

# Project 3

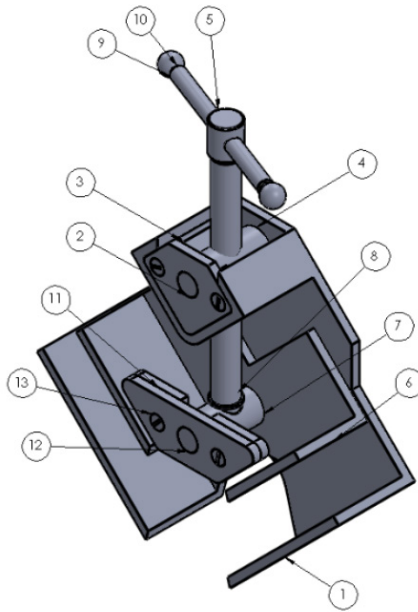
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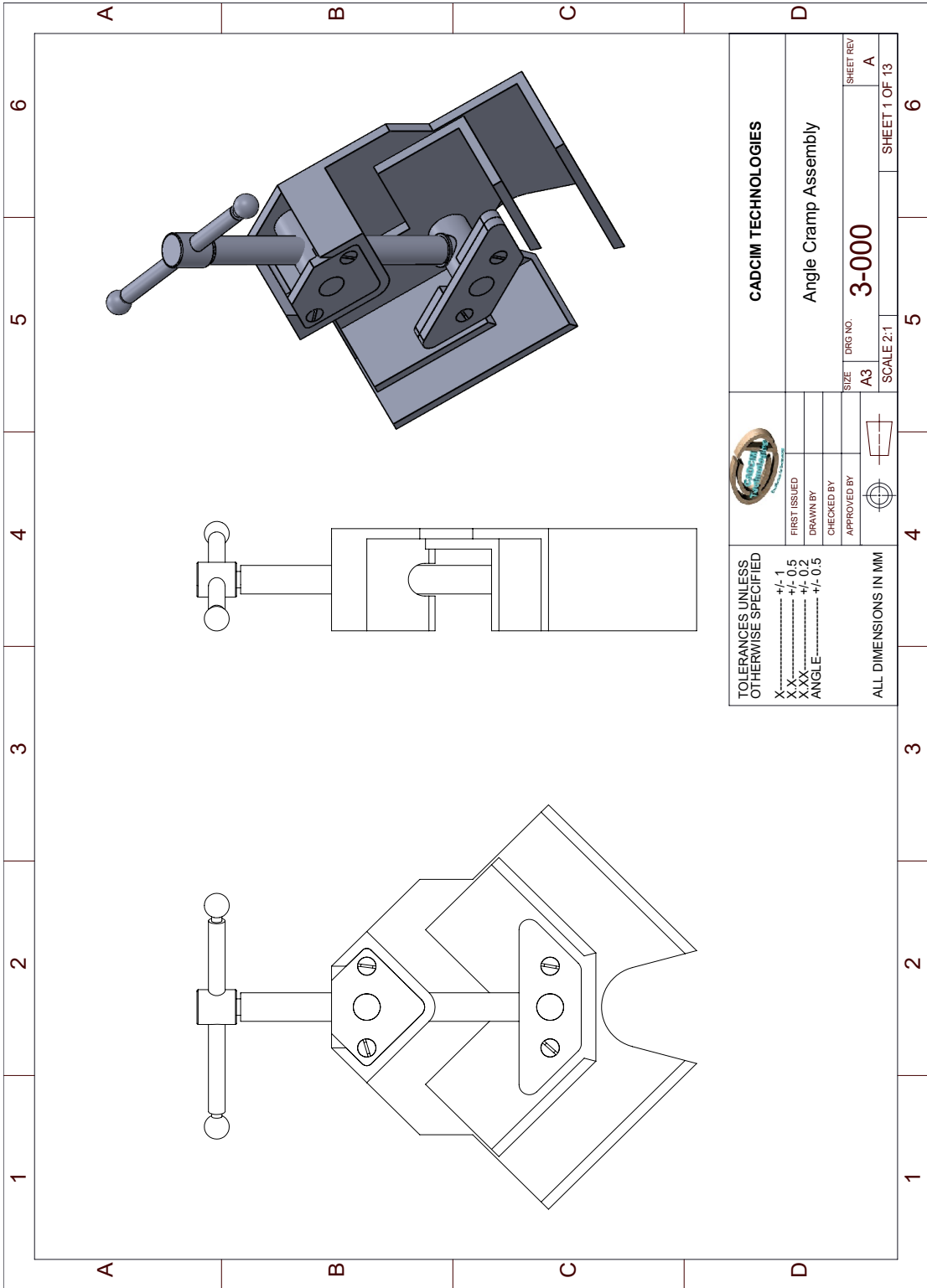
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## Angle Clamp Assembly

