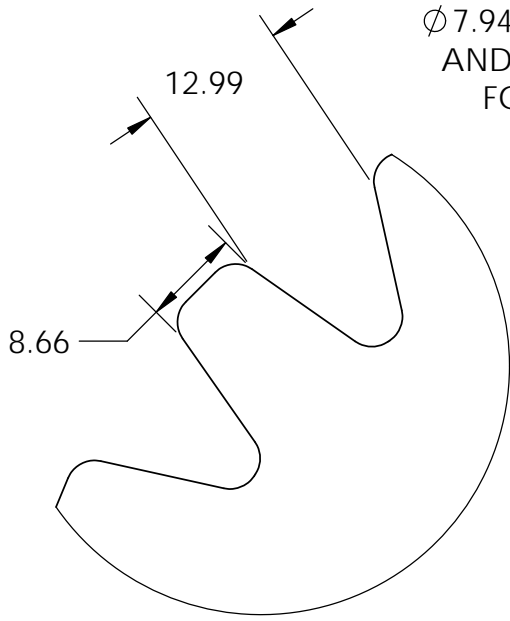
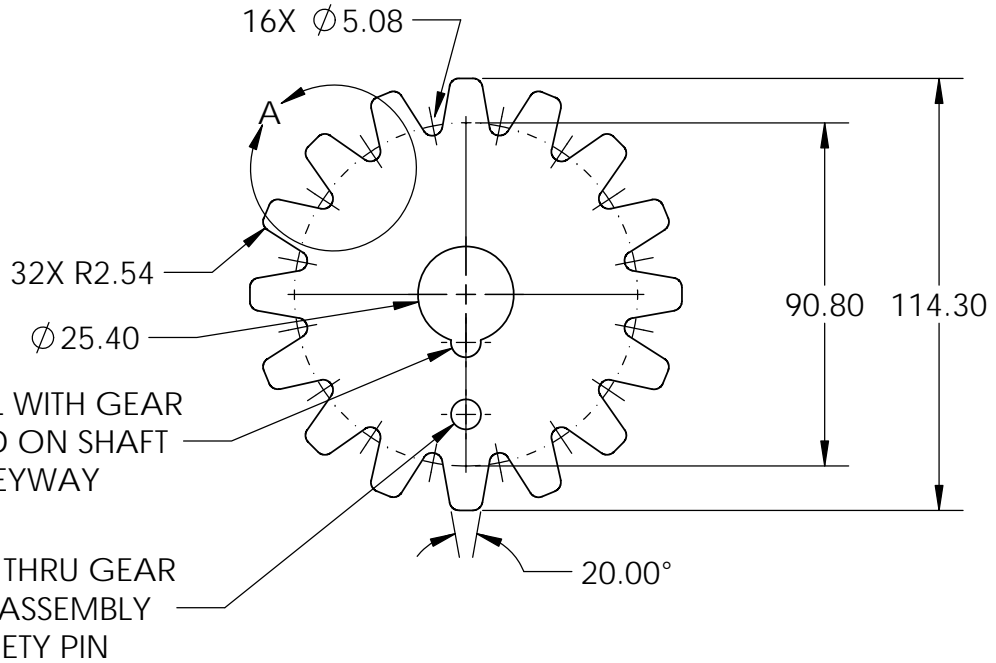
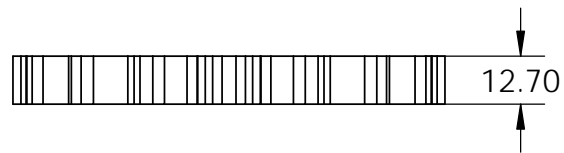


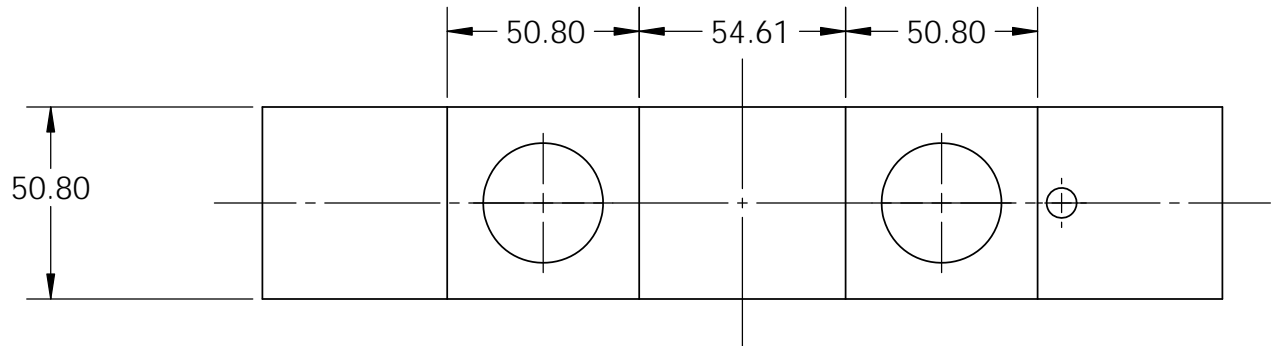
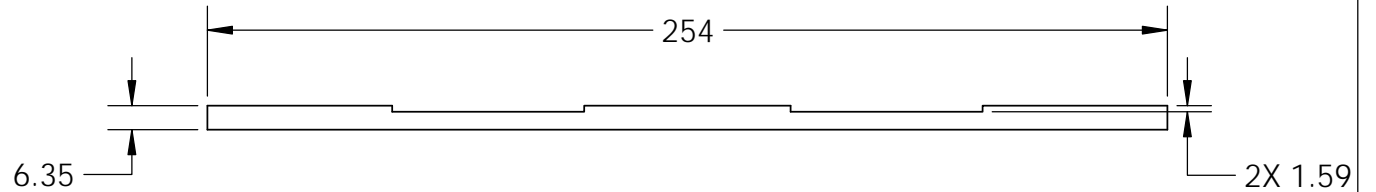
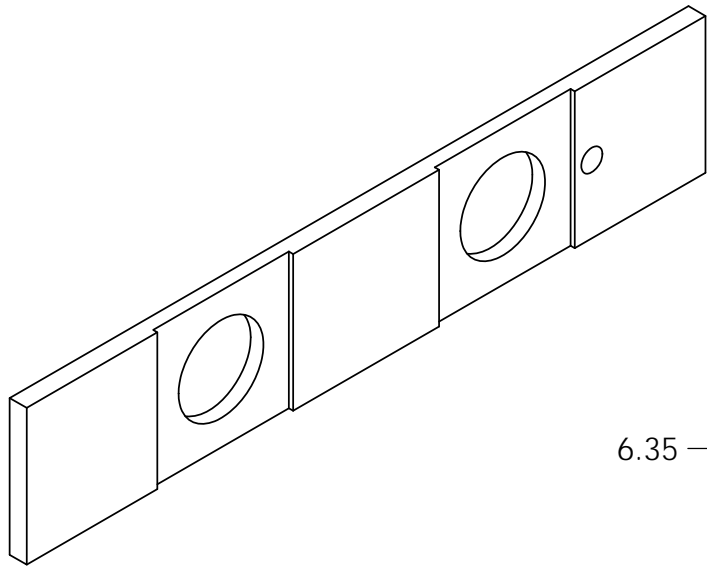
NOTE:  
16 TOOTH GEAR  
ALL TEETH EVENLY SPACED  
SPACING APPX. 22.5°



DETAIL A  
SCALE 1.5 : 1



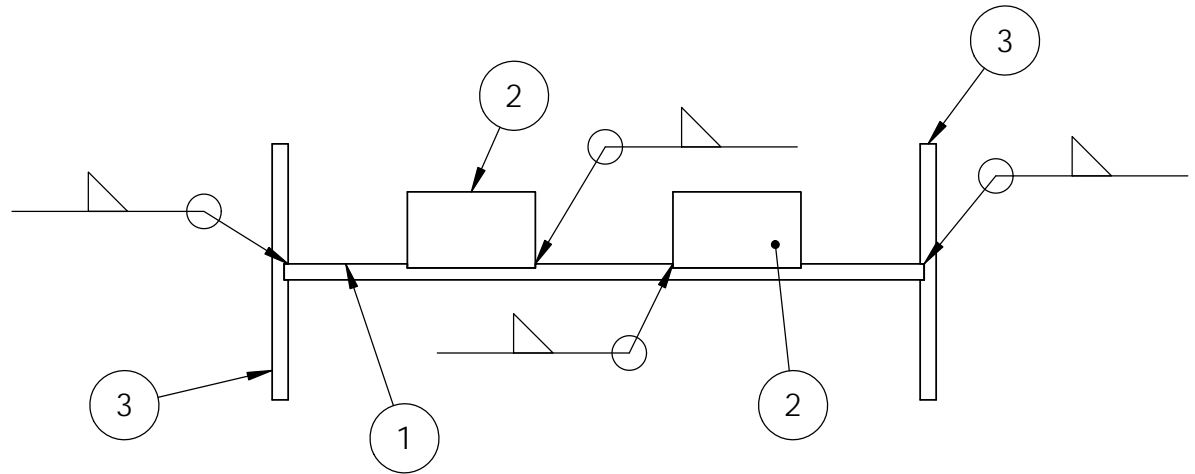
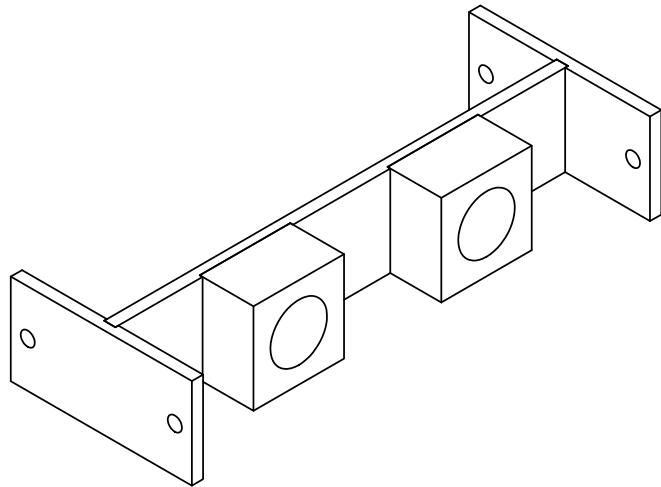
UNLESS OTHERWISE SPECIFIED:	NAME	DATE	<b>EWB SORGHUM PRESS</b>		
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm$ .5 THREE PLACE DECIMAL $\pm$ .2	DRAWN Cordeiro	3/12			
INTERPRET GEOMETRIC TOLERANCING PER:	CHECKED		TITLE:  GEAR 16T		
MATERIAL	ENG APPR.				
FINISH	MFG APPR.		SIZE	DWG. NO.	REV
DO NOT SCALE DRAWING	Q.A.		<b>A</b>		<b>A</b>
	COMMENTS:		SCALE: 1:2		



