

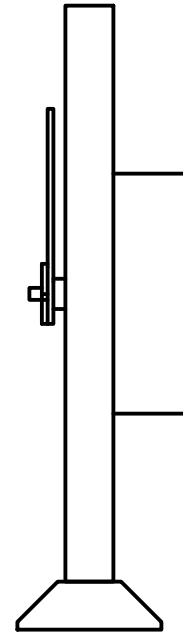
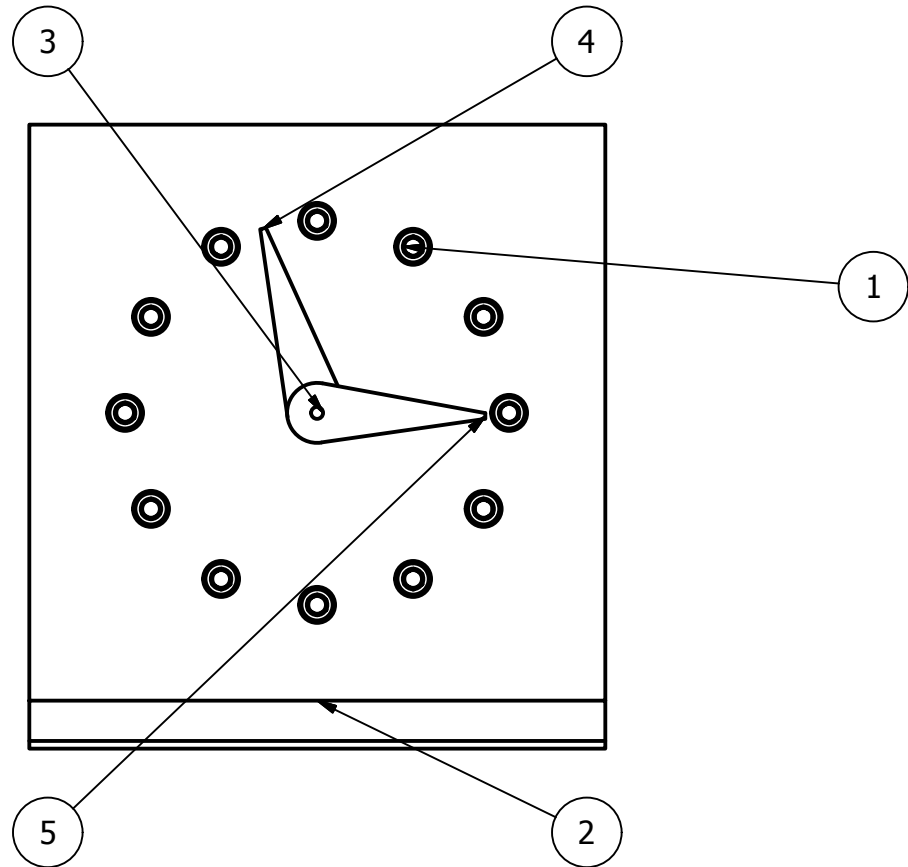
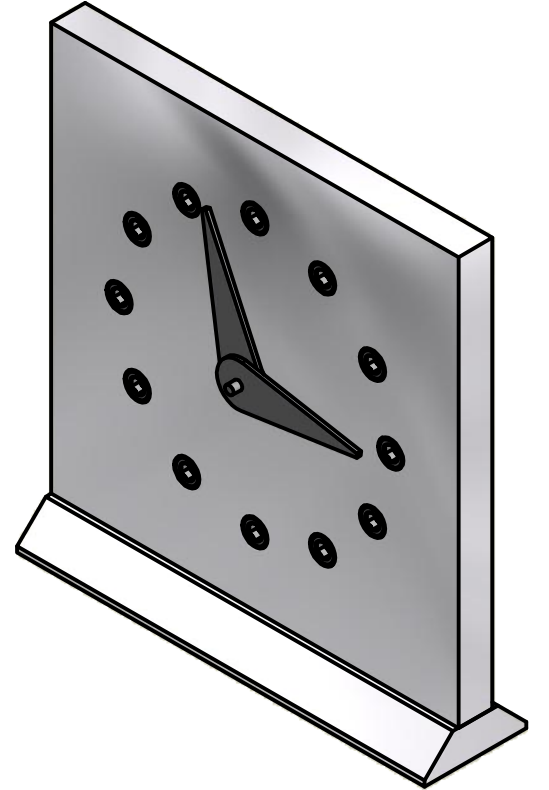
4