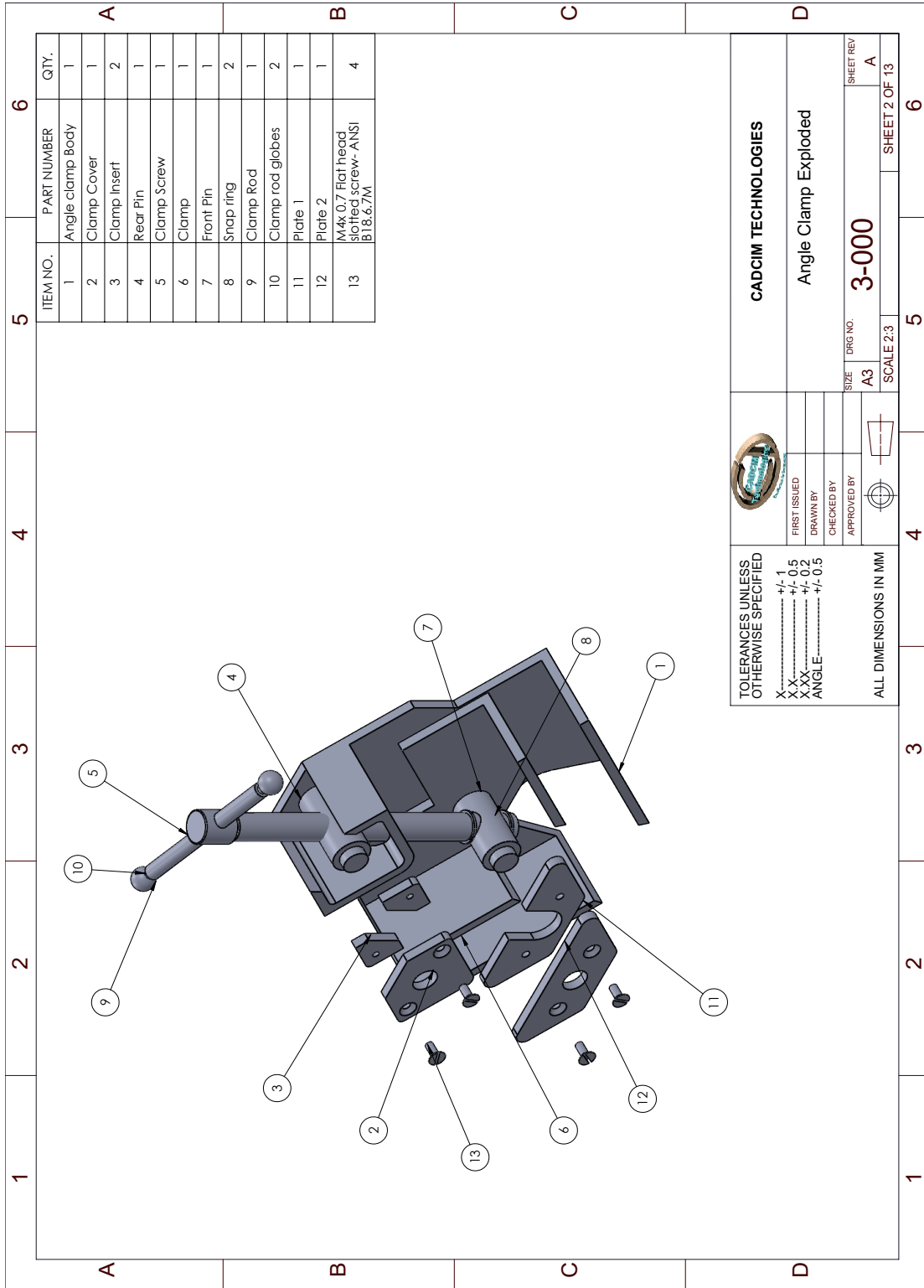
In this project, you will create components for a Angle Clamp assembly and then assemble them. You need to create all the components as separate part files. The views and dimensions of the components are shown in Figures P3-3 through P3-14.

You can also download the model files for your reference from [www.cadcim.com](http://www.cadcim.com). To download the files, use the following path: *Textbooks > CAD/CAM > CATIA > CATIA V5-6R2020 for Designers > Projects for Free Download > Project 3*



