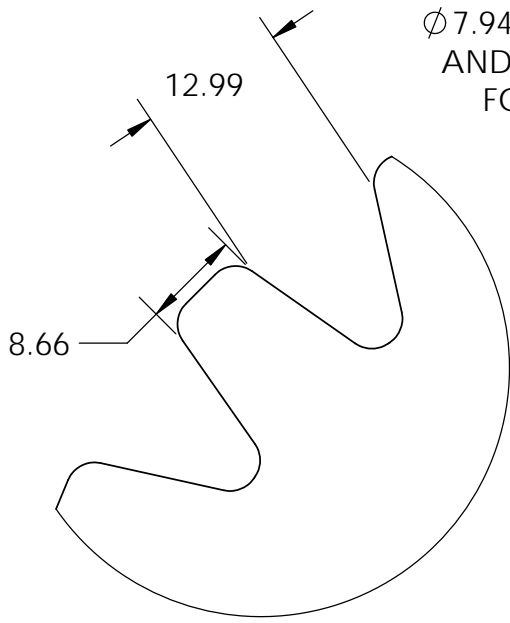
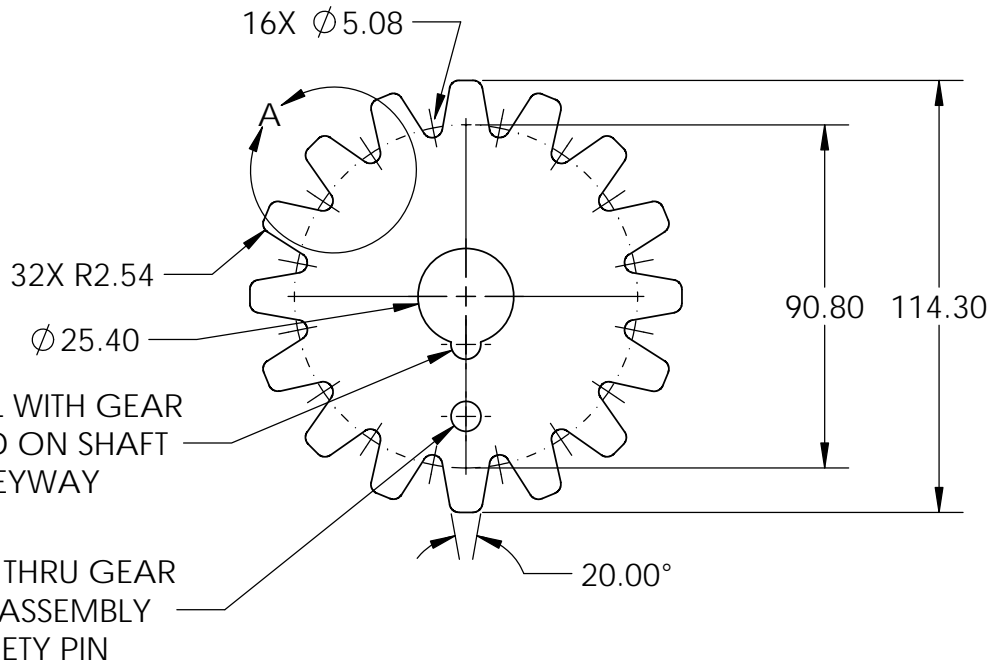
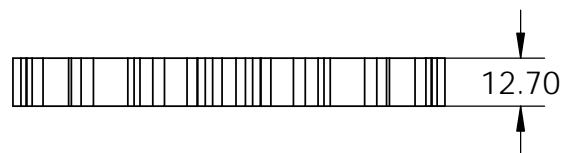


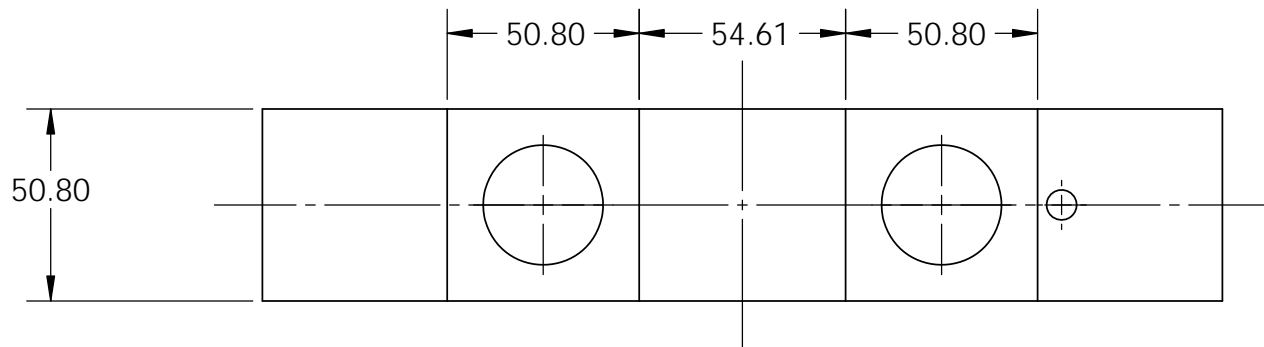
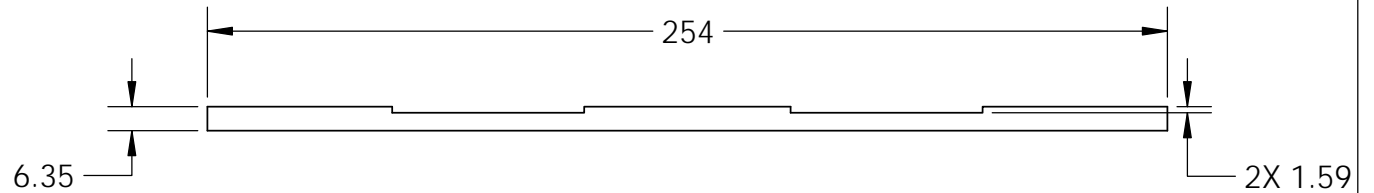
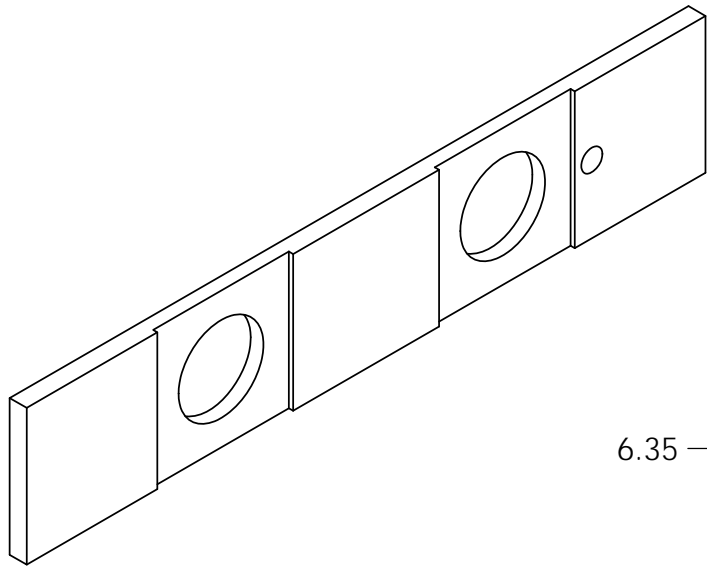
NOTE:  
16 TOOTH GEAR  
ALL TEETH EVENLY SPACED  
SPACING APPX. 22.5°