NOTES:

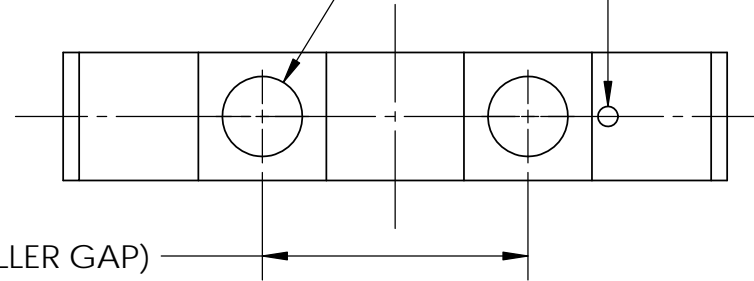
- 1) LARGE THROUGH HOLES NOT TO BE DRILLED UNTIL BASE AND BUSHING SUPPORTS ARE WELDED TOGETHER
- 2) SMALL THORUGH HOLE IS TO INCORPORATE SAFETY PIN. NOT TO BE DRILLED UNTILL FINAL ASSEMBLY

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		DRAWN	Cordeiro		
MATERIAL <b>STEEL</b>		CHECKED		TITLE: <b>BASE</b>	
		ENG APPR.			
		MFG APPR.			
FINISH		Q.A.		SIZE <b>A</b>	
		COMMENTS:			
DO NOT SCALE DRAWING		<p>First angle</p>		REV <b>A</b>	
		SCALE: 1:2			



2X  $\phi 31.75$  DRILL THRU AFTER WELDING HOLE TO FIT ROLLER BUSHING

$\phi 7.94$  DRILL THRU ASSY AND GEAR FOR SAFETY PIN



105.41 (OR ROLLER DIA. + ROLLER GAP)

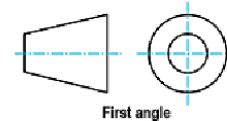
ITEM NO.	PART NUMBER	QTY.
1	BASE	1
2	BUSHING SUPPORT	2
3	MOUNT	2

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM  
TOLERANCES:  
TWO PLACE DECIMAL  $\pm .5$   
THREE PLACE DECIMAL  $\pm .2$

	NAME	DATE
DRAWN	Cordeiro	3/12
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:



First angle

DO NOT SCALE DRAWING

**EWB SORGHUM PRESS**

TITLE:

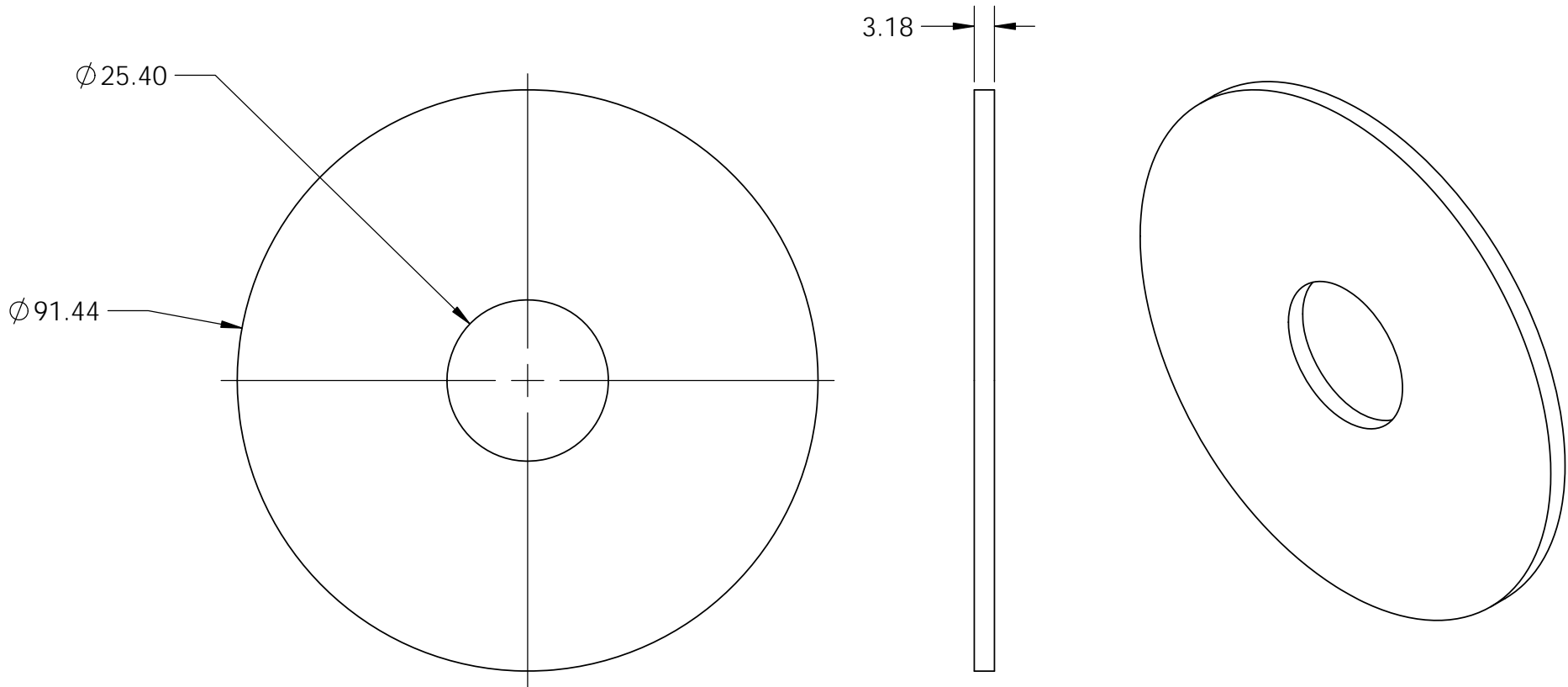
**BASE WELDMENT**

SIZE  
**A**

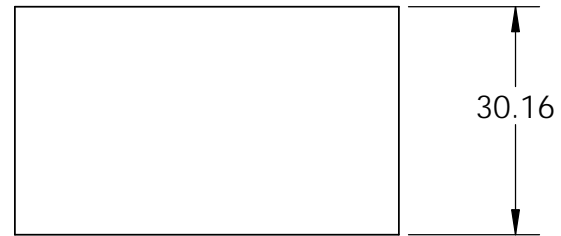
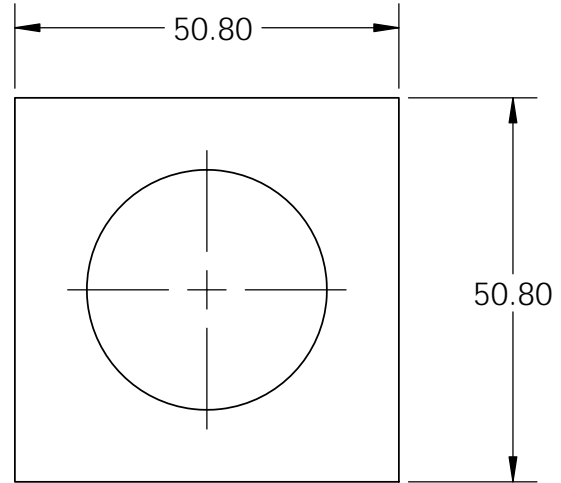
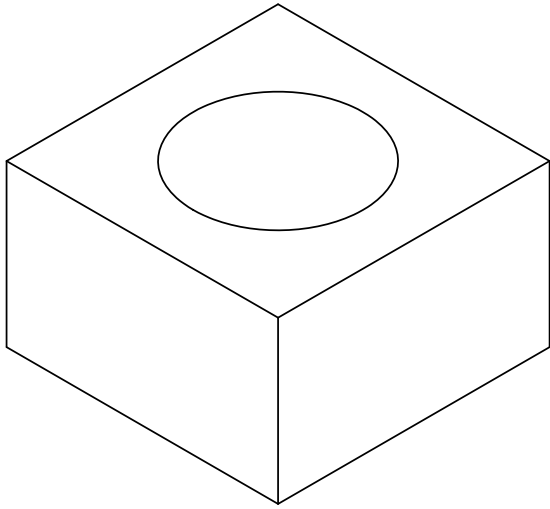
DWG. NO.

