

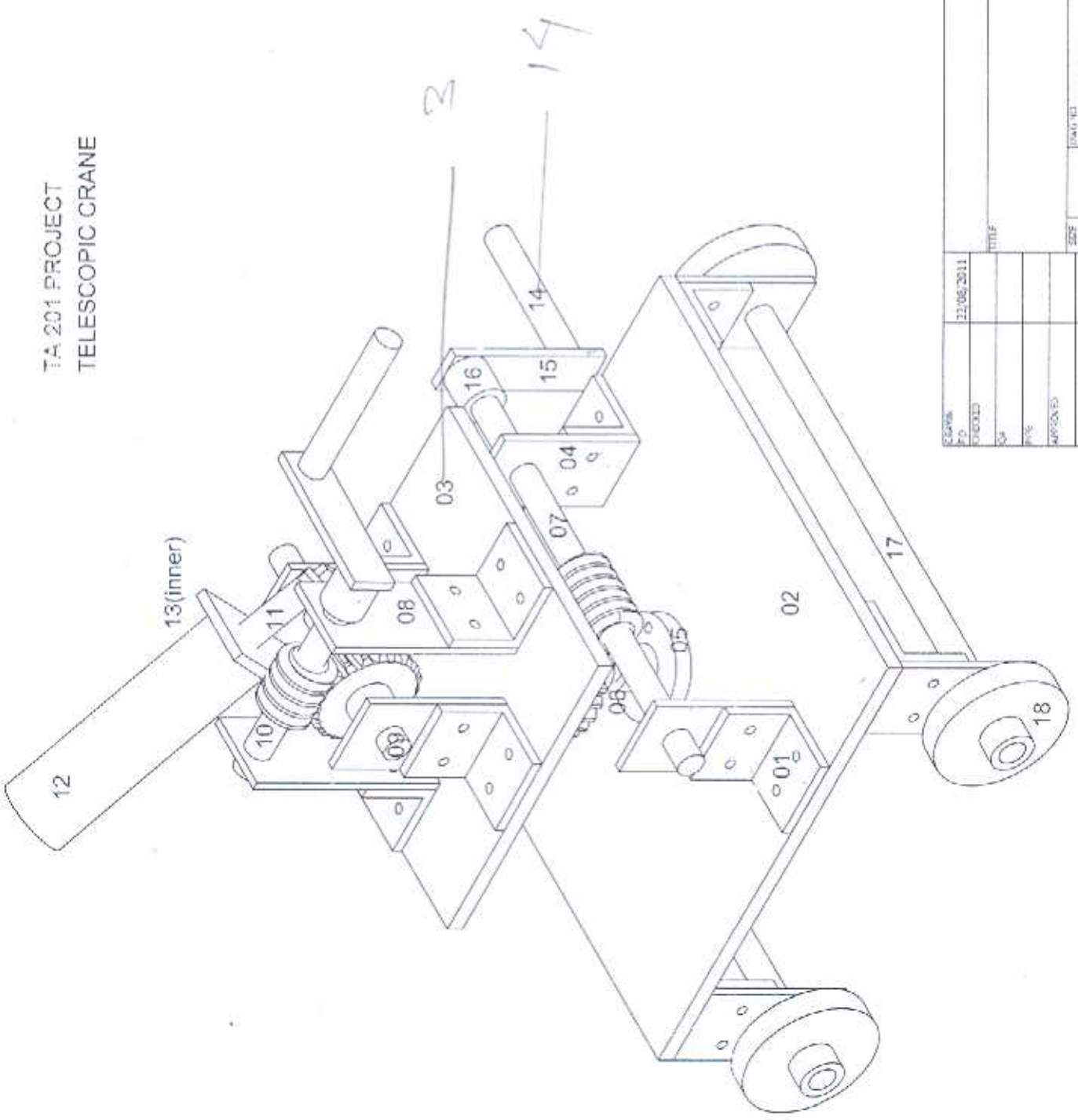
Index

Sr.No	Part Name	Quantity	Material	Size
1	Angles	10	Mild steel	40X40X6
2	Base Plate (Lower)	1	Mild steel	300X300X6
3	Base Plate (Upper)	1	Mild steel	200X200X6
4	Handle	2	Mild steel Plate	100X26X6
4	Telescope Shaft Support	2	Mild steel Flat Strip	120X50X6
5	Azimuthal Shaft Support	8	Mild steel Flat Strip	90X50X6
6	Wheel Shaft	2	Mild steel Rod	Dia:16 Length:380
7	Azimuthal Shaft	1	Mild steel Rod	Dia:32 Length:300
8	Vertical Axle	1	Mild steel Rod	Dia:16 Length:130
9	Worm Gear Shaft(i)	1	Mild steel Rod	Dia:32 Length:150
9	Worm Gear Shaft(ii)	1	Mild steel Rod	Dia:16 Length:150
10	Handle	2	Mild steel Rod	Dia:16 Length:100
11	Telescopic Screw	1	Mild steel Rod	Dia:16 Length:190
12	Wheel	4	Mild steel Rod	Dia:80 Length:30