DETAIL A  
SCALE 1.5 : 1



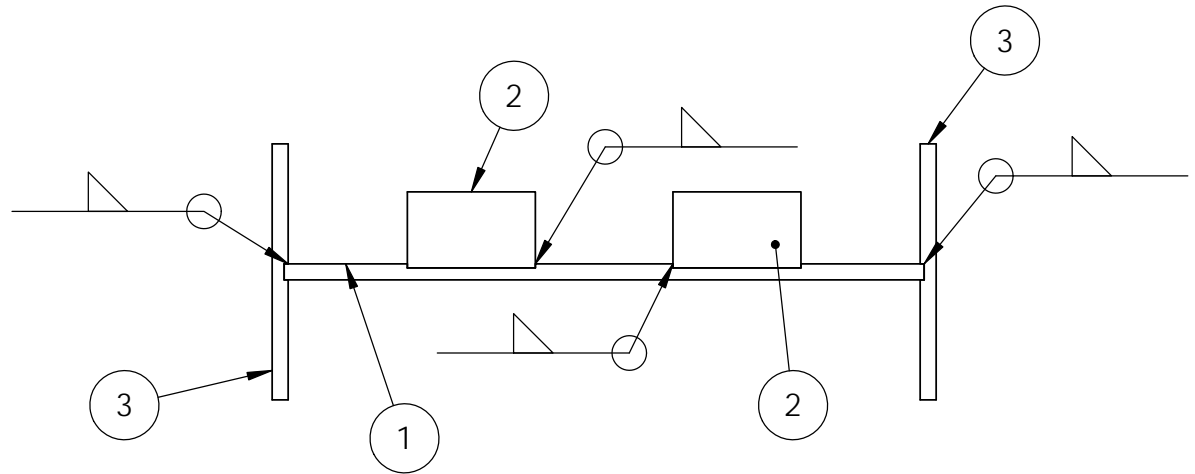
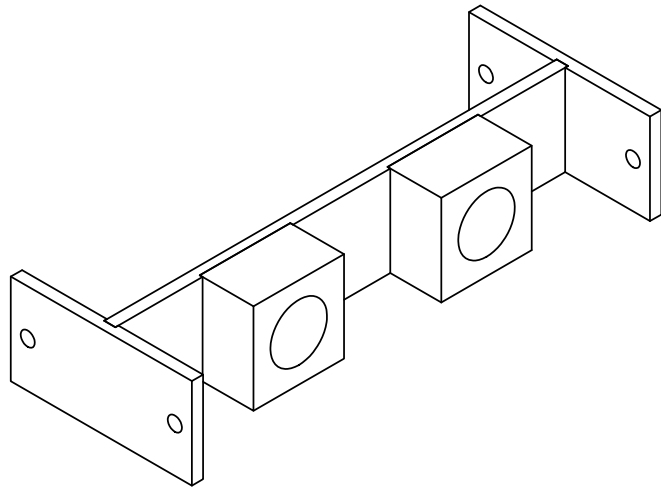
UNLESS OTHERWISE SPECIFIED:	NAME	DATE	<b>EWB SORGHUM PRESS</b>		
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN Cordeiro	3/12			
INTERPRET GEOMETRIC TOLERANCING PER:	CHECKED		TITLE:  GEAR 16T		
MATERIAL	ENG APPR.				
FINISH	MFG APPR.		SIZE	DWG. NO.	REV
DO NOT SCALE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



NOTES:

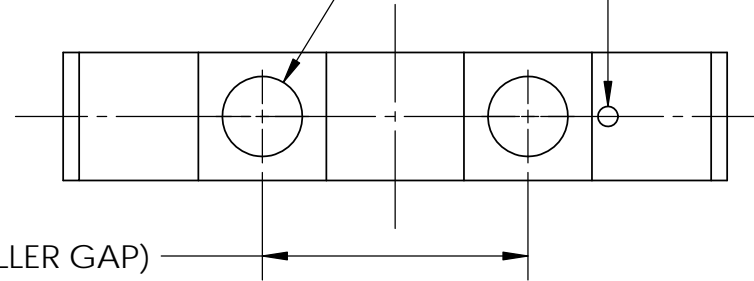
- 1) LARGE THROUGH HOLES NOT TO BE DRILLED UNTIL BASE AND BUSHING SUPPORTS ARE WELDED TOGETHER
- 2) SMALL THORUGH HOLE IS TO INCORPORATE SAFETY PIN. NOT TO BE DRILLED UNTILL FINAL ASSEMBLY

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

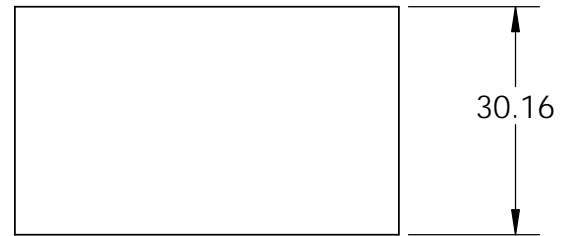
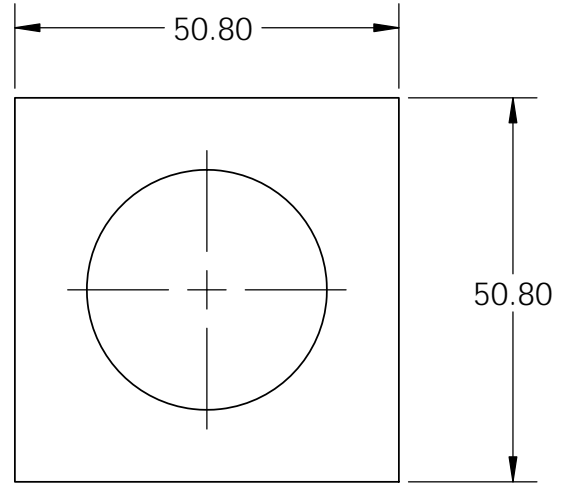
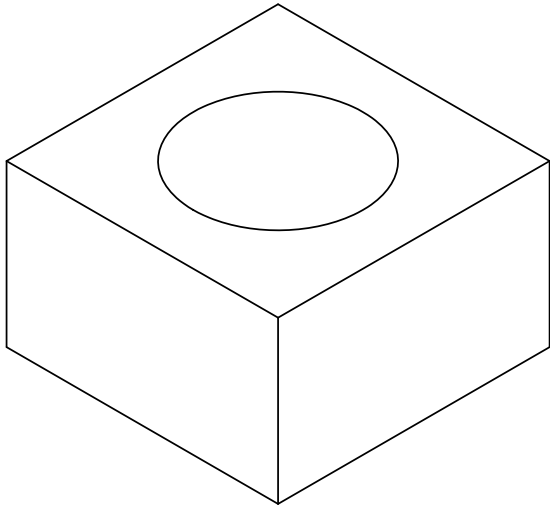


105.41 (OR ROLLER DIA. + ROLLER GAP)

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

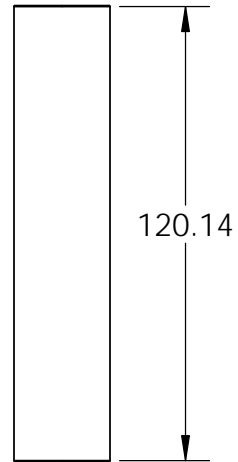
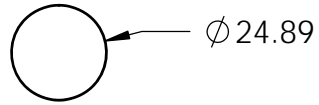
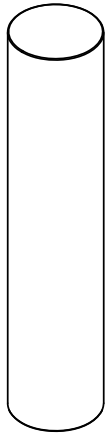
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm .5$ THREE PLACE DECIMAL $\pm .2$		DRAWN	Cordeiro		
		CHECKED			TITLE:
		ENG APPR.			BASE WELDMENT
		MFG APPR.			SIZE
		Q.A.			DWG. NO.
		COMMENTS:			REV
					<b>A</b>
DO NOT SCALE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



