43 H05 Z.1 M08
G84 G98 X4.5 Y-2.8262 R.1 Z-.9 F25.
Y-.6853
X.5
Y-2.6853
G80
G00 G91 G30 Z0
G28Y0
M09
M30
%
```

END OF PROGRAM

How To Take Tool Offsets

Tool Length Offsets

1. Move tool to Z position
2. From Monitor page press softkey “Offset”
3. Place cursor over offset to be measured
4. Key in “Z” if tool is touching zero. Key in “Z1.” If tool is touching 1” Block above zero.
5. Press “Measure”.
6. Tool length offset will be recorded.

Work Coordinate Offset

1. Move to X or Y measure position
2. From Monitor page press softkey “Coord”
3. Select the work offset to be measured
4. Press “Easy Setting” to record current position
5. Use “+Input” To adjust position for edge finder diameter

Notes on taking offsets:

If using a Tool and/or Part probe please go to EDIT>Interactive Cycles and follow the GUI instructions.