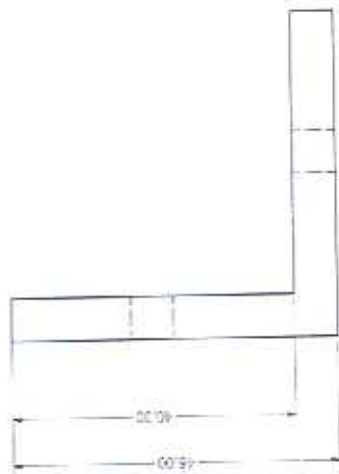
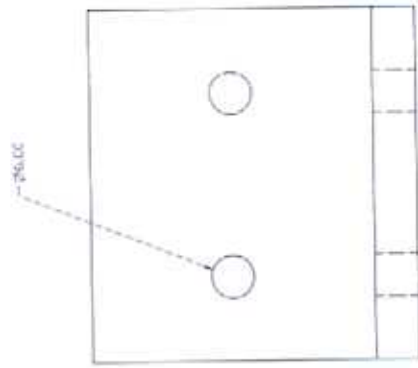
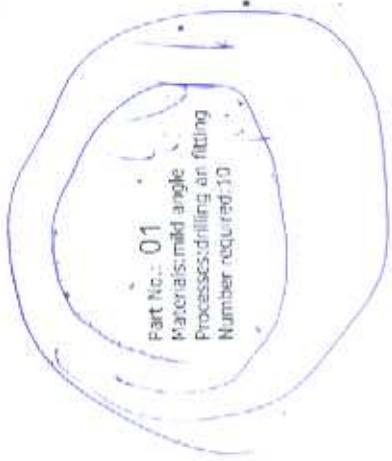
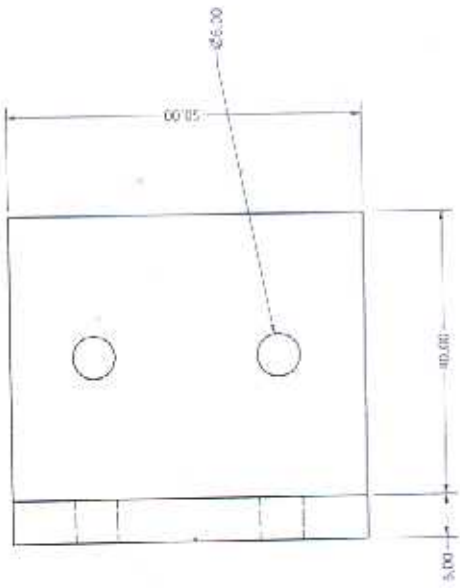
Sr.No	Part Name	Quantity	Material	Size
13	Telescopic (Inner)	1	Mild steel Rod	Dia:40 Length:150
14	Telescopic (Covering)	1	Mild steel Pipe	Dia:40(int.) Dia:45(ext)
15	Gear (Lower)	1	Mild steel Rod	Dia:80 Length:33
16	Gear (Upper)	1	Mild steel Rod	Dia:65 Length:40
17	Support (Telescopic arm)	1	Mild steel Channel	

NOTE: *ALL Dimensions are in mm

TA 201 PROJECT
TELESCOPIC CRANE

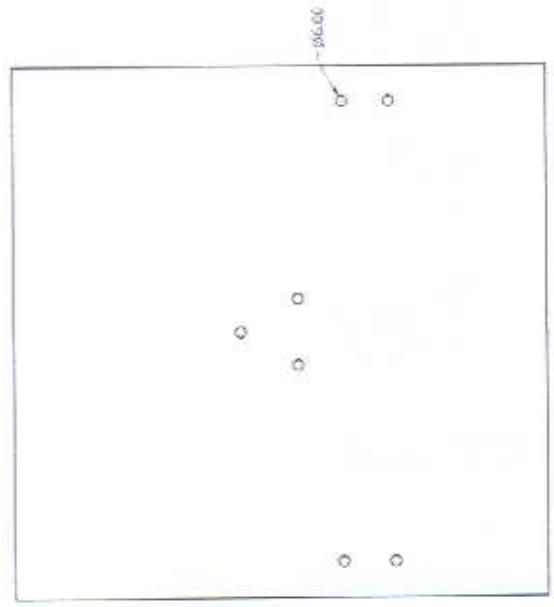


DATE	22/06/2011	TITLE	CRANE TA 201 new file
DESIGNED		SCALE	1:1
CHECKED		DATE	
DRAWN		NO	
APPROVED		SCALE	1:1
		SHEET 1 OF 1	