REV  
**A**

SCALE: 1:3

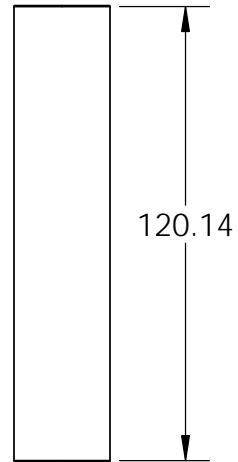
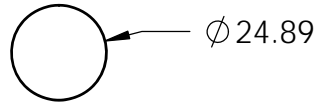
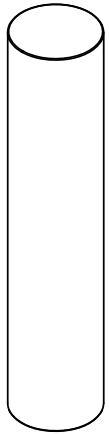


UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>		
	DRAWN	Cordeiro	3/12			TITLE:
	CHECKED			BOTTOM ROLLER CAP		
	ENG APPR.					
	MFG APPR.					
	Q.A.			SIZE	DWG. NO.	REV
MATERIAL	COMMENTS:			<b>A</b>		<b>A</b>
MILD STEEL						
DO NOT SCALE DRAWING				SCALE: 1:1		

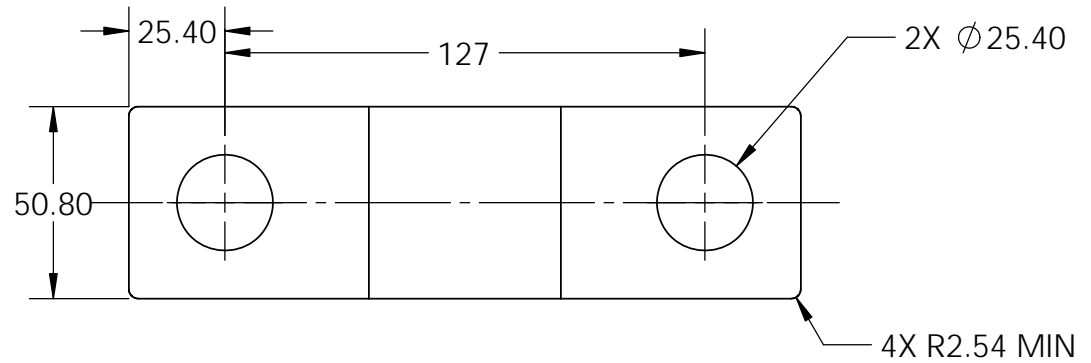
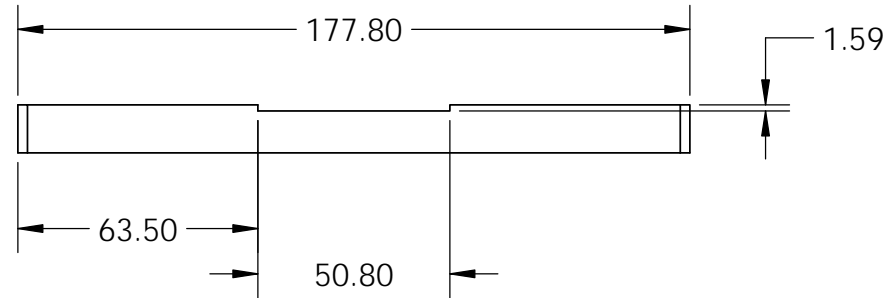
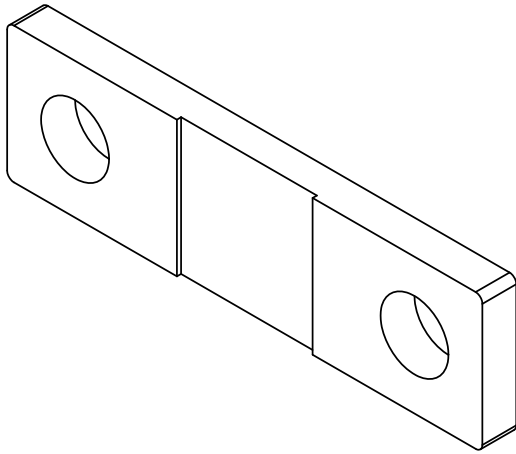


NOTE:  
THROUGH HOLE NOT TO BE DRILLED  
UNTIL PART IS WELDED TO BASE

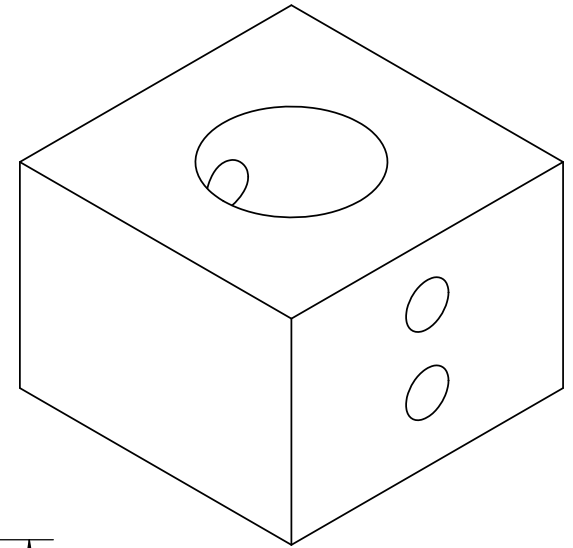
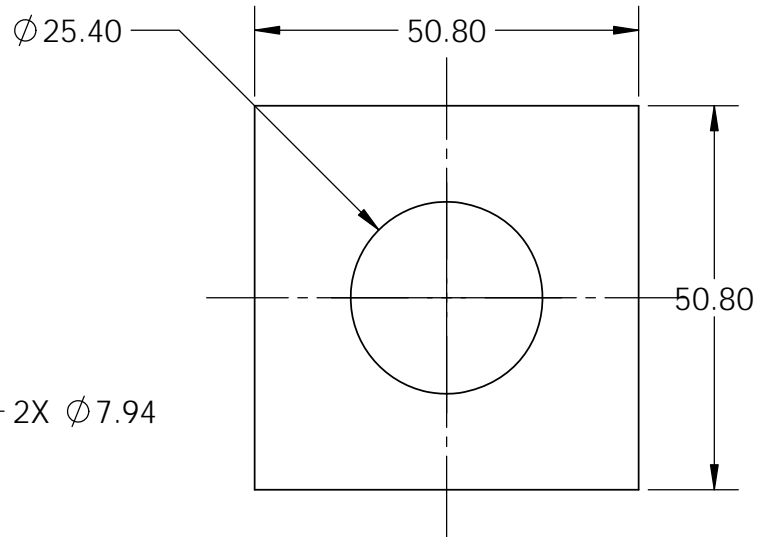
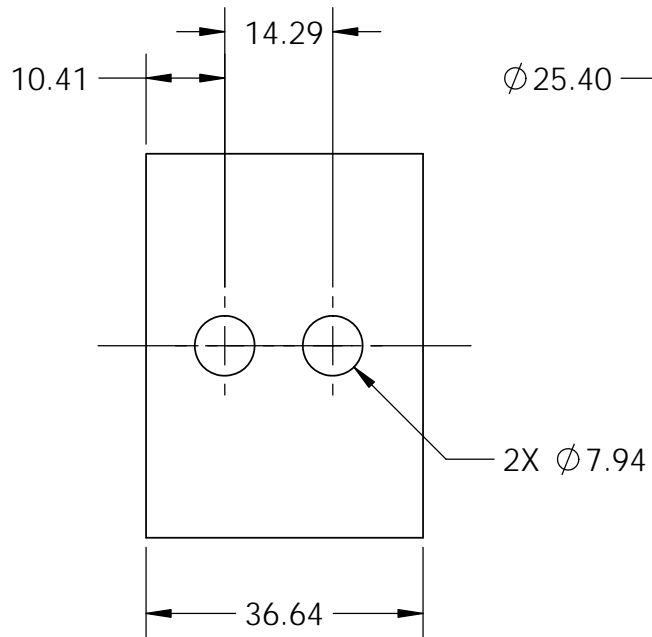
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		DRAWN	Cordeiro		
INTERPRET GEOMETRIC TOLERANCING PER:		CHECKED		TITLE: <b>BUSHING SUPPORT</b>	
		ENG APPR.			
		MFG APPR.			
MATERIAL <b>STEEL</b>		Q.A.			
DO NOT SCALE DRAWING		COMMENTS:		SIZE	DWG. NO.
				<b>A</b>	
				SCALE: 1:1	



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12		
INTERPRET GEOMETRIC TOLERANCING PER:	CHECKED				
MATERIAL <b>STEEL</b>	ENG APPR.				
FINISH	MFG APPR.				
DO NOT SCALE DRAWING	Q.A.			SIZE <b>A</b>	DWG. NO.
	COMMENTS:			SCALE: 1:2	REV <b>A</b>

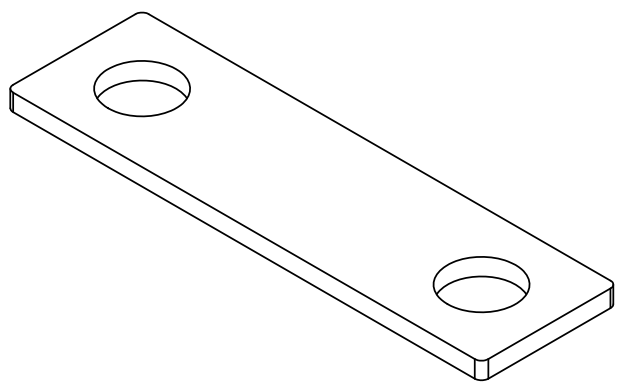
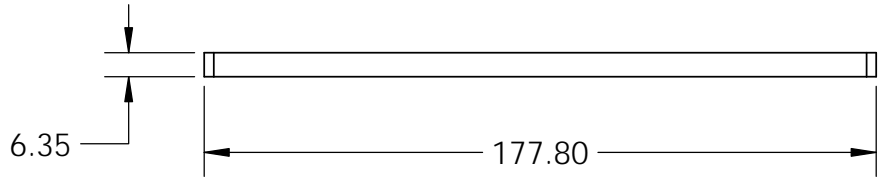
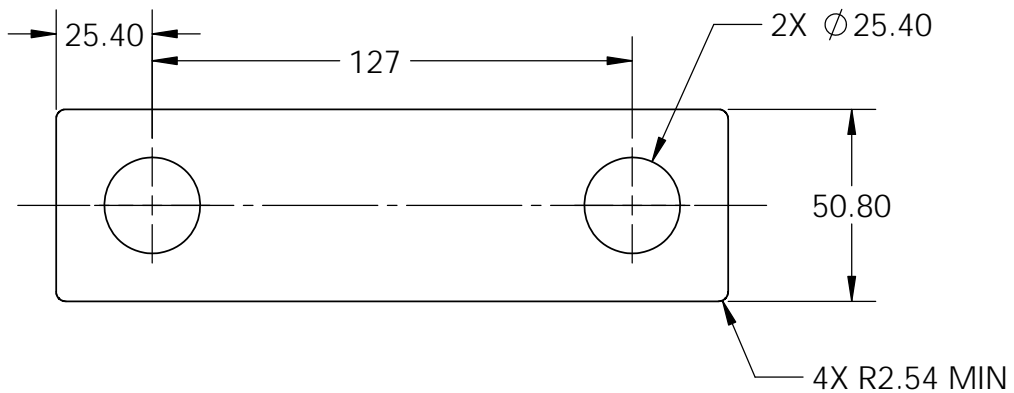


UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2  INTERPRET GEOMETRIC TOLERANCING PER:  MATERIAL STEEL  DO NOT SCALE DRAWING		NAME	DATE	<b>EWB SORGHUM PRESS</b>		
	DRAWN	Cordeiro	3/12			TITLE:  CRANK BASE
	CHECKED					
	ENG APPR.					
	MFG APPR.					
	Q.A.			SIZE	DWG. NO.	REV
	 First angle		<b>A</b>		<b>A</b>	
			SCALE: 1:2			



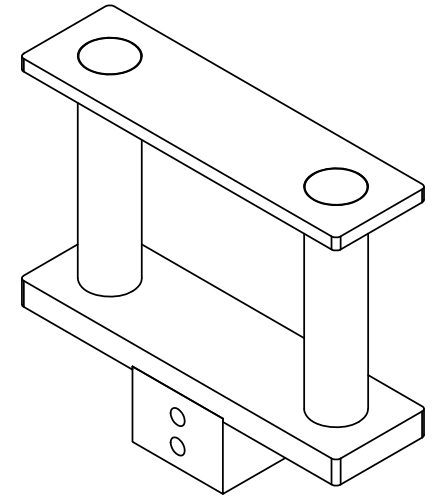
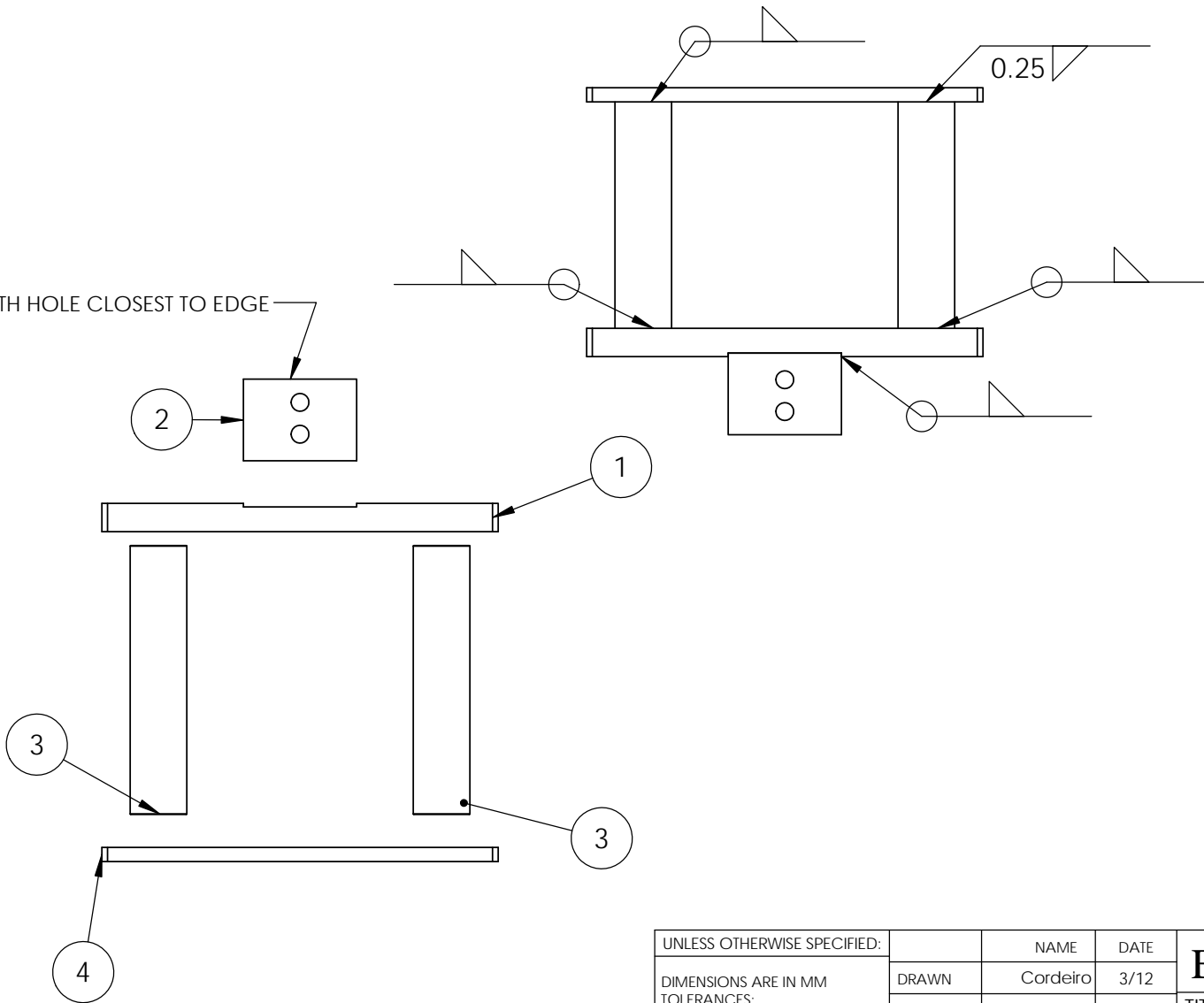
UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>			
	DRAWN	Cordeiro	3/12			TITLE:  CRANK BLOCK	
	CHECKED						
	ENG APPR.						
	MFG APPR.						
	Q.A.			REV			
MATERIAL STEEL	COMMENTS:			SIZE <b>A</b>	DWG. NO.	<b>A</b>	
DO NOT SCALE DRAWING	<p>First angle</p>			SCALE: 1:1			





UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		DRAWN	Cordeiro		
INTERPRET GEOMETRIC TOLERANCING PER:		CHECKED		TITLE:  CRANK TOP	
		ENG APPR.		SIZE DWG. NO. REV <b>A</b> <b>A</b>	
		MFG APPR.			
MATERIAL STEEL		Q.A.		SCALE: 1:2	
FINISH		COMMENTS:			
DO NOT SCALE DRAWING					

SIDE WITH HOLE CLOSEST TO EDGE



ITEM NO.	PART DESCRIPTION	QTY.
1	Crank_Base	1
2	crank_block	1
3	Crank-Pin	2
4	Crank_top	1

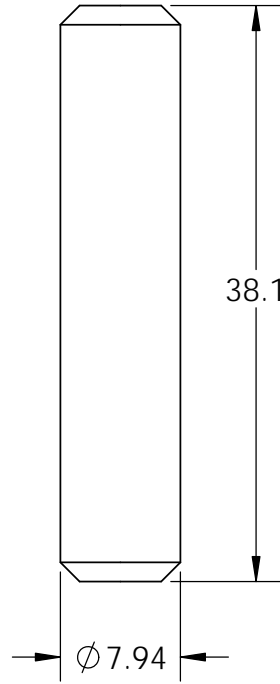
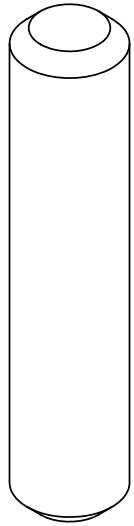
UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MM  
 TOLERANCES:  
 TWO PLACE DECIMAL ±.01  
 THREE PLACE DECIMAL ±.005

	NAME	DATE
DRAWN	Cordeiro	3/12
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

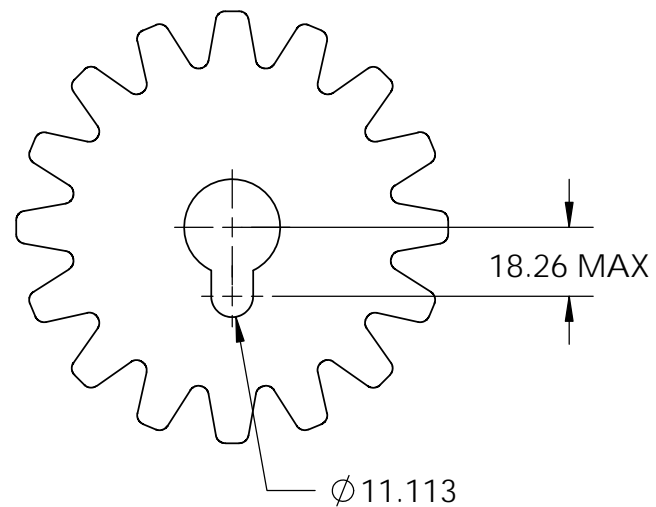
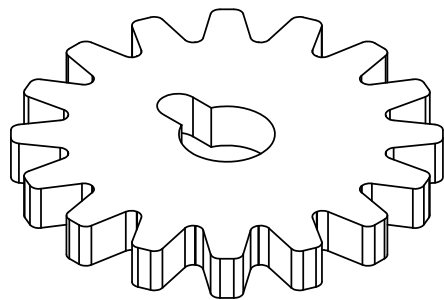
COMMENTS:

EWB SORGHUM PRESS		
TITLE: CRANK WELDMENT		
SIZE <b>A</b>	DWG. NO.	REV <b>A</b>
SCALE: 1:3		

DO NOT SCALE DRAWING

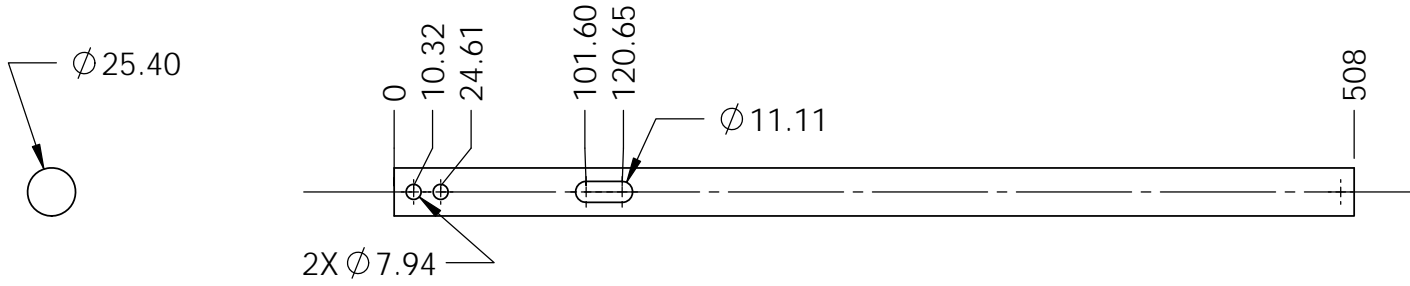


UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>										
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12	TITLE:  DOWEL PIN										
	CHECKED													
	ENG APPR.													
	MFG APPR.													
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			<table border="1"> <tr> <td>SIZE</td> <td>DWG. NO.</td> <td>REV</td> </tr> <tr> <td><b>A</b></td> <td></td> <td><b>A</b></td> </tr> <tr> <td>SCALE: 2:1</td> <td></td> <td></td> </tr> </table>		SIZE	DWG. NO.	REV	<b>A</b>		<b>A</b>	SCALE: 2:1		
SIZE	DWG. NO.	REV												
<b>A</b>		<b>A</b>												
SCALE: 2:1														
MATERIAL <b>STEEL</b>	COMMENTS:													
FINISH														
DO NOT SCALE DRAWING														

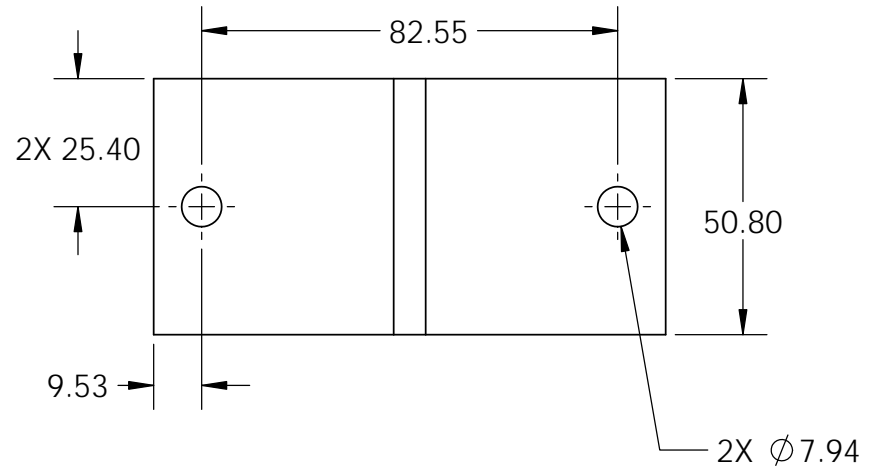
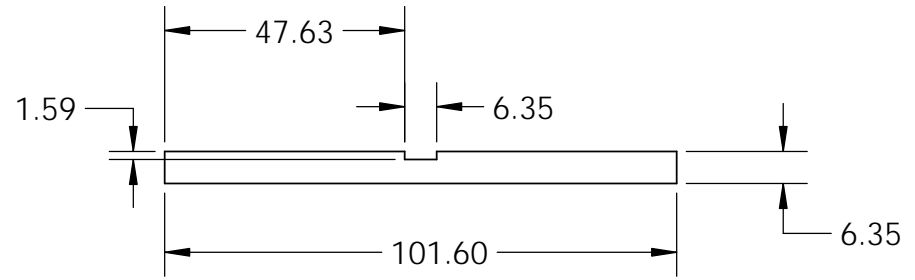
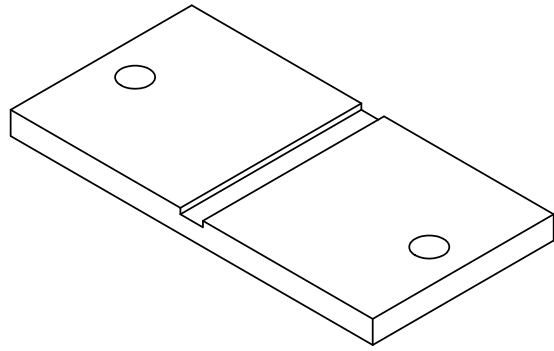


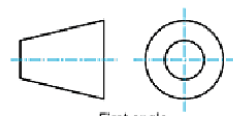
NOTE  
 USE DIMENSIONS FROM 16 TOOTH GEAR DRAWING  
 SAME TOOTH GEOMETRY. DIFFERENT KEYWAY.

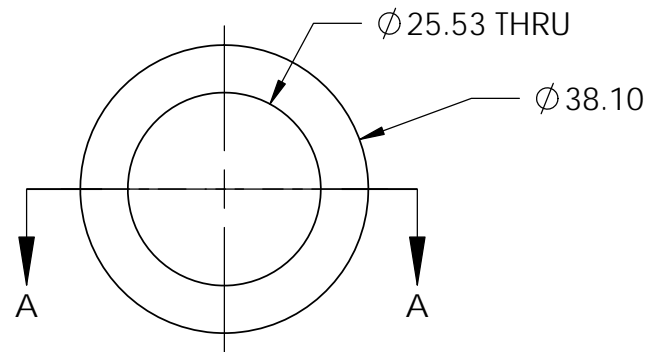
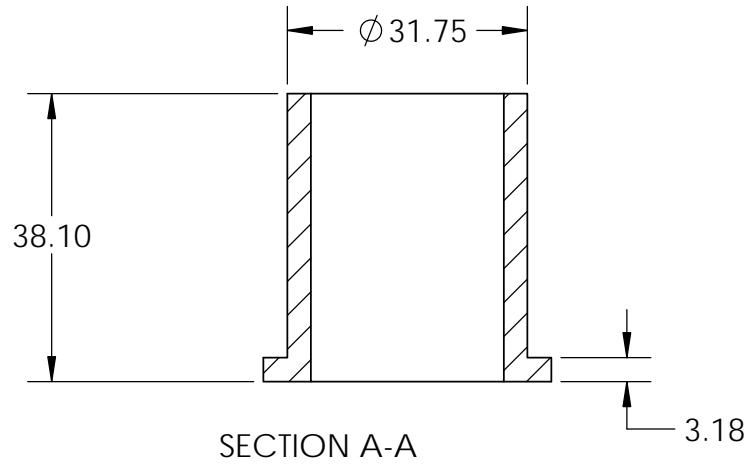
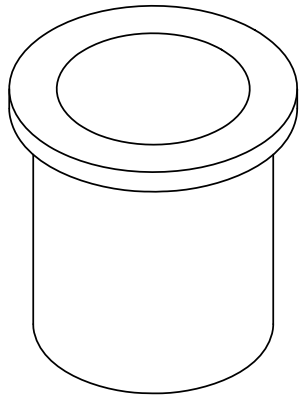
UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
	DRAWN	Cordeiro	3/12		
	CHECKED				
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE	REV
MATERIAL STEEL	COMMENTS:			<b>A</b>	<b>A</b>
DO NOT SCALE DRAWING				SCALE: 1:2	