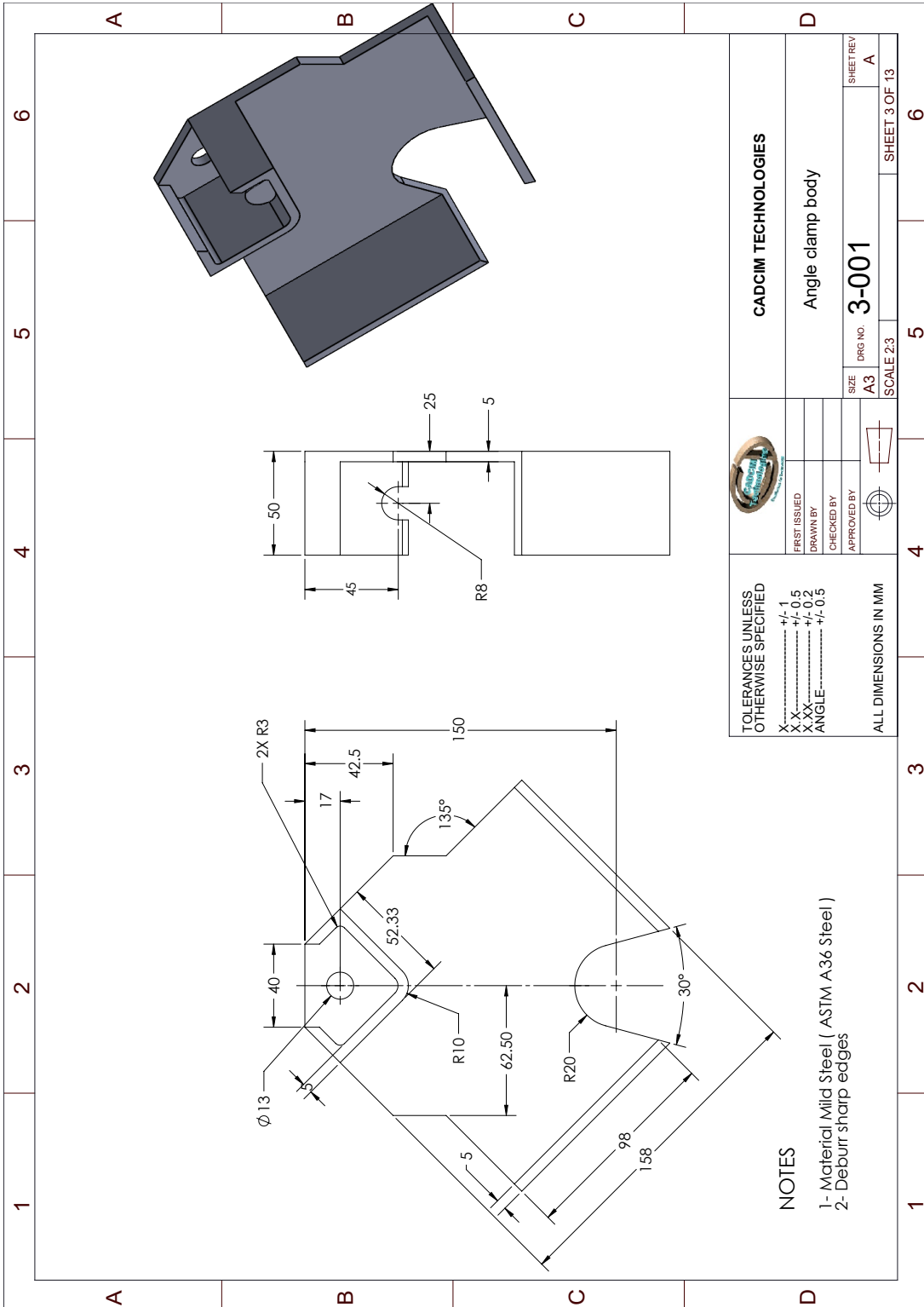


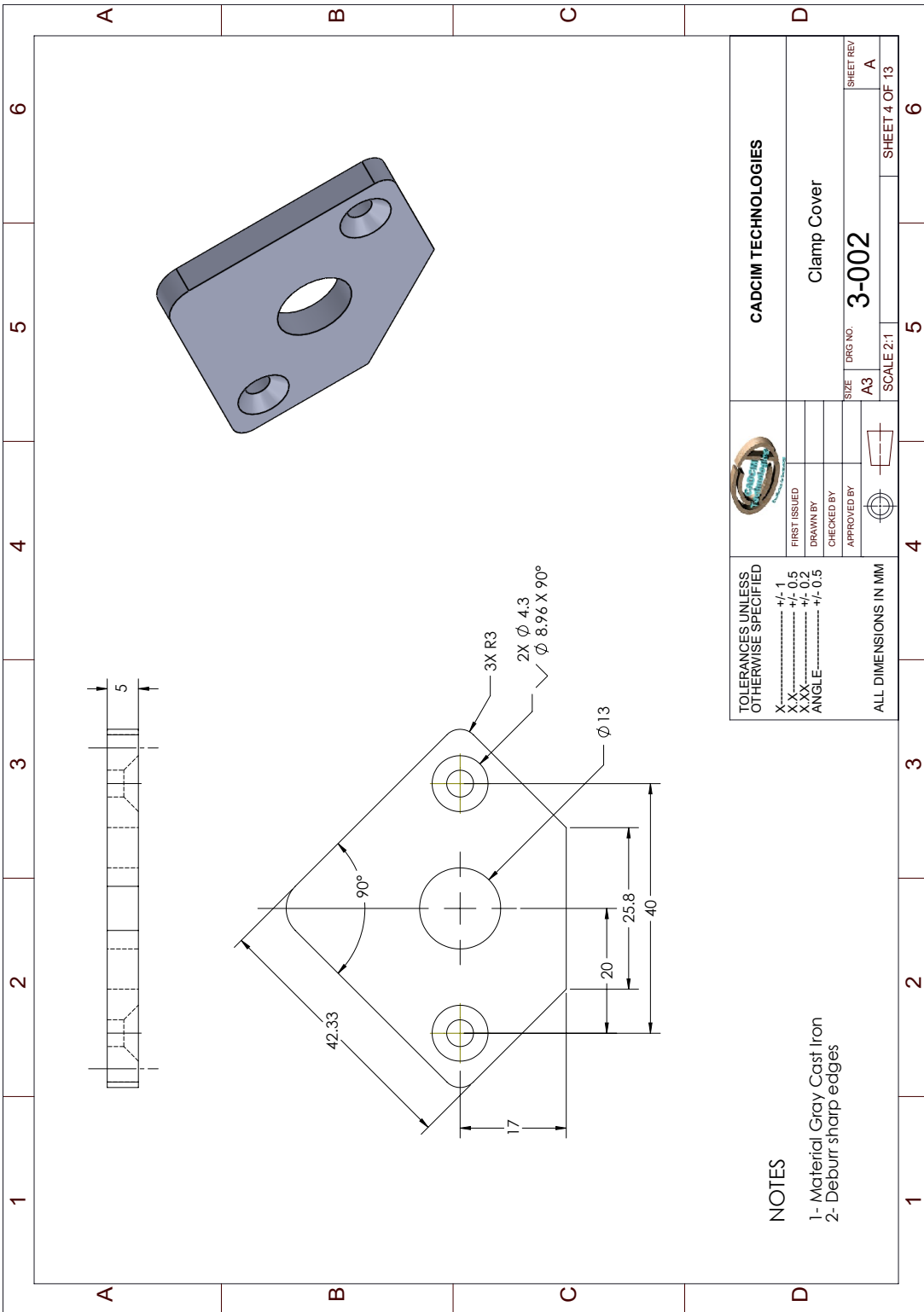
		<b>CADCIM TECHNOLOGIES</b>	
TOLERANCES UNLESS OTHERWISE SPECIFIED X----- +/- 1 XX----- +/- 0.5 XXX----- +/- 0.2 ANGLE----- +/- 0.5		Angle Cramp Assembly	
FIRST ISSUED DRAWN BY CHECKED BY APPROVED BY		DRG NO. <b>3-000</b>	SHEET REV <b>A</b>
ALL DIMENSIONS IN MM		SIZE <b>A3</b>	SCALE 2:1 <b>3-000</b>
		SHEET 1 OF 13	



ITEM NO.	PART NUMBER	QTY.
1	Angle clamp Body	1
2	Clamp Cover	1
3	Clamp Insert	2
4	Rear Pin	1
5	Clamp Screw	1
6	Clamp	1
7	Front Pin	1
8	Snap ring	2
9	Clamp Rod	1
10	Clamp rod globes	2
11	Plate 1	1
12	Plate 2	1
13	M4x0.7 Flat head bolt, screw--ANSI 316.67/M	4

		<b>CADCIM TECHNOLOGIES</b>	
		Angle Clamp Exploded	
TOLERANCES UNLESS OTHERWISE SPECIFIED X----- +/- 1 XX----- +/- 0.5 XXX----- +/- 0.2 ANGLE----- +/- 0.5	FIRST ISSUED DRAWN BY CHECKED BY APPROVED BY	DRG NO. <b>3-000</b>	SHEET REV <b>A</b>
ALL DIMENSIONS IN MM	SIZE <b>A3</b>	SCALE <b>2:3</b>	SHEET 2 OF 13