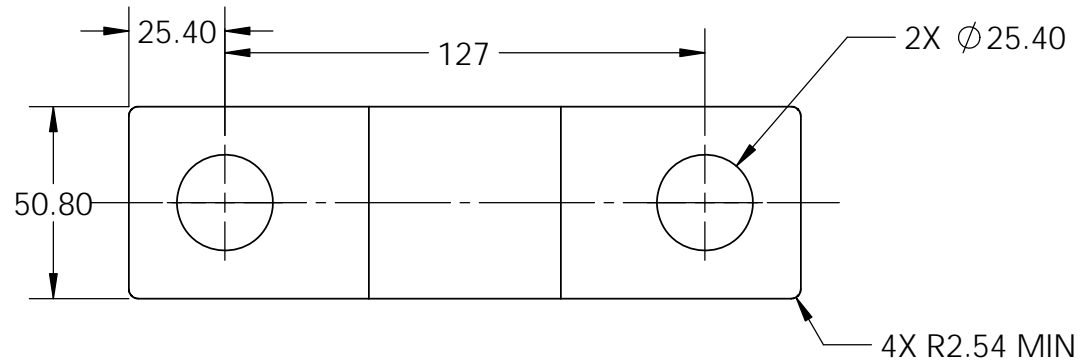
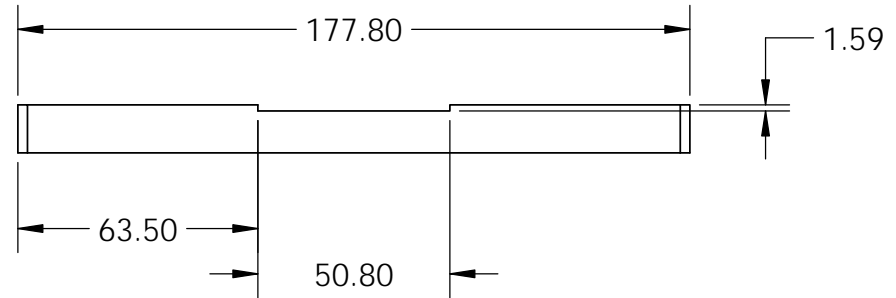
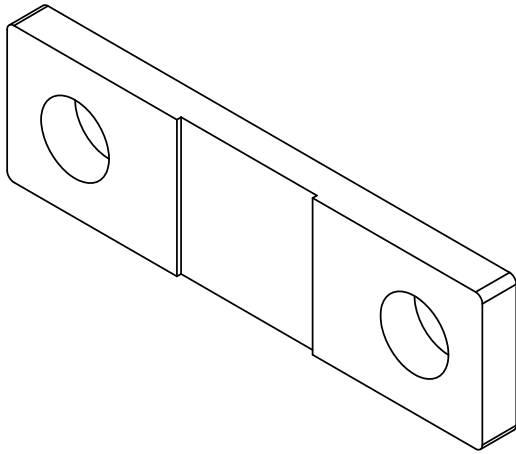


NOTE:  
THROUGH HOLE NOT TO BE DRILLED  
UNTIL PART IS WELDED TO BASE

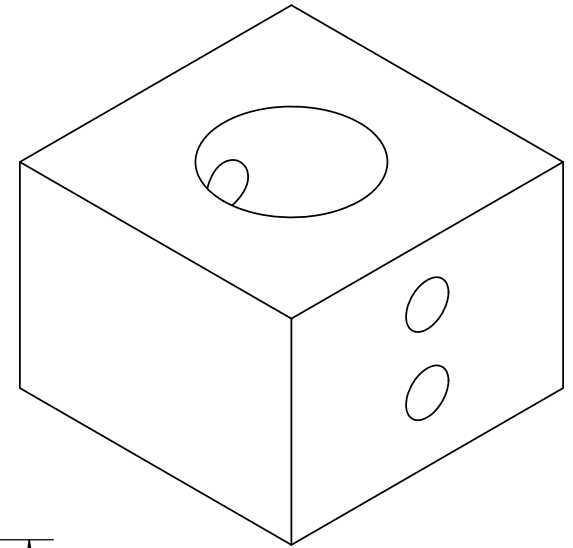
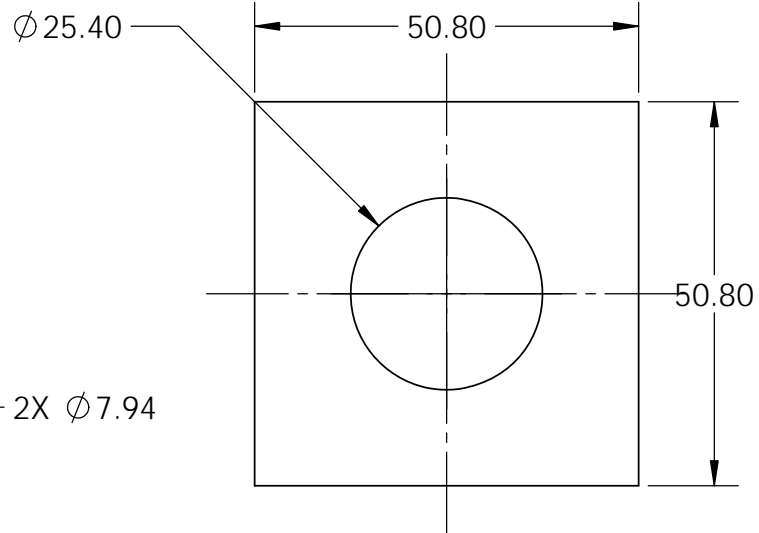
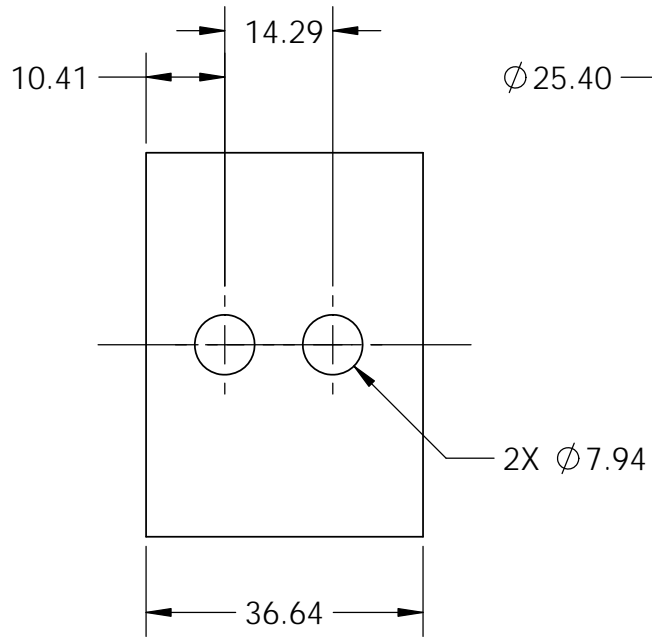
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		DRAWN	Cordeiro		
INTERPRET GEOMETRIC TOLERANCING PER:		CHECKED		TITLE: <b>BUSHING SUPPORT</b>	
		ENG APPR.			
		MFG APPR.			
MATERIAL <b>STEEL</b>		Q.A.			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

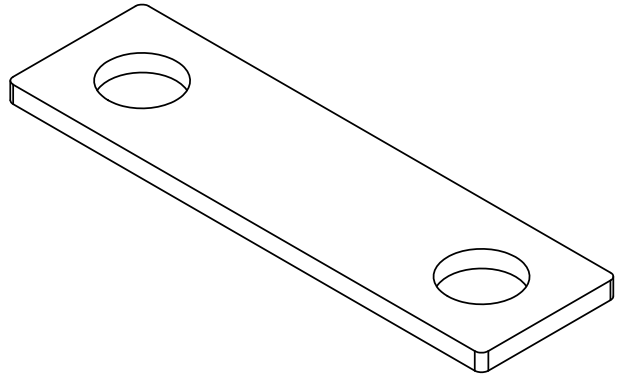
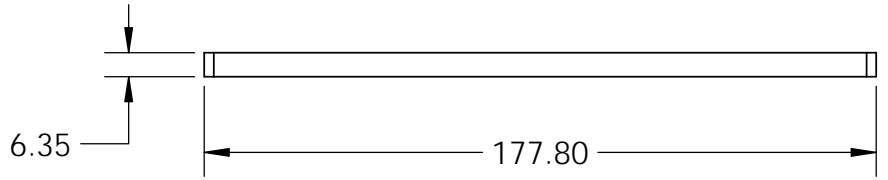
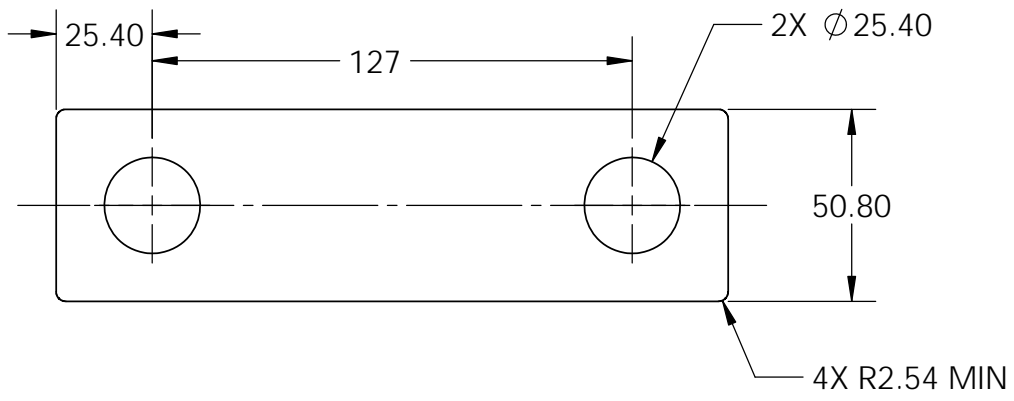


UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2  INTERPRET GEOMETRIC TOLERANCING PER:  MATERIAL STEEL  DO NOT SCALE DRAWING		NAME	DATE	<b>EWB SORGHUM PRESS</b>		
	DRAWN	Cordeiro	3/12			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
	Q.A.			SIZE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



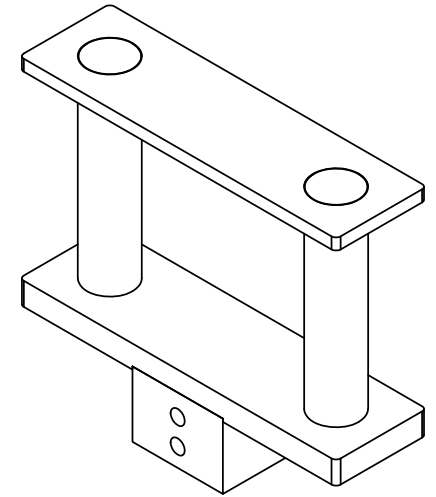
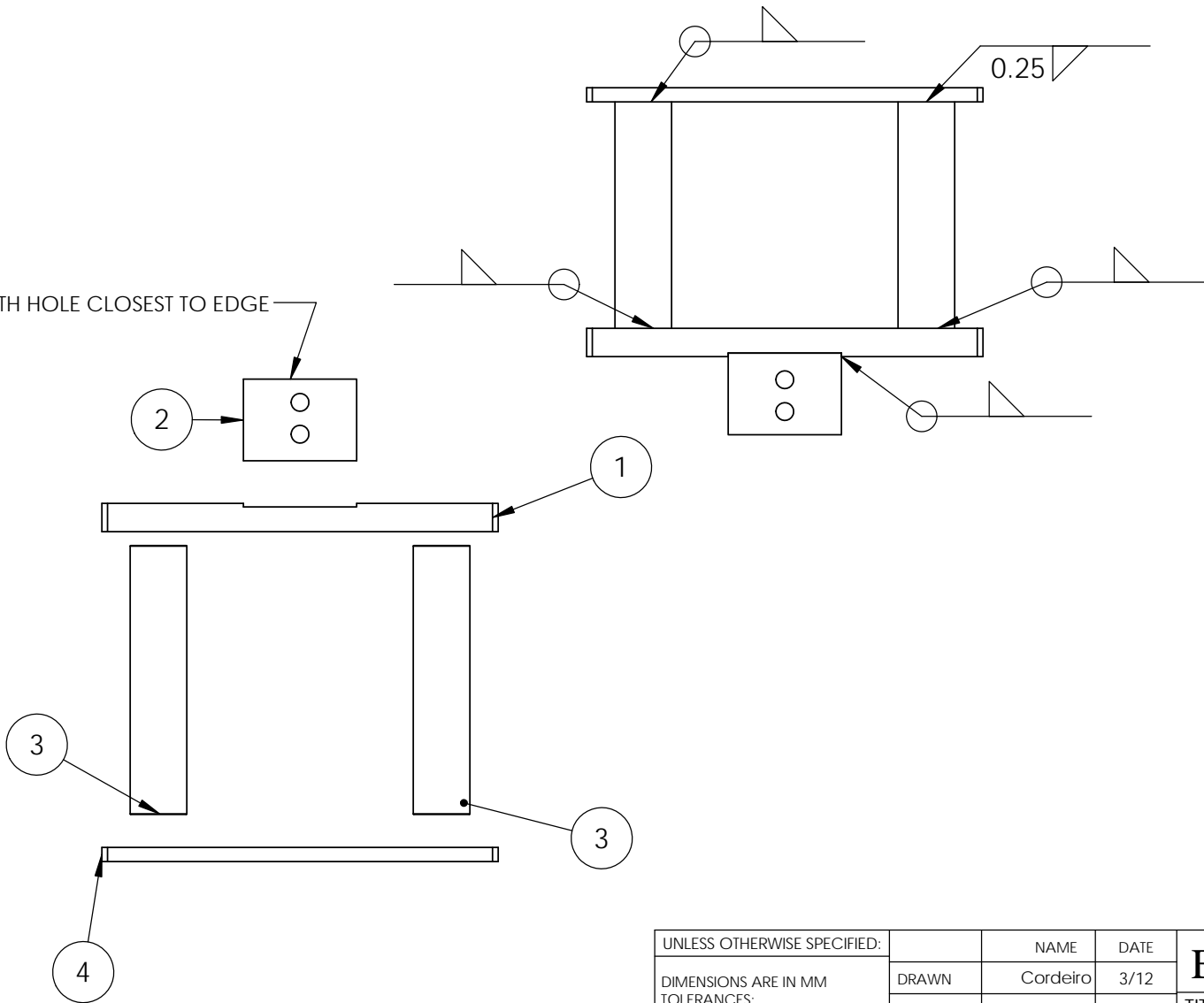
UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>			
	DRAWN	Cordeiro	3/12			TITLE:  CRANK BLOCK	
	CHECKED						
	ENG APPR.						
	MFG APPR.						
	Q.A.			SIZE DWG. NO. REV			
MATERIAL STEEL	COMMENTS:		<p>First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





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

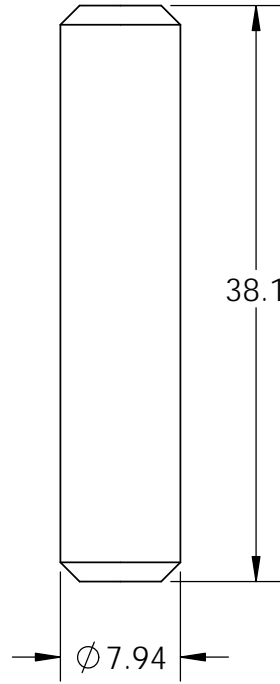
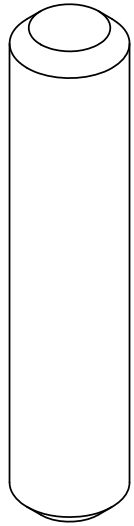
UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MM  
 TOLERANCES:  
 TWO PLACE DECIMAL ±.01  
 THREE PLACE DECIMAL ±.005

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

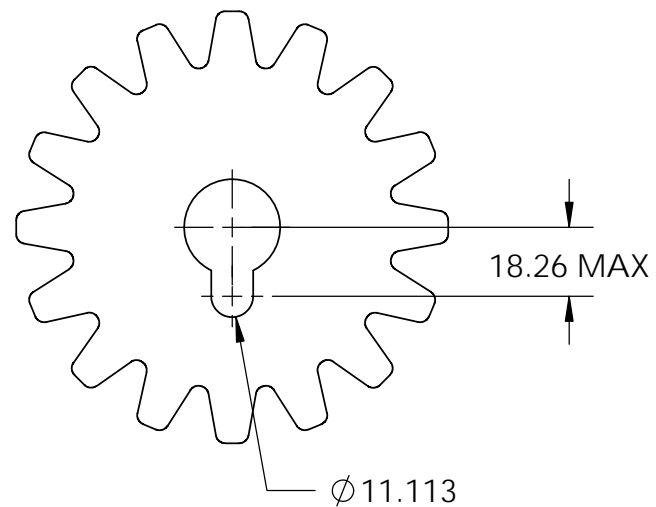
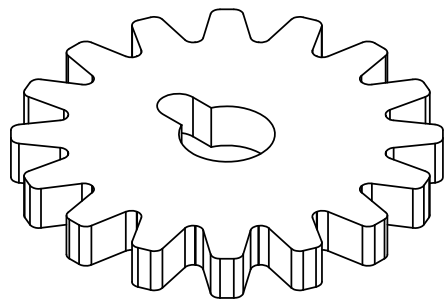
COMMENTS:

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

DO NOT SCALE DRAWING

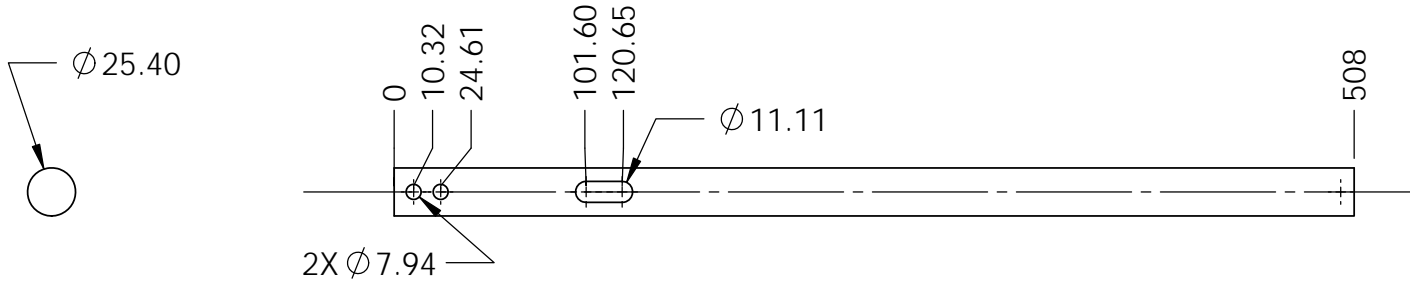


UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>										
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12	TITLE:  DOWEL PIN										
	CHECKED													
	ENG APPR.													
	MFG APPR.													
INTERPRET GEOMETRIC TOLERANCING 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 colspan="2">SCALE: 2:1</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														

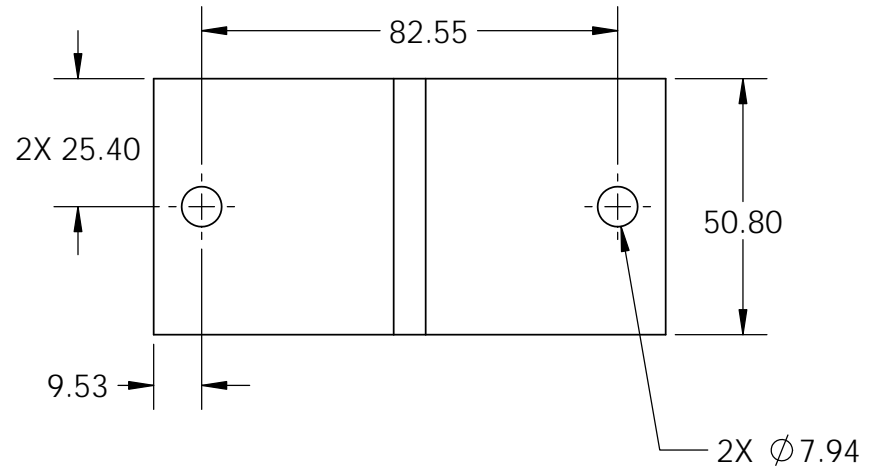
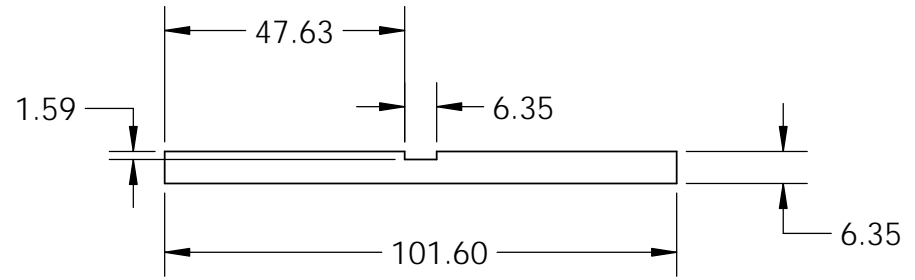
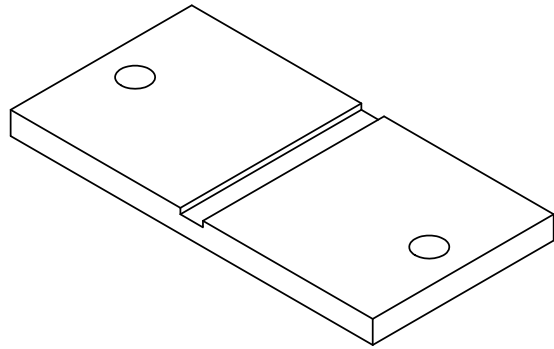


NOTE  
 USE DIMENSIONS FROM 16 TOOTH GEAR DRAWING  
 SAME TOOTH GEOMETRY. DIFFERENT KEYWAY.

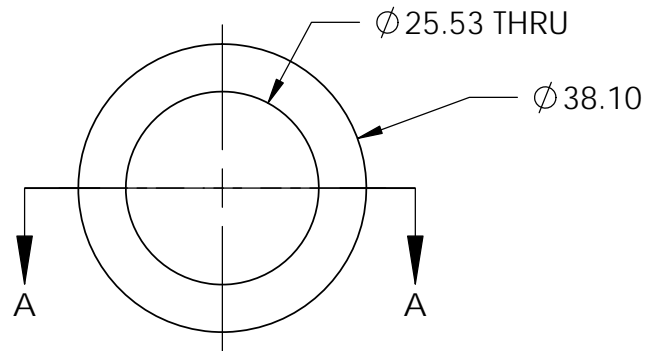
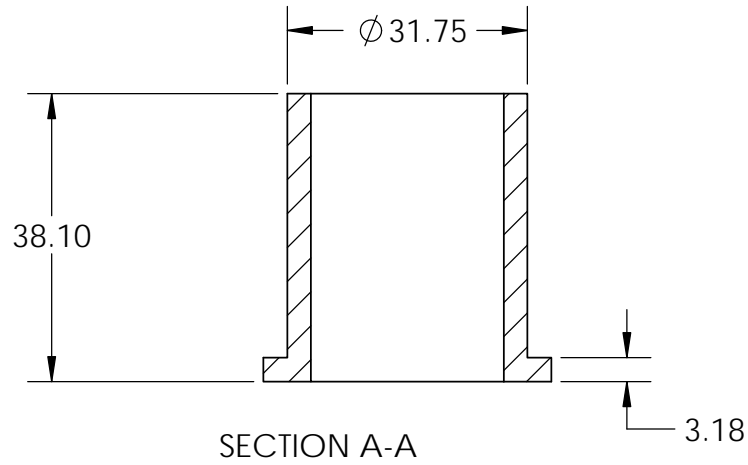
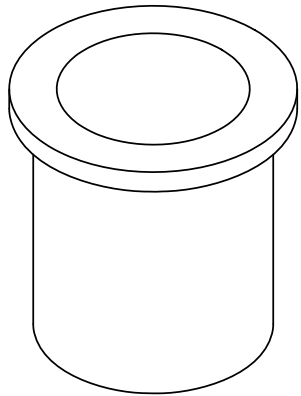
UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2		NAME	DATE	<b>EWB SORGHUM PRESS</b>	
	DRAWN	Cordeiro	3/12		
	CHECKED				
	ENG APPR.				
	MFG APPR.				
	Q.A.			SIZE	REV
MATERIAL STEEL	COMMENTS:			<b>A</b>	<b>A</b>
DO NOT SCALE DRAWING				SCALE: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