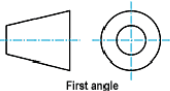


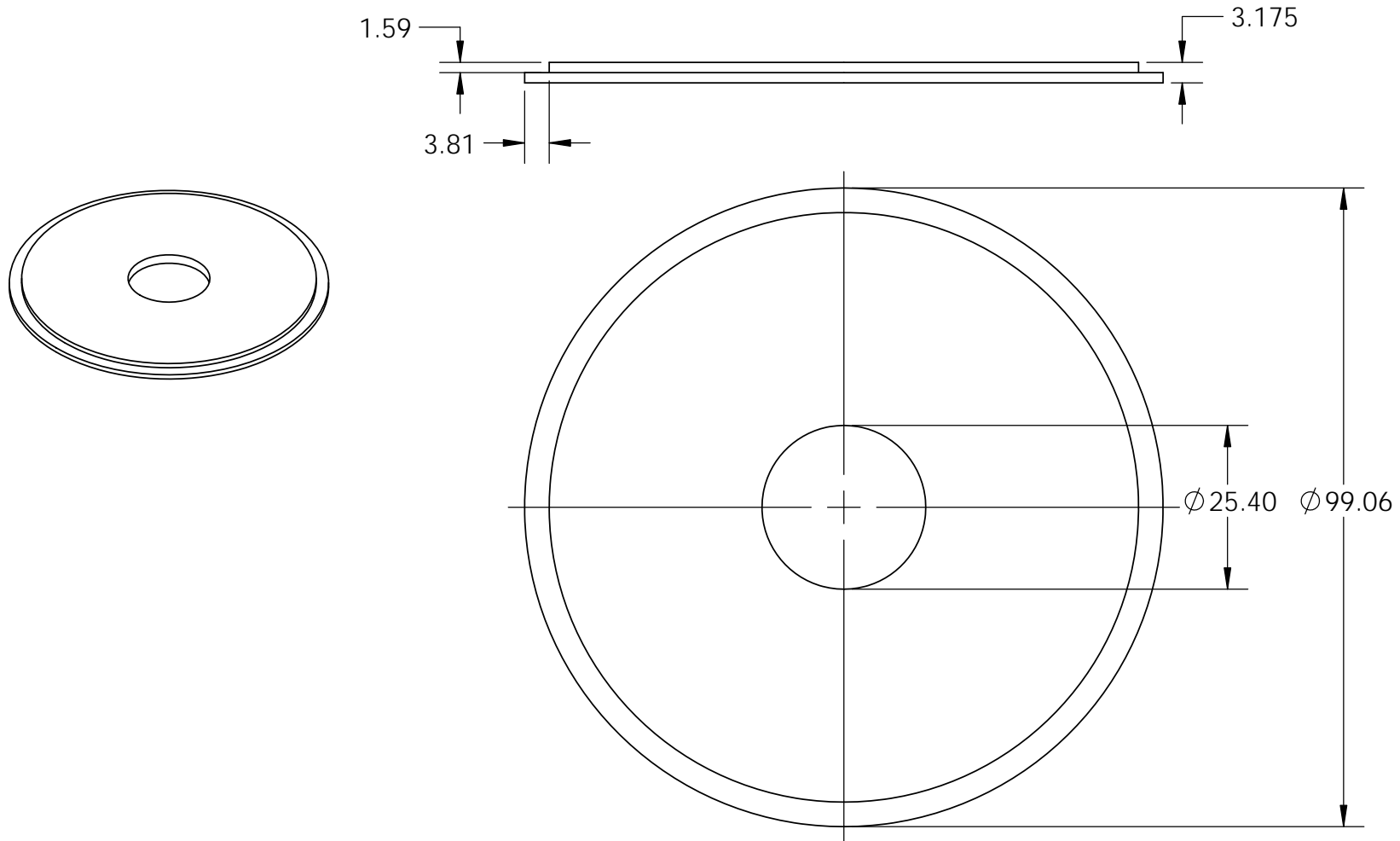
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12	TITLE:  DRIVE ROLLER SHAFT	
	CHECKED				
	ENG APPR.				
	MFG APPR.				
DRAWING IN FIRST ANGLE	Q.A.			SIZE <b>A</b> DWG. NO.    REV <b>A</b> SCALE: 1:8	
MATERIAL STEEL	COMMENTS:				
DO NOT SCALE DRAWING					



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12		
	CHECKED			MOUNT	
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE	REV
MATERIAL STEEL	COMMENTS:  First angle			<b>A</b>	<b>A</b>
FINISH				SCALE: 2:3	
DO NOT SCALE DRAWING					



UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>  TITLE:  <b>ROLLER BUSHING</b>										
	DRAWN	Cordeiro	3/12											
	CHECKED													
	ENG APPR.													
	MFG APPR.													
	Q.A.			<table border="1"> <tr> <td>SIZE</td> <td>DWG. NO.</td> <td>REV</td> </tr> <tr> <td><b>A</b></td> <td></td> <td><b>A</b></td> </tr> <tr> <td colspan="2">SCALE: 1:1</td> <td></td> </tr> </table>		SIZE	DWG. NO.	REV	<b>A</b>		<b>A</b>	SCALE: 1:1		
SIZE	DWG. NO.	REV												
<b>A</b>		<b>A</b>												
SCALE: 1:1														
MATERIAL <b>BRASS</b>	COMMENTS:   First angle													
FINISH														
DO NOT SCALE DRAWING														

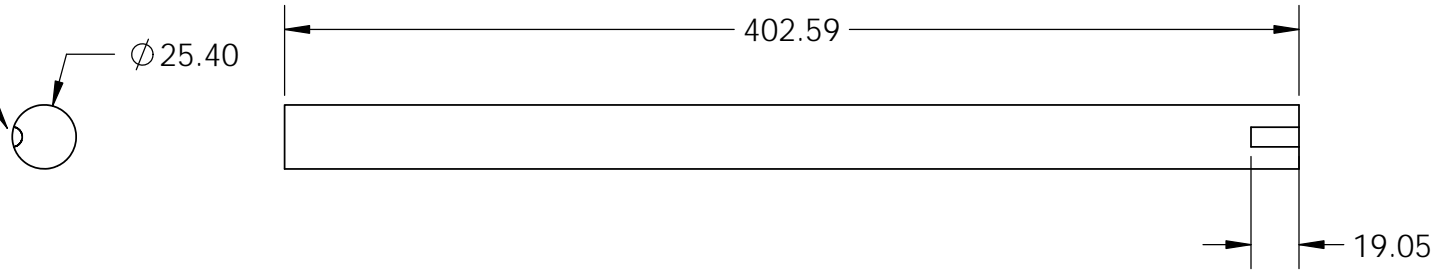


UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>  TITLE:  <b>ROLLER CAP 1</b>	
	DRAWN	Cordeiro	3/12		
	CHECKED				
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE <b>A</b> <span style="float: right;">REV <b>A</b></span> SCALE: 1:1	
MATERIAL	COMMENTS:				
MILD STEEL	 First angle				
DO NOT SCALE DRAWING					

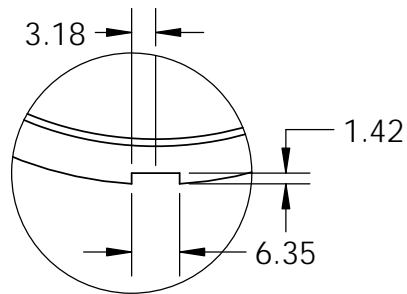
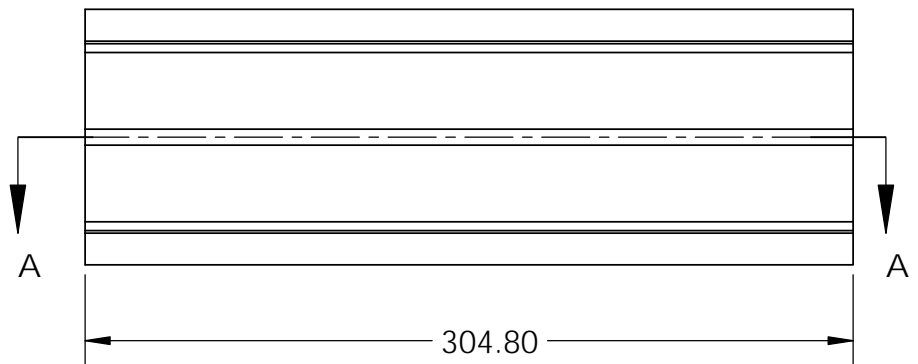
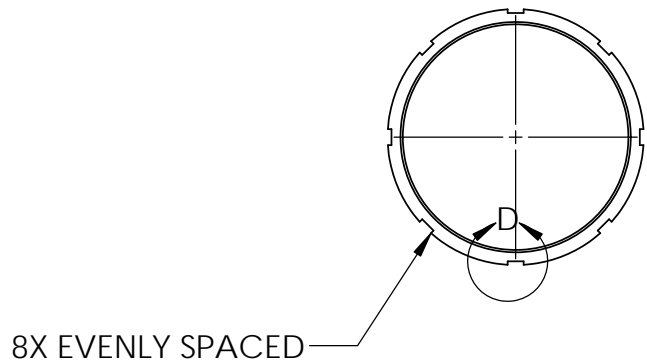




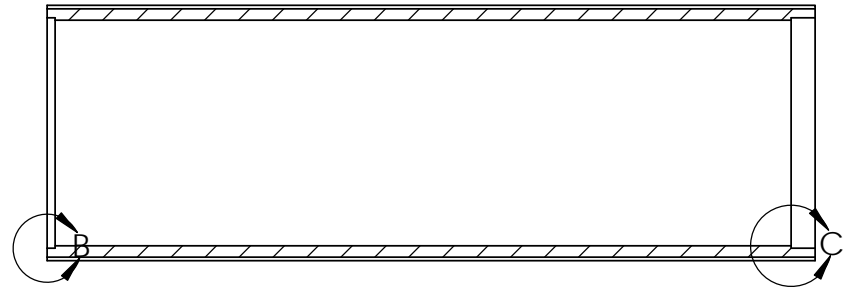
$\phi 7.94$   
 DRILL AFTER ASSEMBLY COMPLETE  
 HOLE TO ACCOMODATE SCOTCH KEY



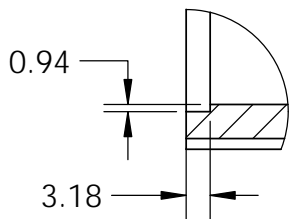
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>		
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm .5$ THREE PLACE DECIMAL $\pm .2$		DRAWN	Cordeiro			3/12
		CHECKED				
		ENG APPR.				
		MFG APPR.				
		Q.A.			TITLE:  <b>ROLLER SHAFT</b>	
MATERIAL	STEEL		SIZE	DWG. NO.		
FINISH			 First angle		<b>A</b>	<b>A</b>
DO NOT SCALE DRAWING		SCALE: 1:3				



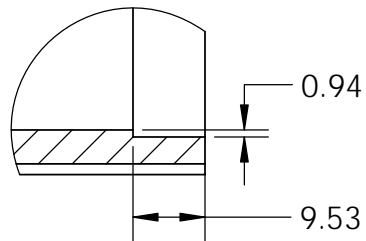
DETAIL D  
SCALE 1 : 1



SECTION A-A



DETAIL B  
SCALE 1 : 1



DETAIL C  
SCALE 1 : 1

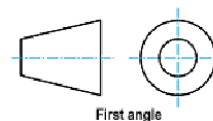
UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM  
TOLERANCES:  
TWO PLACE DECIMAL ±.5  
THREE PLACE DECIMAL ±.2