**NOTES**

- 1- Material Gray Cast Iron
- 2- Deburr sharp edges

TOLERANCES UNLESS OTHERWISE SPECIFIED	
X.....	+/- 1
XX.....	+/- 0.5
XXX.....	+/- 0.2
ANGLE.....	+/- 0.5

FIRST ISSUED  
DRAWN BY  
CHECKED BY  
APPROVED BY



ALL DIMENSIONS IN MM



**CAD/CIM TECHNOLOGIES**

Clamp Cover

DRG NO. **3-002**

SIZE	A3	SHEET REV	A
SCALE	2:1	SHEET 4 OF 13	

6

5

4

3

2

1

A

B

C

D

6

5

4

3

2

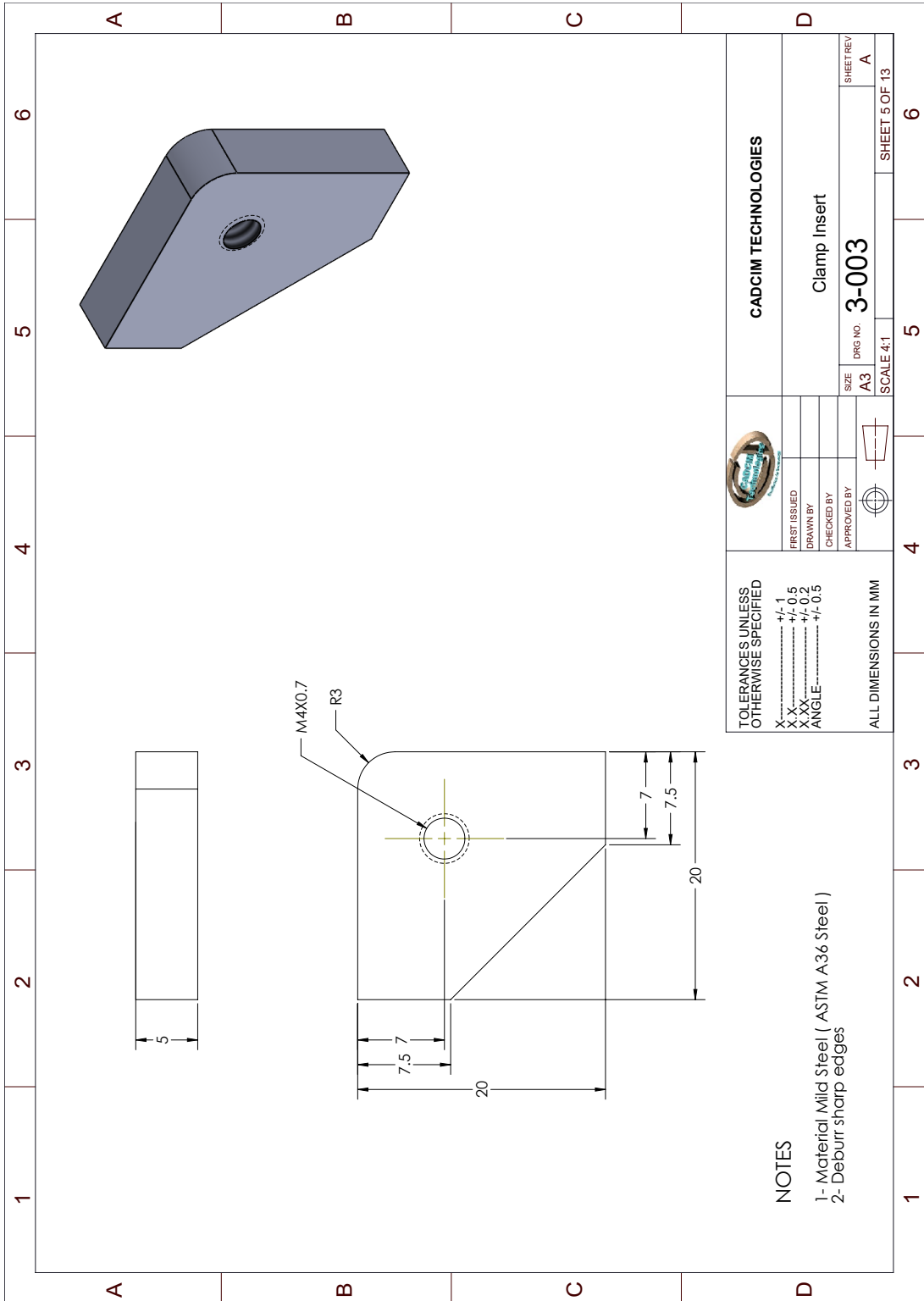
1

A

B

C

D



<p><b>CAD/CIM TECHNOLOGIES</b></p>		<p>DRG NO. <b>3-003</b></p>	
<p>Clamp Insert</p>		<p>SIZE <b>A3</b></p>	
<p>DRG NO. <b>3-003</b></p>		<p>SCALE 4:1</p>	
<p>SIZE <b>A3</b></p>		<p>SHEET REV <b>A</b></p>	
<p>SCALE 4:1</p>		<p>SHEET 5 OF 13</p>	