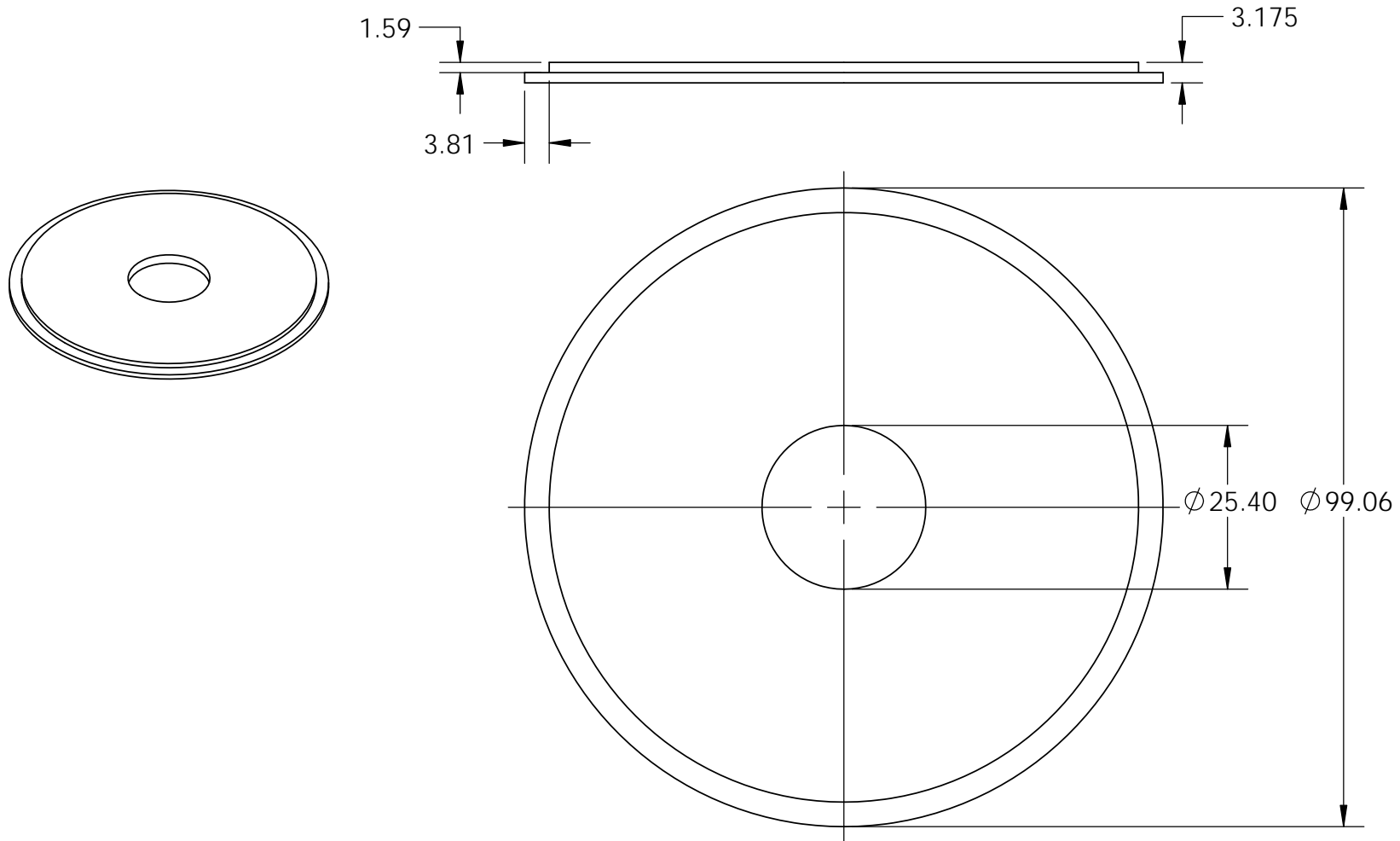
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>										
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL ±.5 THREE PLACE DECIMAL ±.2	DRAWN	Cordeiro	3/12	TITLE:  DRIVE ROLLER SHAFT										
	CHECKED													
	ENG APPR.													
	MFG APPR.													
DRAWING IN FIRST ANGLE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



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				
		ENG APPR.				
		MFG APPR.				
		Q.A.			TITLE:	
MATERIAL BRASS		COMMENTS:		ROLLER BUSHING		
FINISH		 First angle				
DO NOT SCALE DRAWING		SIZE	DWG. NO.	REV		
		<b>A</b>		<b>A</b>		
		SCALE: 1:1				



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: First angle				
MILD STEEL					
DO NOT SCALE DRAWING					

3

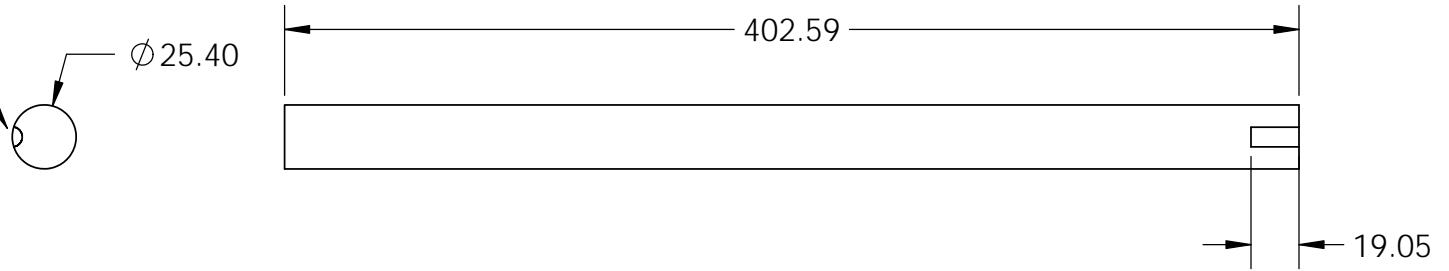
2

1

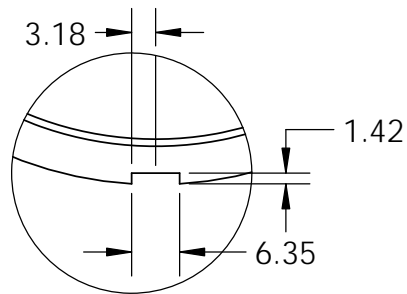
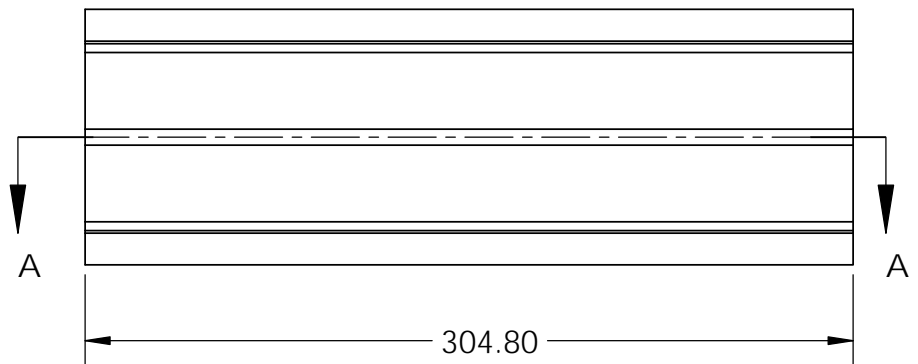
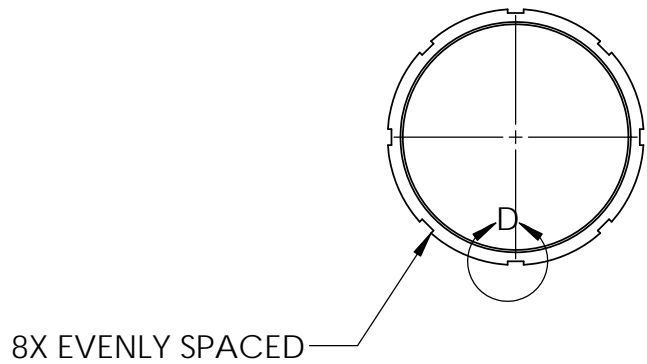




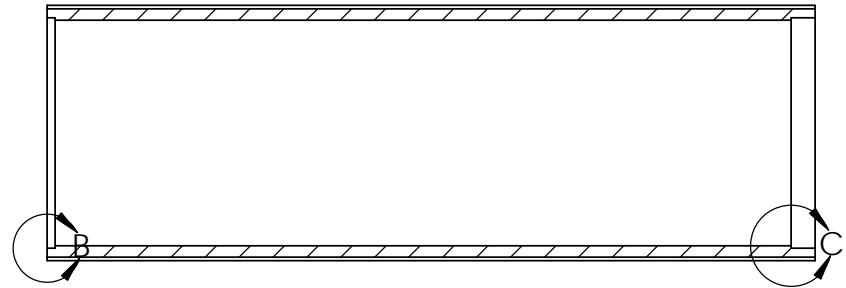
$\phi 7.94$   
 DRILL AFTER ASSEMBLY COMPLETE  
 HOLE TO ACCOMODATE SCOTCH KEY



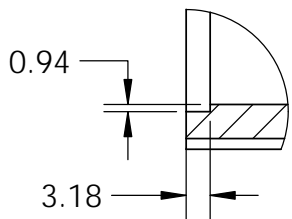
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>				
DIMENSIONS ARE IN MM TOLERANCES: TWO PLACE DECIMAL $\pm .5$ THREE PLACE DECIMAL $\pm .2$		DRAWN	Cordeiro			3/12		
		CHECKED						
		ENG APPR.						
		MFG APPR.						
		Q.A.			TITLE:  <b>ROLLER SHAFT</b>			
MATERIAL	<p>First angle</p>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