MATERIAL  
3.5" SCH 40 STEEL PIPE

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	Cordeiro	3/12
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		



**EWB SORGHUM PRESS**

TITLE:

**ROLLER TUBE**

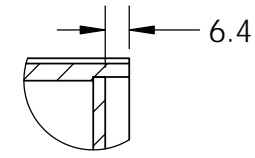
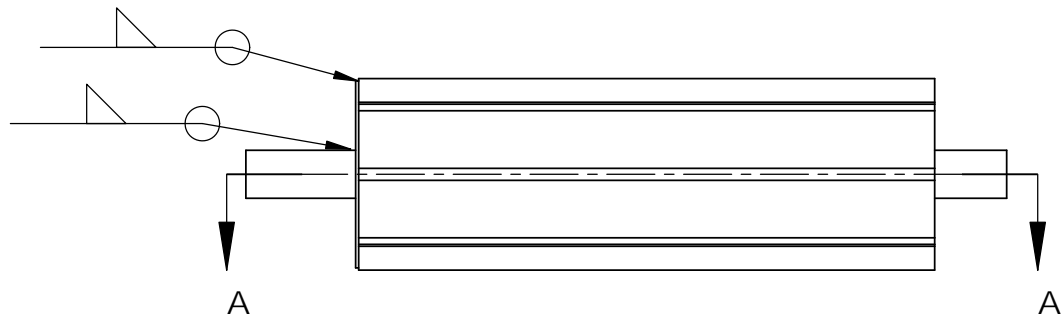
SIZE

**A**

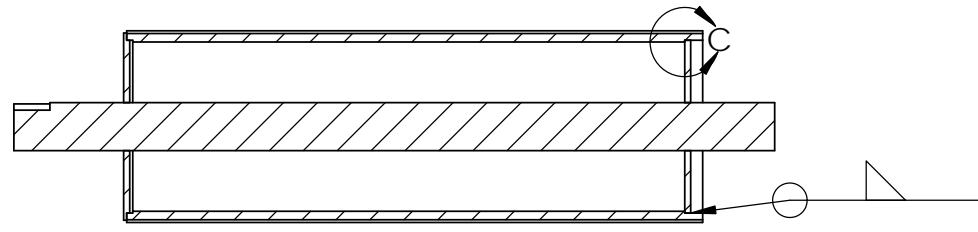
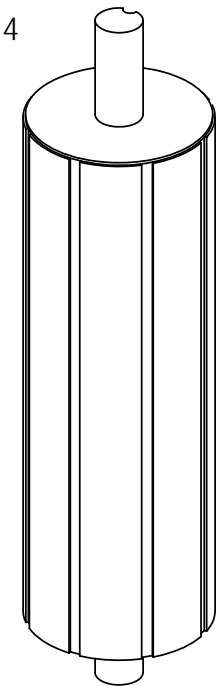
REV

**A**

SCALE: 1:3

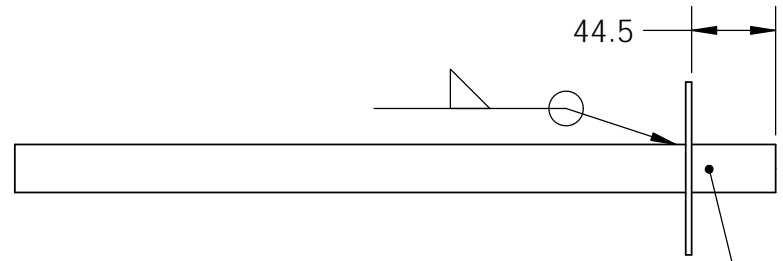
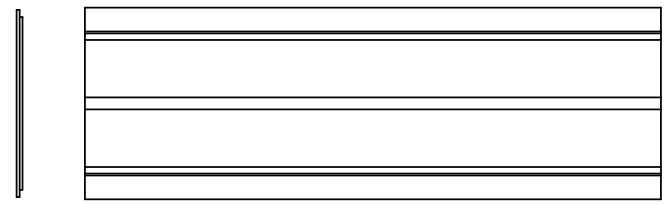


DETAIL C  
SCALE 1 : 2



SECTION A-A

NOTE:  
FULL ASSY. REQUIRES TWO ROLLERS  
DIMENSIONS ON THIS SHEET APPLY TO BOTH  
ROLLERS REGARDLESS OF SHAFT SIZE



DO NOT WELD ON THIS SIDE OF SHAFT

ITEM NO.	PART DESCRIPTION	QTY.
1	ROLLER TUBE	1
2	ROLLER CAP	1
3	ROLLER SHAFT OR DRIVE SHAFT	1
4	BOTTOM CAP	1

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN MM  
TOLERANCES:  
TWO PLACE DECIMAL ±.01  
THREE PLACE DECIMAL ±.005

	NAME	DATE
DRAWN	Cordeiro	3/12
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

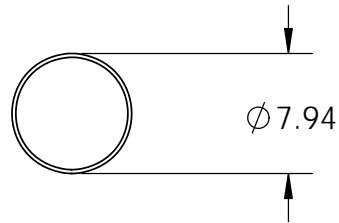
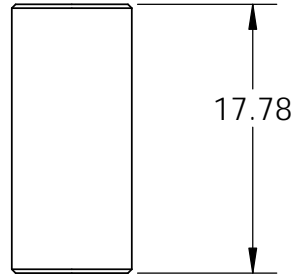
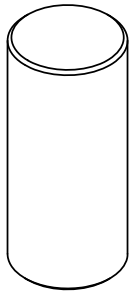
COMMENTS:

First angle

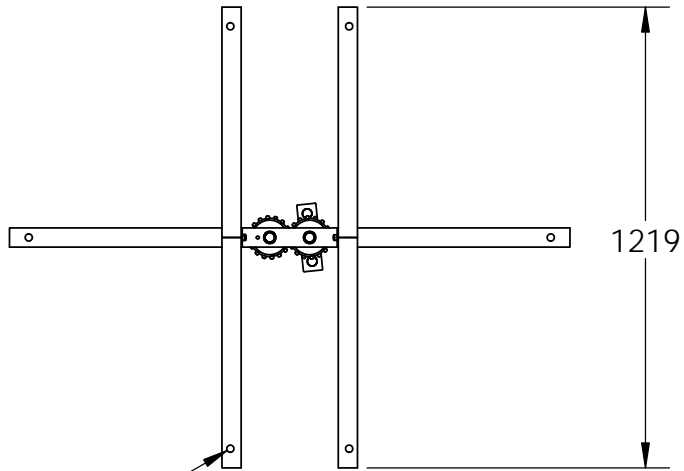
**EWB SORGHUM PRESS**

TITLE:  
**ROLLER WELDMENT**

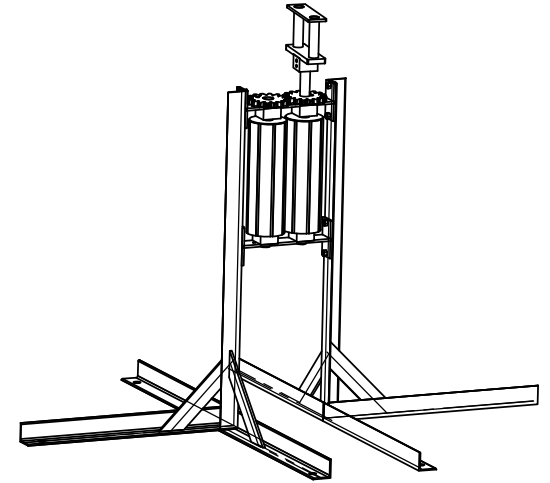
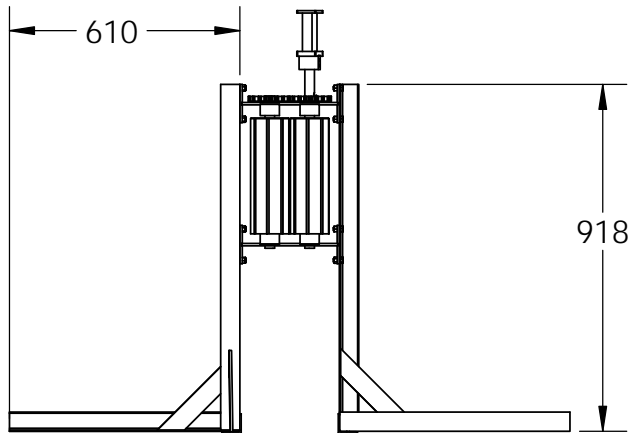
SIZE <b>A</b>	REV <b>A</b>
SCALE: 1:4	



UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm .5$ THREE PLACE DECIMAL $\pm .2$		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
	DRAWN	Cordeiro	3/12		
	CHECKED				
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE	REV
MATERIAL STEEL	<p>First angle</p>			<b>A</b>	<b>A</b>
DO NOT SCALE DRAWING			SCALE: 2:1		