TOLERANCES UNLESS OTHERWISE SPECIFIED

X----- +/- 1

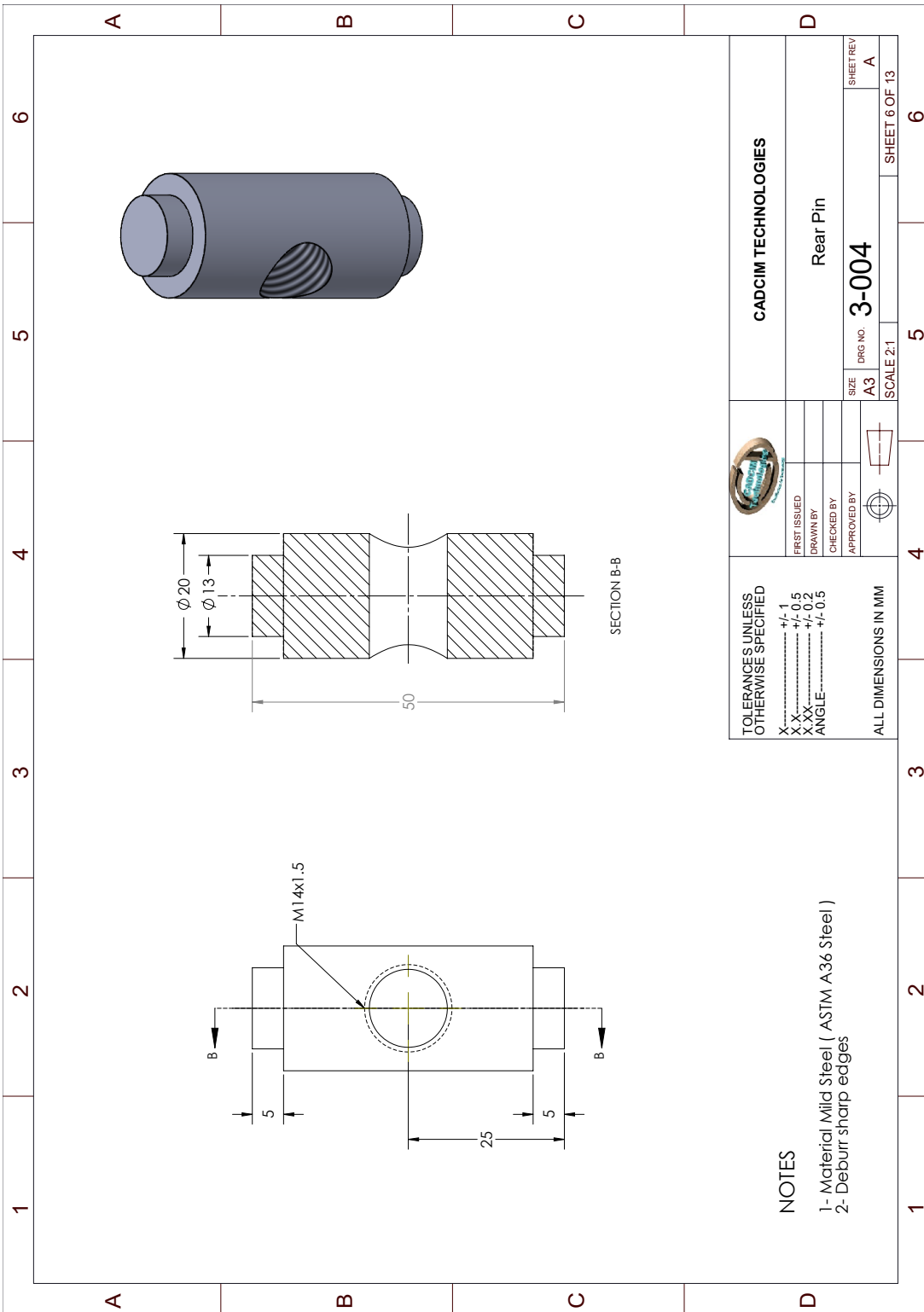
X----- +/- 0.5

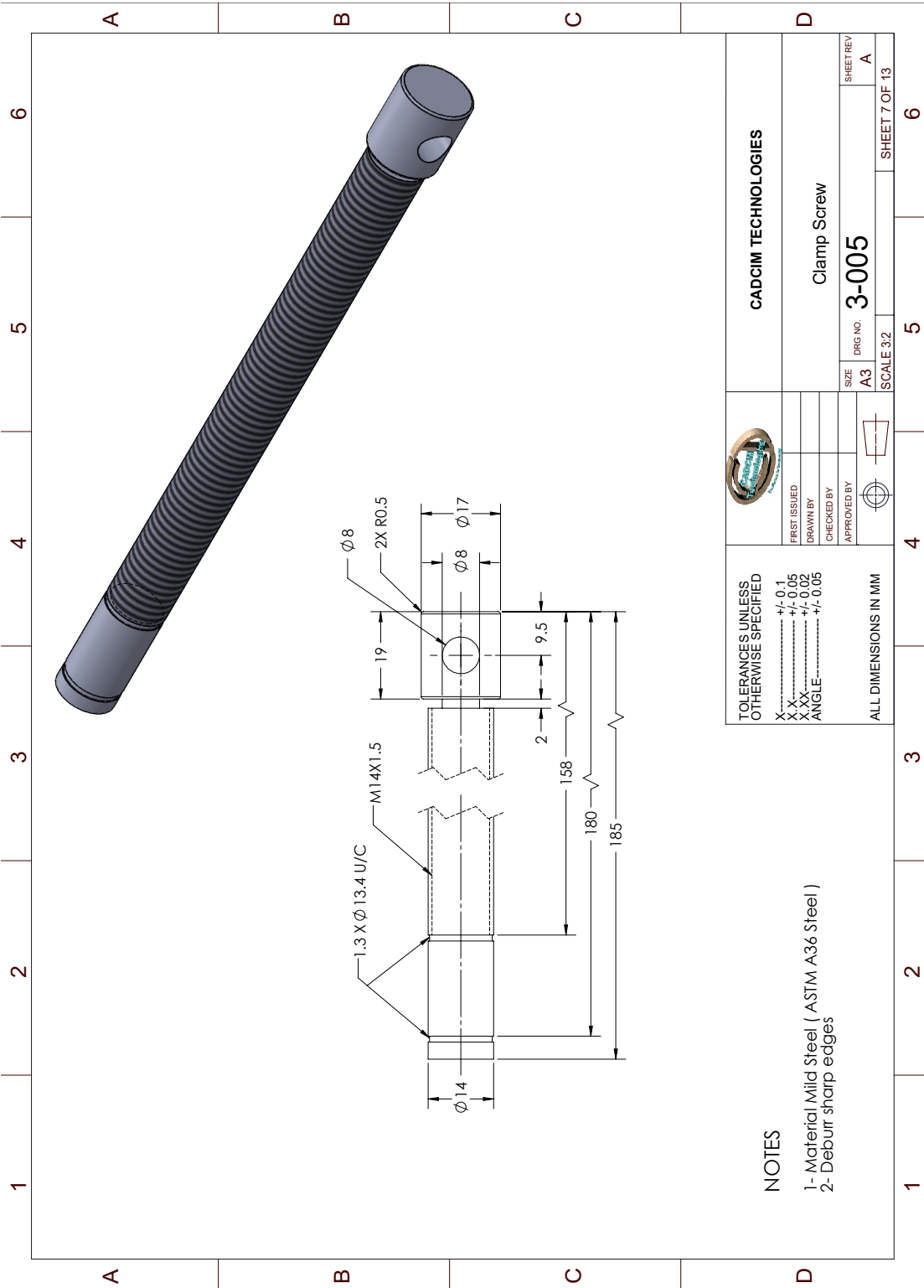
X.XX----- +/- 0.2

ANGLE----- +/- 0.5

ALL DIMENSIONS IN MM

- NOTES**
- 1- Material Mild Steel ( ASTM A36 Steel )
  - 2- Deburr sharp edges





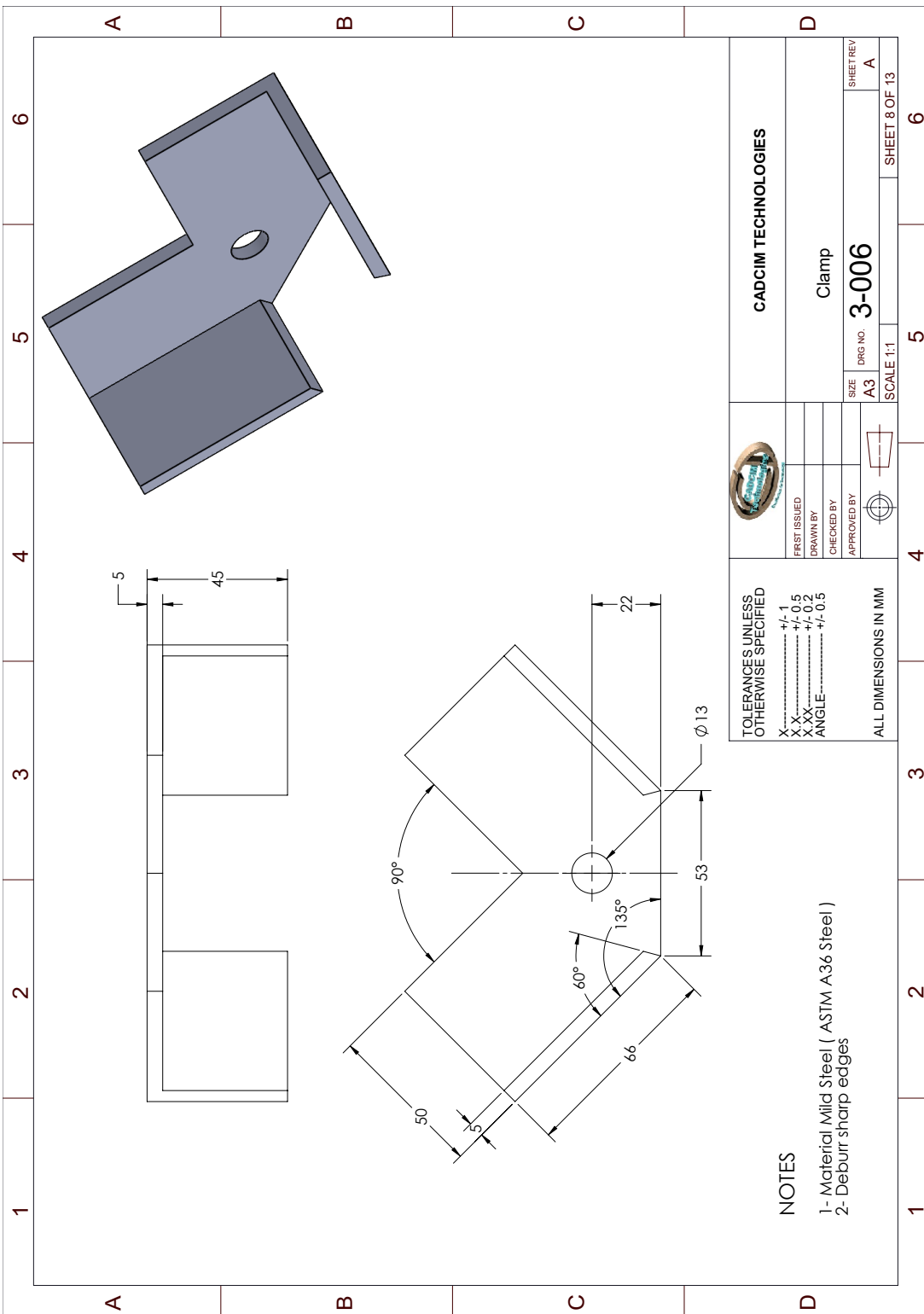
<p><b>TOLERANCES UNLESS OTHERWISE SPECIFIED</b></p> <p>X..... +/- 0.1                  XX..... +/- 0.05                  XXX..... +/- 0.02                  ANGLE..... +/- 0.05</p>		<p><b>CADCIM TECHNOLOGIES</b></p>	
<p><b>NOTES</b></p> <p>1- Material Mild Steel ( ASTM A36 Steel )                  2- Deburr sharp edges</p>		<p><b>Clamp Screw</b></p>	
<p>ALL DIMENSIONS IN MM</p>		<p>SIZE  <b>A3</b></p>	<p>DRG NO.  <b>3-005</b></p>
<p>FIRST ISSUED</p>		<p>SCALE 3:2</p>	
<p>DRAWN BY</p>		<p>SHEET REV</p>	
<p>CHECKED BY</p>		<p><b>A</b></p>	
<p>APPROVED BY</p>		<p>SHEET 7 OF 13</p>	