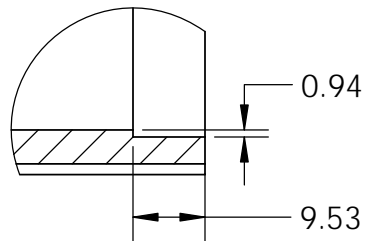
DETAIL D  
SCALE 1 : 1



SECTION A-A

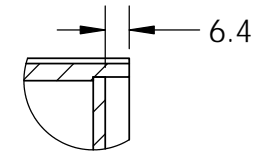
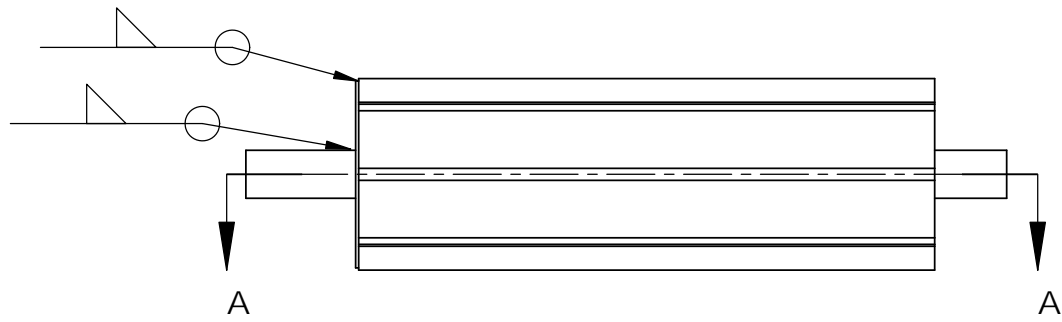


DETAIL B  
SCALE 1 : 1

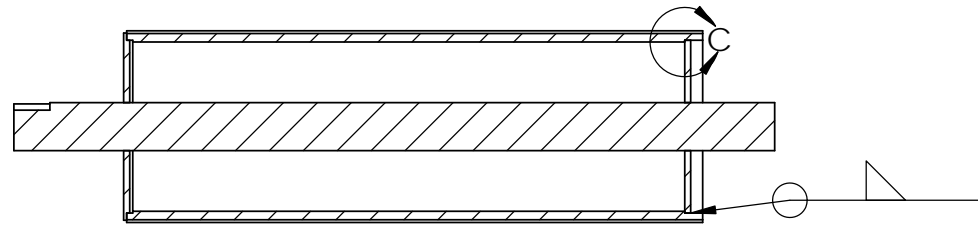
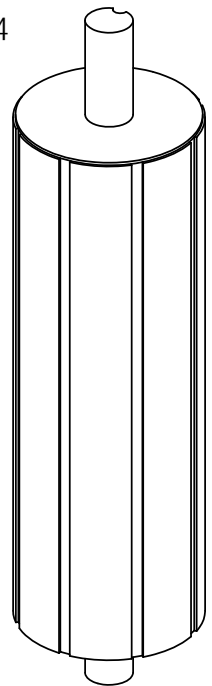


DETAIL C  
SCALE 1 : 1

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<b>EWB SORGHUM PRESS</b>			
DIMENSIONS ARE IN MM		DRAWN	3/12			TITLE: <b>ROLLER TUBE</b>	
TOLERANCES:		CHECKED					
TWO PLACE DECIMAL ±.5		ENG APPR.					
THREE PLACE DECIMAL ±.2		MFG APPR.					
		Q.A.		SIZE	REV		
MATERIAL		<p>First angle</p>		<b>A</b>	<b>A</b>		
3.5" SCH 40 STEEL PIPE				SCALE: 1:3			
DO NOT SCALE DRAWING							

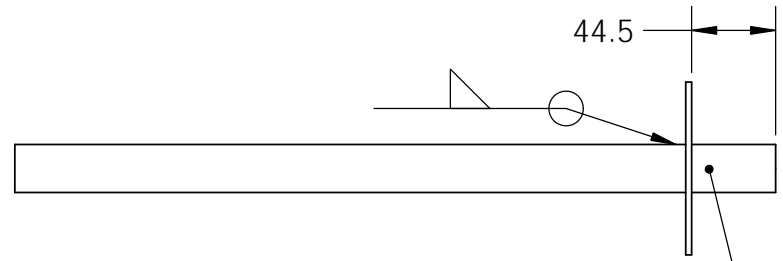
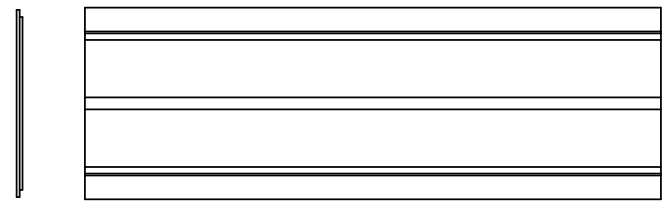


DETAIL C  
SCALE 1 : 2



SECTION A-A

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

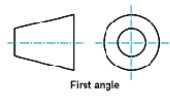


DO NOT WELD ON THIS SIDE OF SHAFT

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

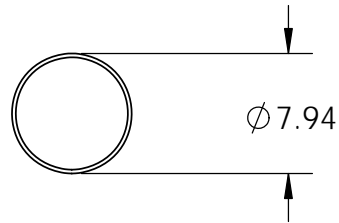
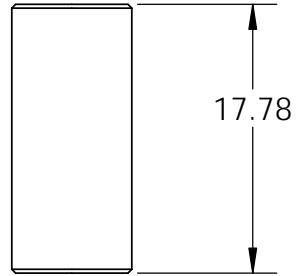
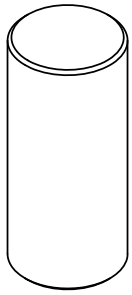
DO NOT SCALE DRAWING

**EWB SORGHUM PRESS**

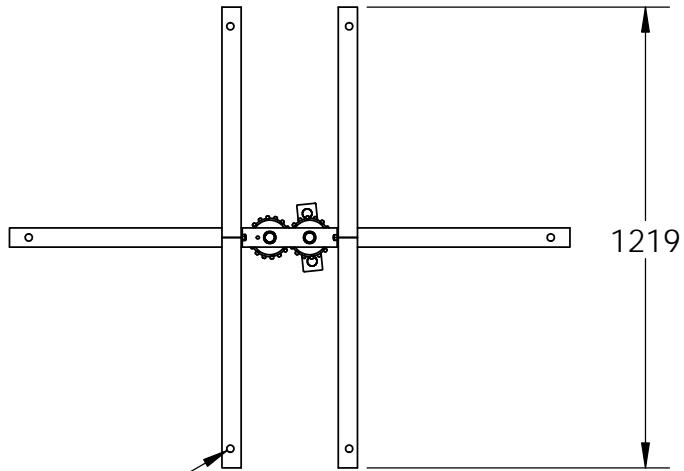
TITLE:  
**ROLLER WELDMENT**

SIZE **A** REV **A**

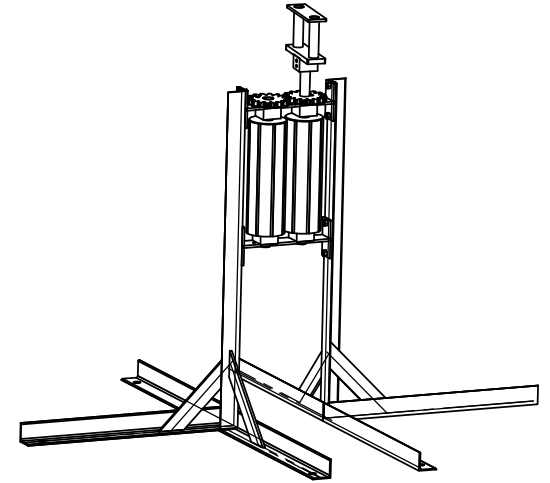
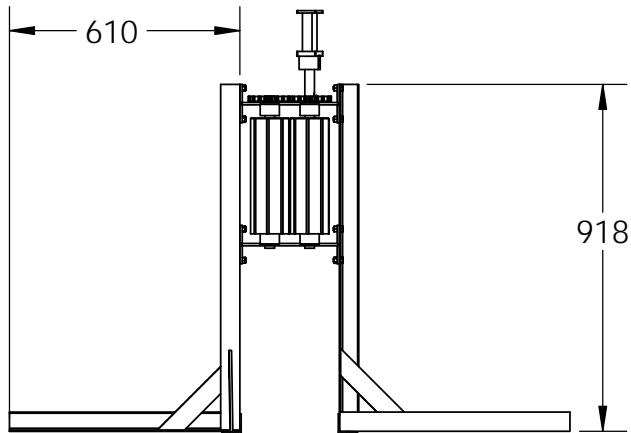
SCALE: 1:4