3

2

1

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	Clock face	6 x 6 x 1/2 Alum Bar
2	1	Base	6 x 1 1/2 x 1/2 Alum Bar
3	1	Clockworks	P/P
4	1	Hour Hand	P/P
5	1	Minute Hand	P/P
6	12	SNSS-1/4-20x3/8	SNSS - Socket Head Cap Screw (Inch Thread)
7	2	SNSS-1/4-28x1 1/4	SNSS - Socket Head Cap Screw (Inch Thread)



Tolerances Unless OTHERWISE SPECIFIED
FRACTIONAL +/- 1/64
2 PLC DEC. +/- .015
3 PLC DEC. +/- .005
ANGLES +/- 5 MIN

DRAWN	R. Tosch	12/16/2010	TITLE		
CHECKED			MFG102		
QA			SIZE	DWG NO	REV
MFG			B	Clock Assembly	NEW
APPROVED			SCALE	SHEET 1 OF 3	

4

3

2

1

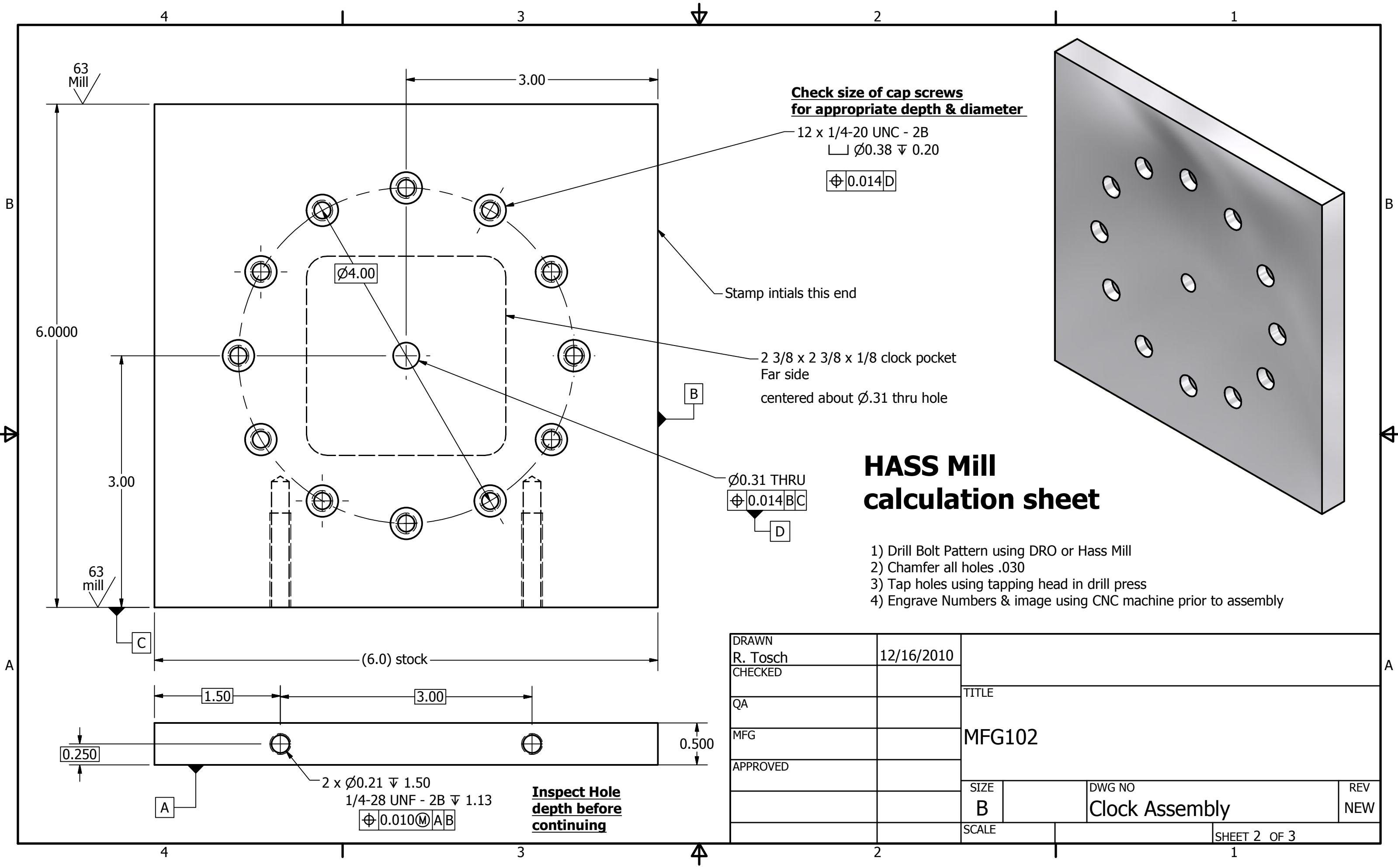
B

B

A

A





**Check size of cap screws  
for appropriate depth & diameter**

12 x 1/4-20 UNC - 2B  
 □ ∅0.38 ∇ 0.20

□ ∅0.014 D

Stamp initials this end

2 3/8 x 2 3/8 x 1/8 clock pocket  
 Far side  
 centered about ∅.31 thru hole

∅0.31 THRU  
 □ ∅0.014 B C

□ D

# HASS Mill calculation sheet

- 1) Drill Bolt Pattern using DRO or Hass Mill
- 2) Chamfer all holes .030
- 3) Tap holes using tapping head in drill press
- 4) Engrave Numbers & image using CNC machine prior to assembly

DRAWN R. Tosch	12/16/2010	TITLE		
CHECKED				
QA		MFG102		
MFG				
APPROVED		SIZE B	DWG NO Clock Assembly	REV NEW
		SCALE	SHEET 2 OF 3	