1 2 3 4 5 6

A B C D

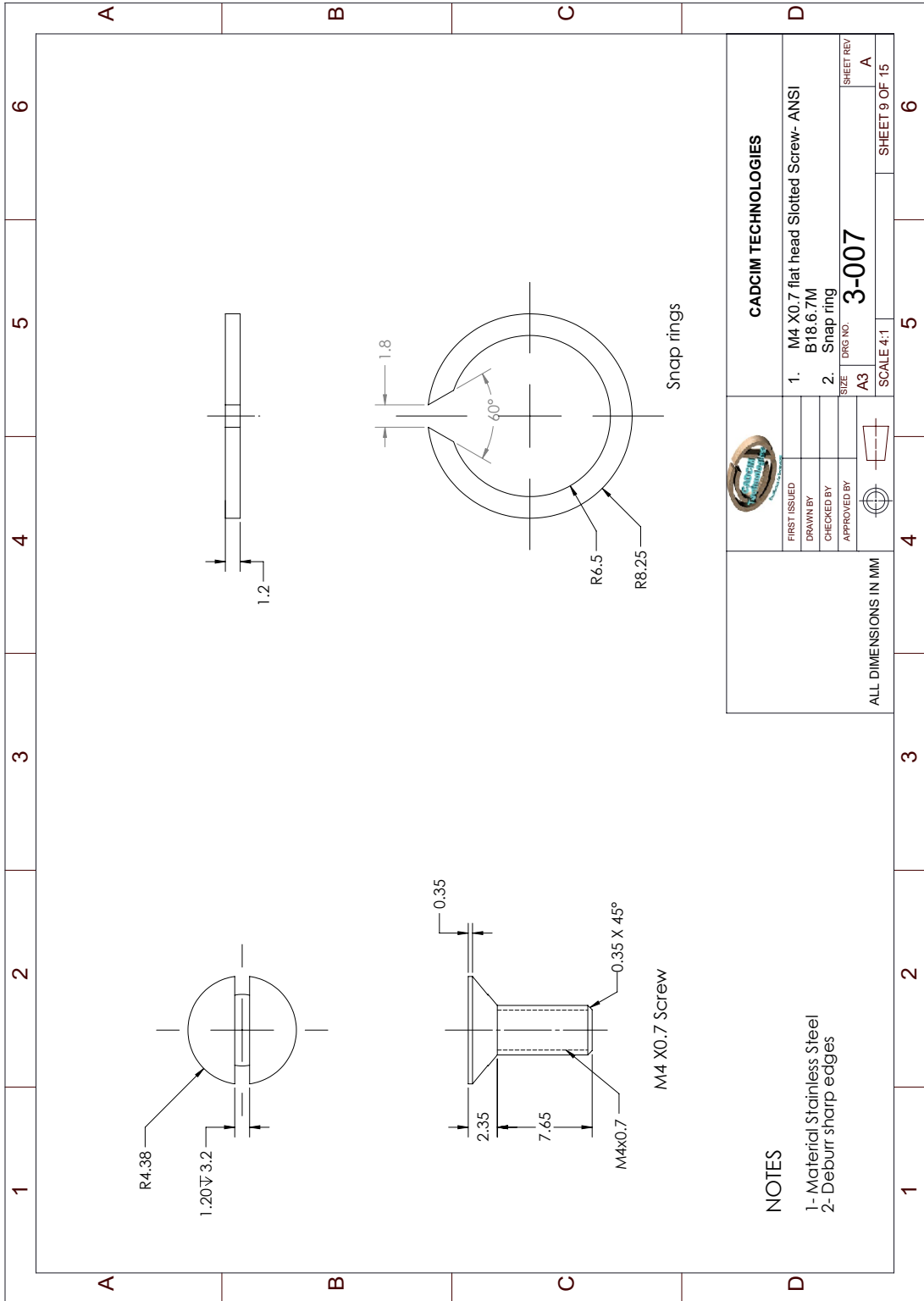
1 2 3 4 5 6

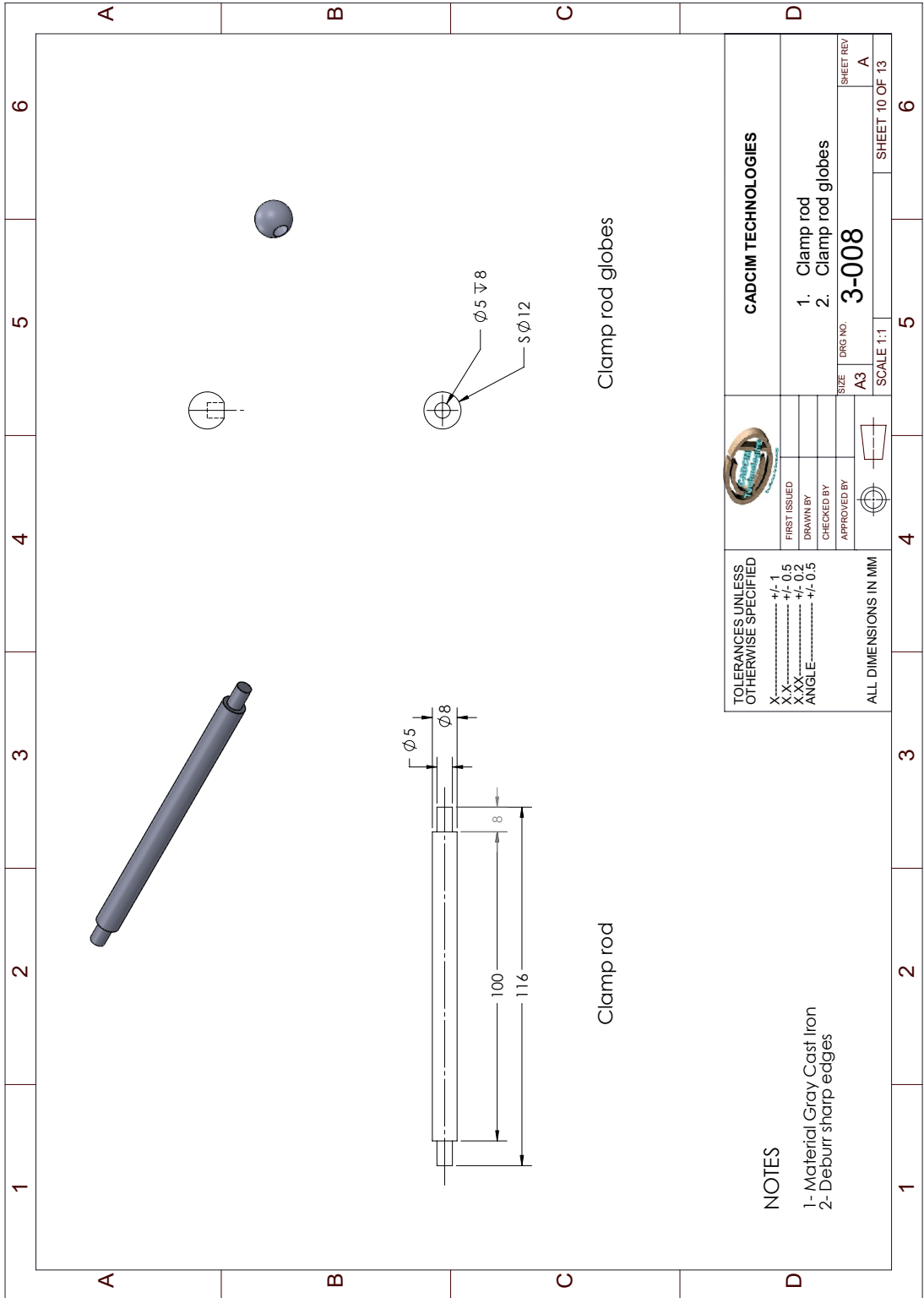




		<b>CADCIM TECHNOLOGIES</b>	
		FIRST ISSUED DRAWN BY CHECKED BY APPROVED BY	DRG NO. A3 SCALE 1:1
TOLERANCES UNLESS OTHERWISE SPECIFIED X----- +/- 1 XX----- +/- 0.5 XXX----- +/- 0.2 ANGLE----- +/- 0.5		Clamp <b>3-006</b>	
		ALL DIMENSIONS IN MM	