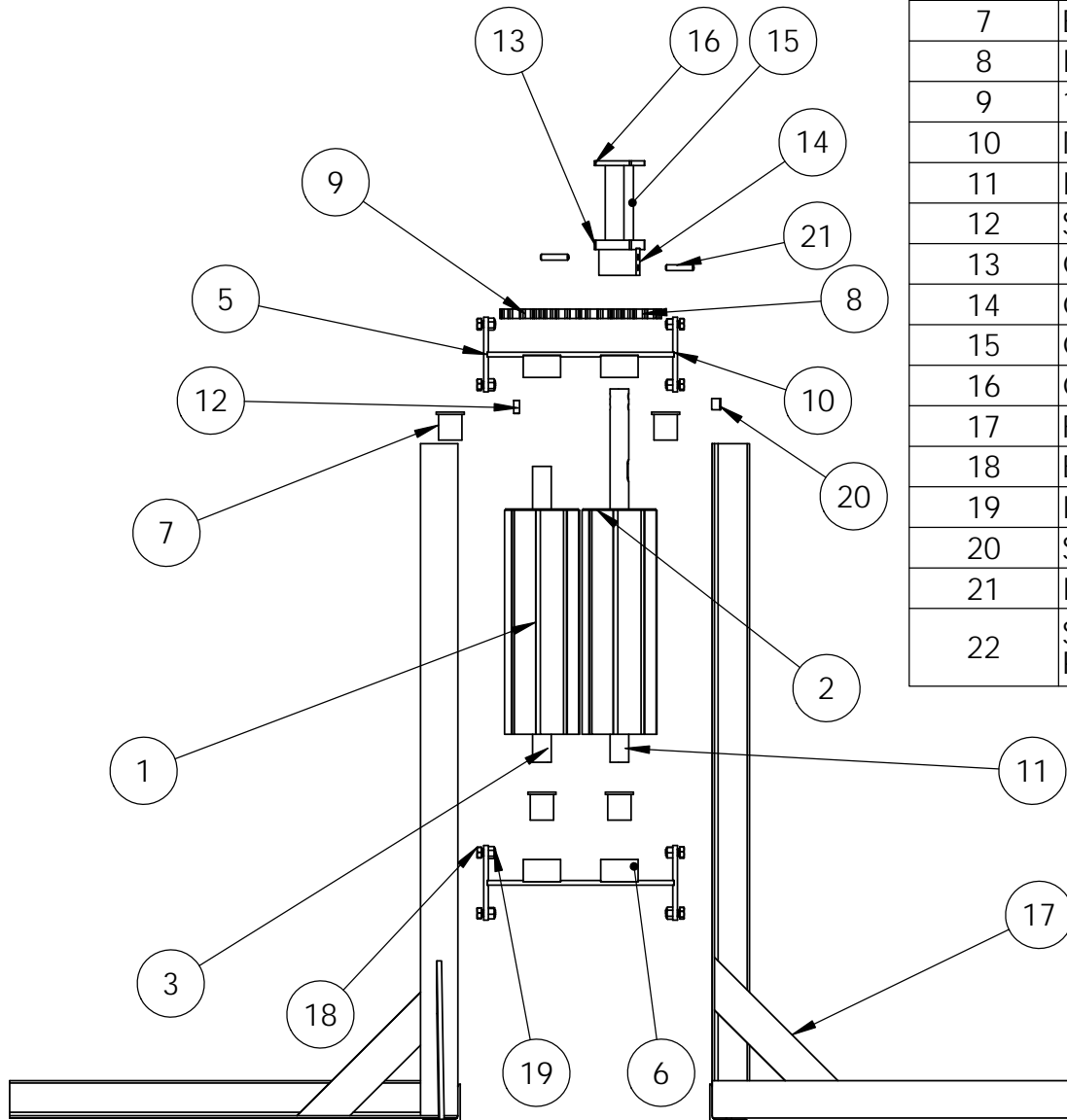
4X  $\phi$ 19.1  
FOR STAKING



NOTE:  
PROTOTYPE FRAME CONSTRUCTED FROM 2" 90DEG ANGLE IRON  
1/4" THICK. FRAME SUPPORTS CONSTRUCTED FROM LEFTOVER  
STOCK FROM BASE AND MOUNT CONSTRUCTION

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>		
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm$ .5 THREE PLACE DECIMAL $\pm$ .2		DRAWN	Cordeiro			3/12
DO NOT SCALE DRAWING		CHECKED			TITLE:  <b>ASSEMBLY &amp; FRAME</b>	
		ENG APPR.				
		MFG APPR.				
		Q.A.				
		COMMENTS:		SIZE	DWG. NO.	REV
				<b>A</b>		<b>A</b>
				SCALE: 1:20	SHEET 1 OF 3	

NOTE:  
RETAIL COST USED FOR PURCHASING  
AND PRICING (2012 YEAR).  
WHOLESALE COST MAY BE LESS.



ITEM NO.	PART	QTY.	MATERIAL COST USD
1	ROLLER TUBE	2	38.26
2	ROLLER CAP	2	12.69
3	ROLLER SHAFT	1	11.53
4	BOTTOM CAP	2	12.68
5	BASE	2	12.26
6	BUSHING SUPPORT	4	30.06
7	BUSHING	4	39.44
8	DRIVE GEAR	1	14.64
9	16 TOOTH GEAR	1	14.64
10	MOUNT	4	9.81
11	DRIVE SHAFT	1	15.37
12	SCOTCH KEY	1	.73
13	CRANK BASE	1	8.59
14	CRANK BLOCK	1	7.91
15	CRANK POST	2	10.76
16	CRANK TOP	1	4.29
17	FRAME	2	116.43
18	BOLT	8	4.23
19	NUT	8	3.82
20	SQUARE KEY	1	.78
21	DOWEL PIN	2	1.47
22	SAFETY SHROUD (NOT PICTURED)	1	11.54

TOTAL RETAIL COST: \$ 381.93

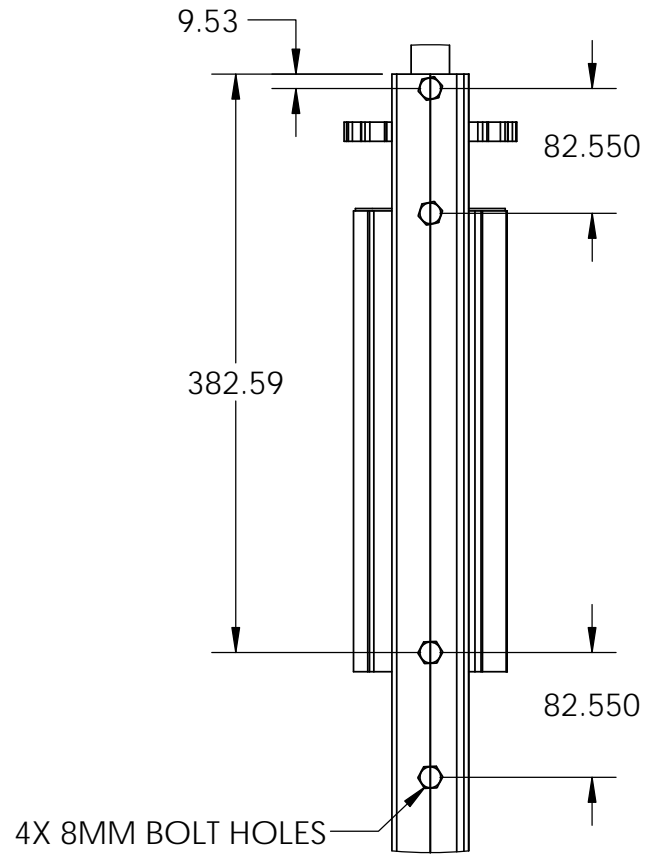
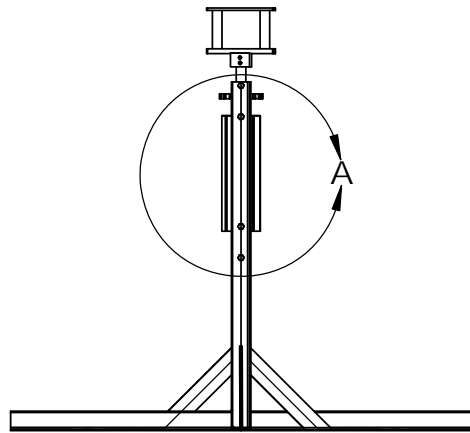
	NAME	DATE
DRAWN	Cordeiro	3/12

## EWB SORGHUM PRESS

TITLE:  
ASSEMBLY & FRAME

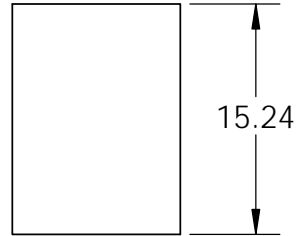
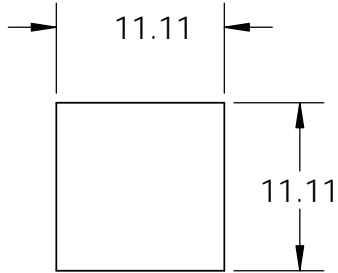
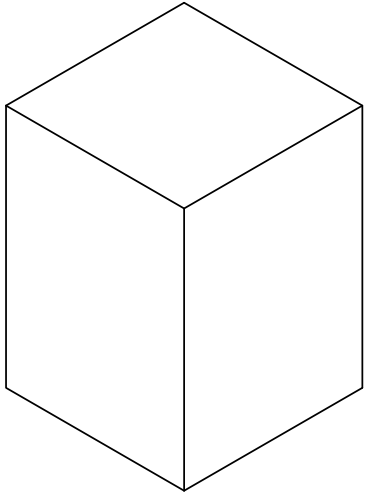
SIZE	DWG. NO.	REV
<b>A</b>		<b>A</b>

SCALE: 1:10 SHEET 2 OF 3



DETAIL A  
SCALE 1 : 5

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		DRAWN	Cordeiro		
		CHECKED			TITLE:
		ENG APPR.			<b>ASSEMBLY &amp; FRAME</b>
		MFG APPR.			
		Q.A.			SIZE
		COMMENTS:			DWG. NO.
					REV
					<b>A</b>
DO NOT SCALE DRAWING				SCALE: 1:20	



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12	TITLE: <b>SQUARE KEY</b>	
	CHECKED				
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE <b>A</b> <span style="float: right;">REV <b>A</b></span>	
MATERIAL <b>KEY STEEL</b>	COMMENTS:				
DO NOT SCALE DRAWING				SCALE: 3:1	