2 x ∅0.21 ∇ 1.50  
 1/4-28 UNF - 2B ∇ 1.13  
 □ ∅0.010 M A B

**Inspect Hole  
depth before  
continuing**

4 3 2 1

63 Mill

3.00

6.0000

3.00

63 mill

(6.0) stock

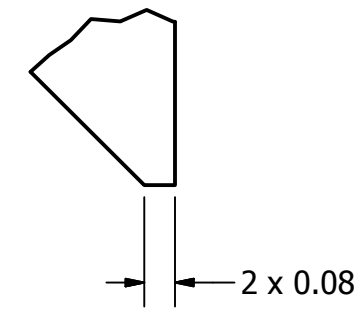
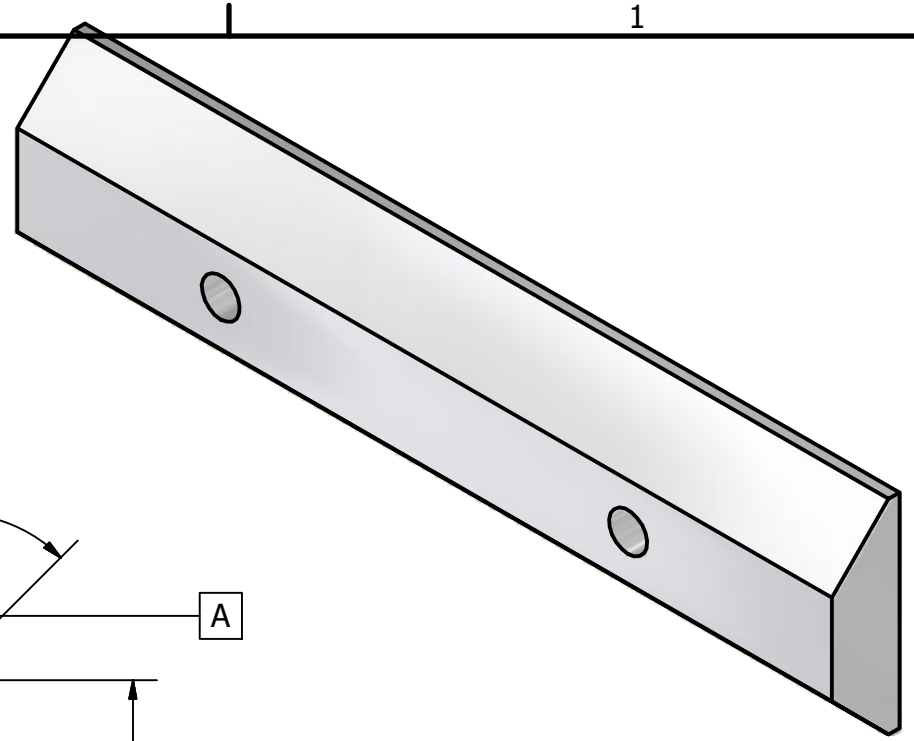
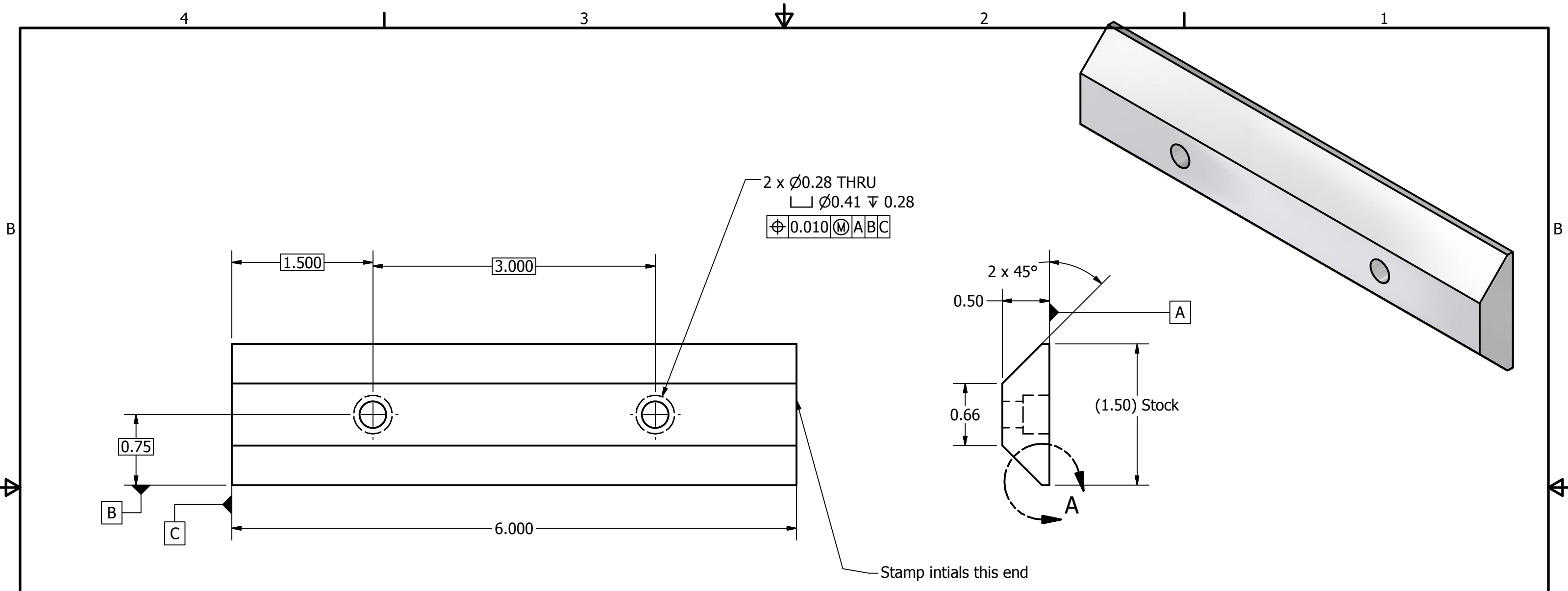
1.50 3.00

0.250

0.500

A B

A B



DETAIL A  
 SCALE 2 : 1

1) Chamfer all holes .030

DRAWN R. Tosch	12/16/2010	TITLE		
CHECKED				
QA		MFG102		
MFG				
APPROVED		SIZE B	DWG NO Clock Assembly	REV NEW
		SCALE	SHEET 3 OF 3	

# **ALPENA**

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## **COMMUNITY COLLEGE**

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