- NOTES**
- 1- Material Mild Steel ( ASTM A36 Steel )
  - 2- Deburr sharp edges





**NOTES**

- 1- Material Gray Cast Iron
- 2- Deburr sharp edges

TOLERANCES UNLESS OTHERWISE SPECIFIED  
 X----- +/- 1  
 XX----- +/- 0.5  
 XXX----- +/- 0.2  
 ANGLE----- +/- 0.5

FIRST ISSUED  
 DRAWN BY  
 CHECKED BY  
 APPROVED BY



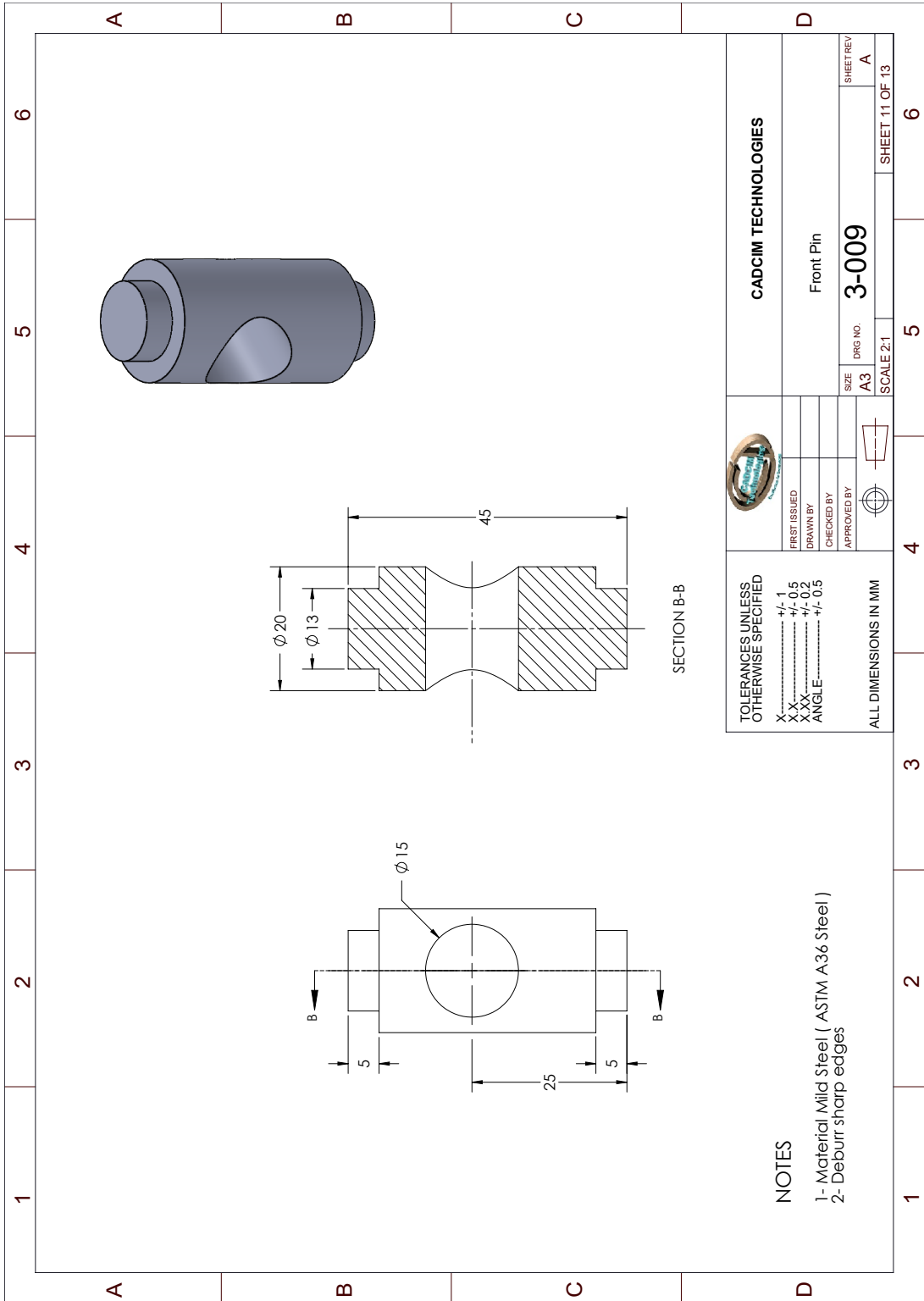
**CADCIM TECHNOLOGIES**

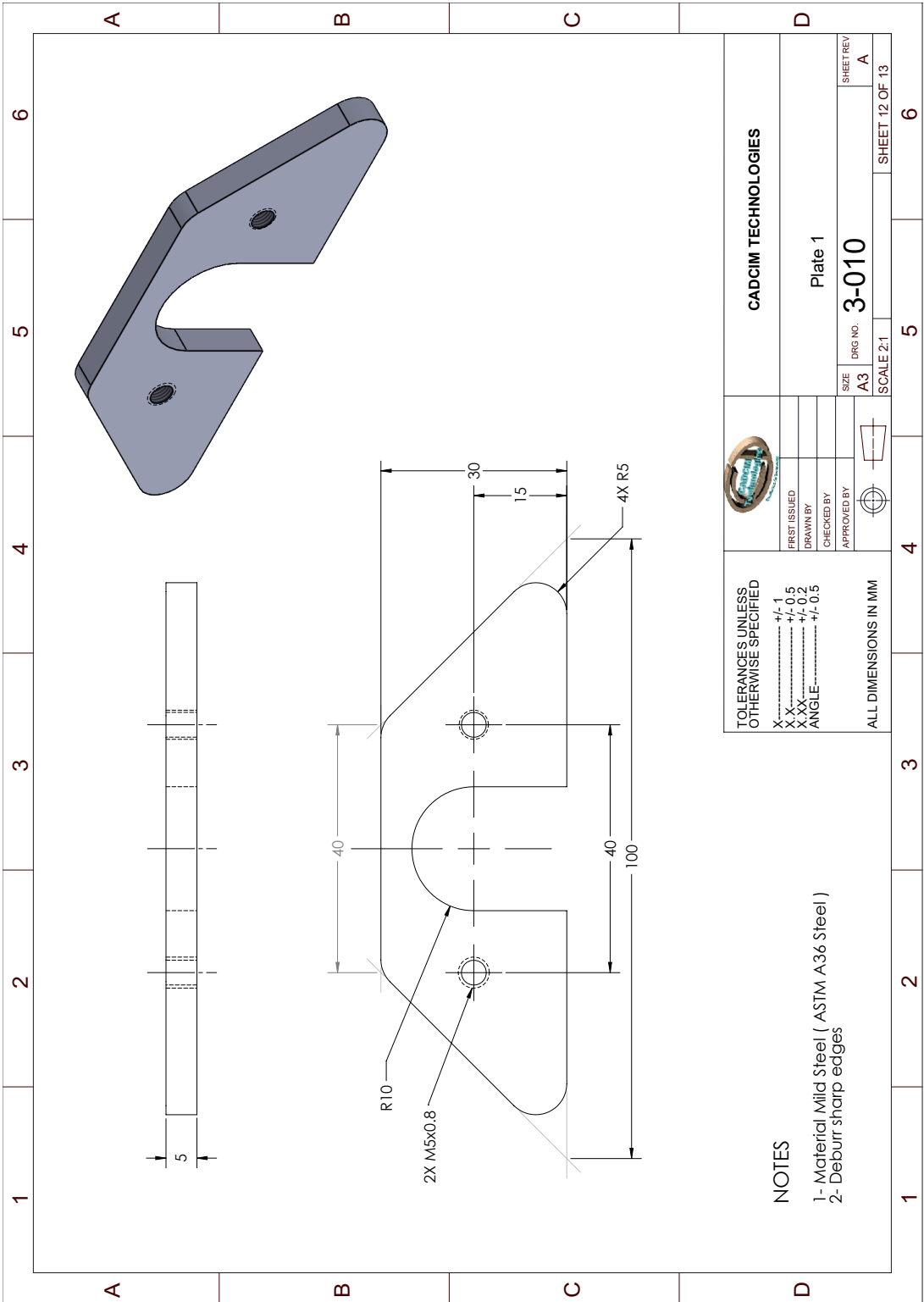
- 1. Clamp rod
- 2. Clamp rod globes


DRG NO. **3-008**

SIZE A3  
 SCALE 1:1  
 SHEET REV A  
 SHEET 10 OF 13

ALL DIMENSIONS IN MM





<b>CADCIM TECHNOLOGIES</b> 		SIZE	SHEET REV
		A3	A
DRG NO. <b>3-010</b>		SCALE	12 OF 13
TITLE: <b>Plate 1</b>			
FIRST ISSUED			
DRAWN BY			
CHECKED BY			
APPROVED BY			

TOLERANCES UNLESS OTHERWISE SPECIFIED  
 X----- +/- 1  
 X X----- +/- 0.5  
 X XX----- +/- 0.2  
 ANGLE----- +/- 0.5

ALL DIMENSIONS IN MM  
 1- Material Mild Steel ( ASTM A36 Steel )  
 2- Deburr sharp edges

NOTES  
 1- Material Mild Steel ( ASTM A36 Steel )  
 2- Deburr sharp edges