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	 First angle		<b>A</b>		<b>A</b>
DO NOT SCALE DRAWING			SCALE: 2:1		



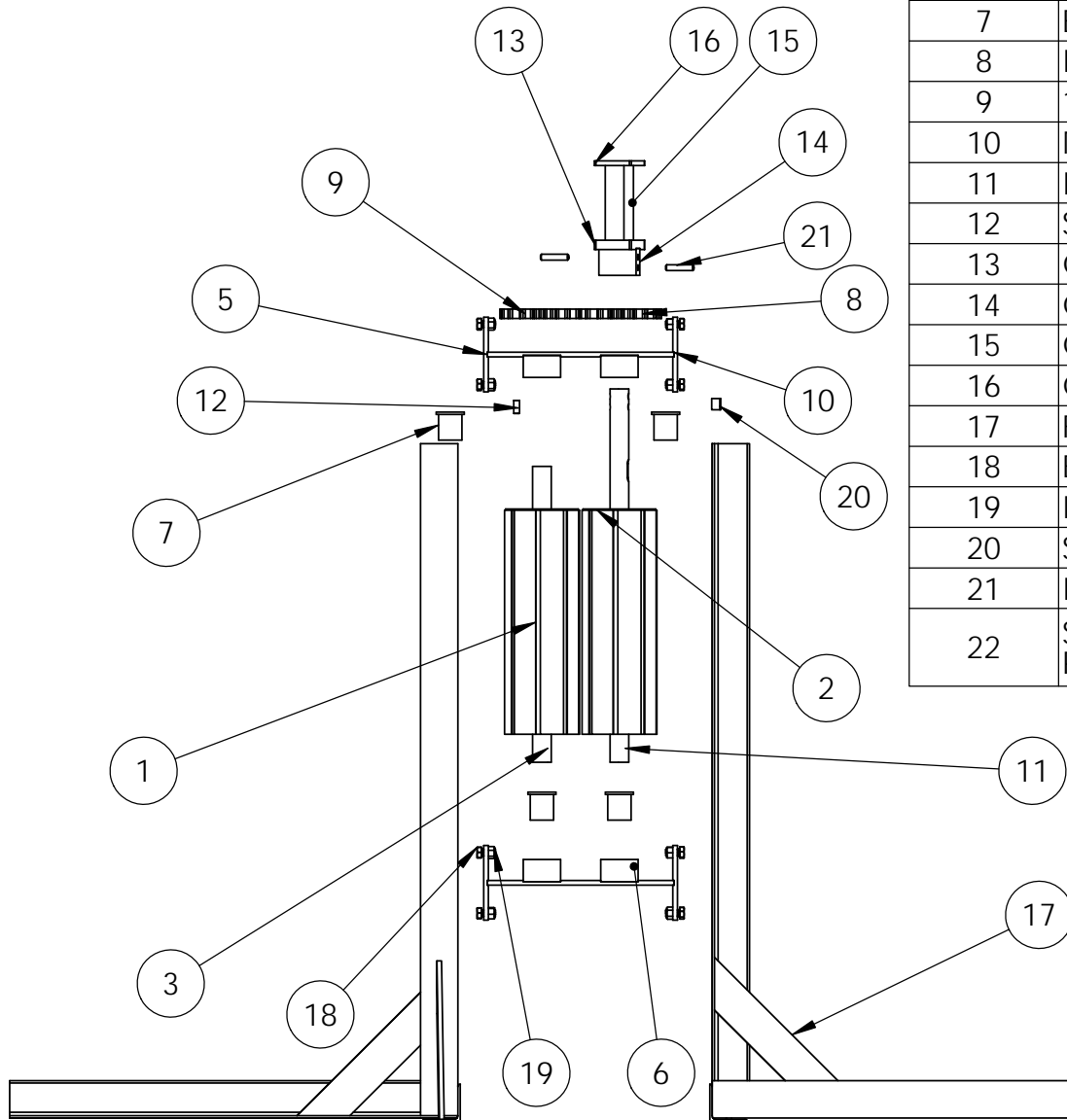
4X  $\phi$ 19.1  
FOR STAKING



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:

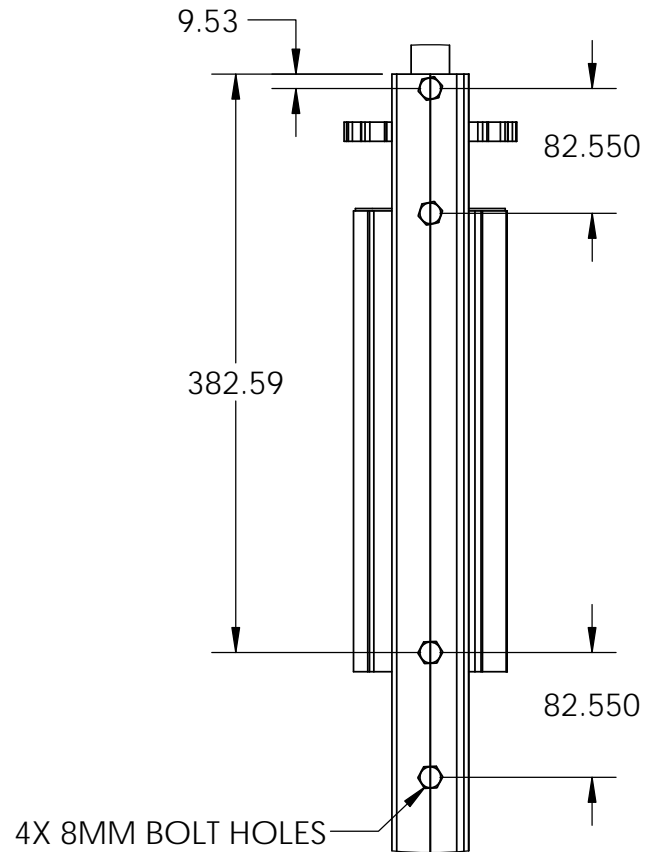
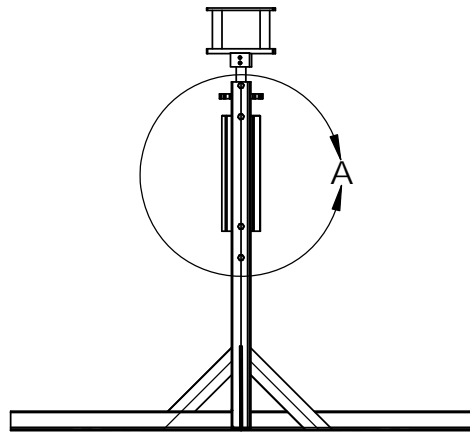
ASSEMBLY & FRAME

SIZE  
**A**

DWG. NO.

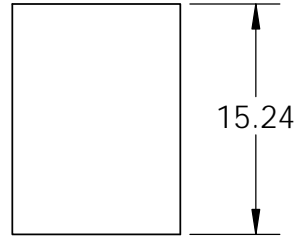
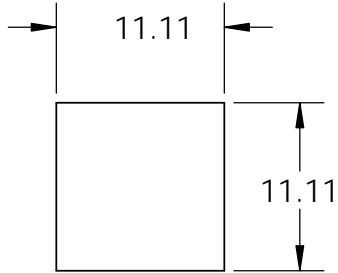
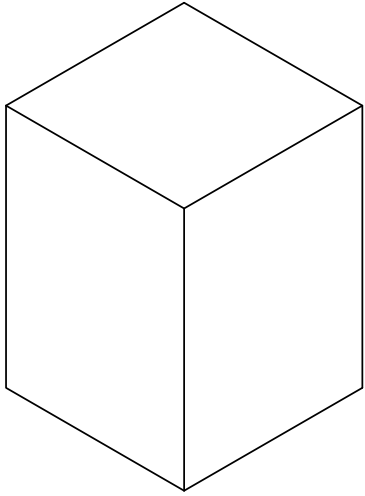
REV  
**A**

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>	<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	