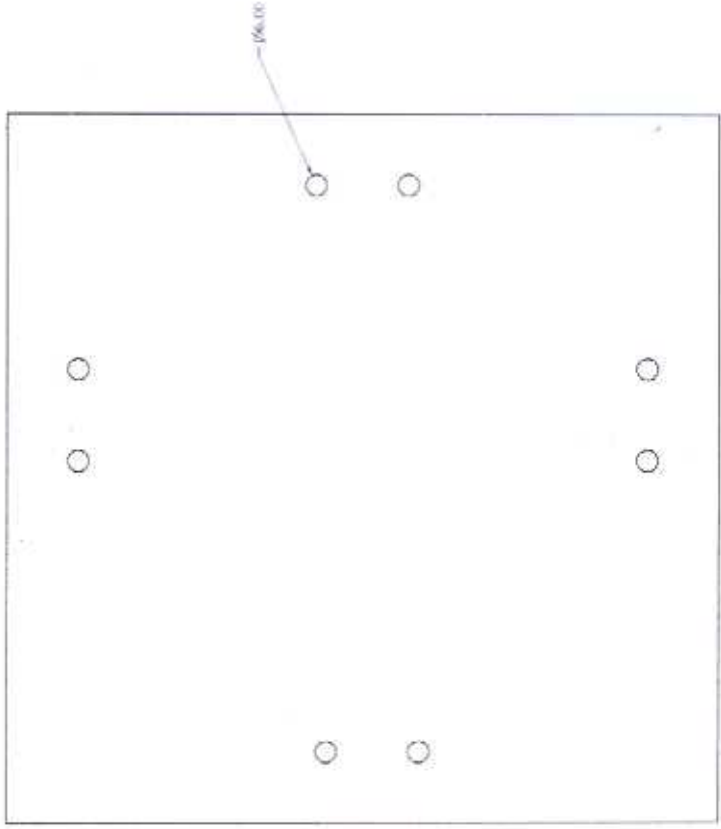
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SCALE			
BY			
CHECKED			
APPROVED			
SIZE	C	NO OF	10
SOCKET		crane angle	

Part No.: 02
 Materials: mild steel plate
 Processes: drilling, fitting
 Number required: 1



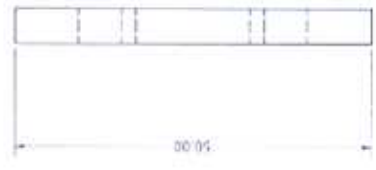
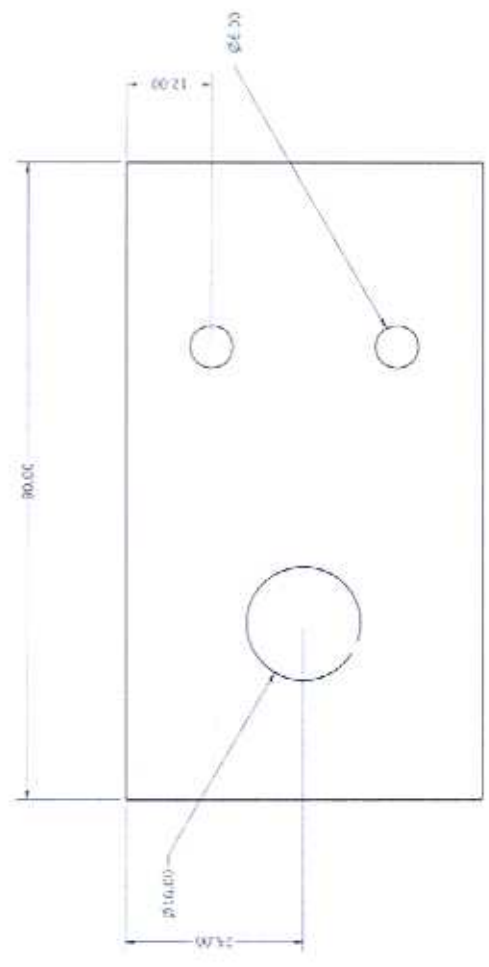
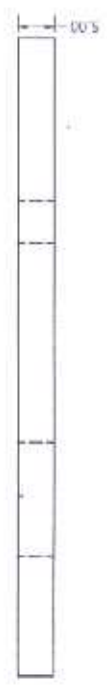
DATE	22/08/2011	TITLE	
TO			
CHECKED			
BY			
DESIGNED			
BY			
DATE		SCALE	
		C	
		SWG NO.	crane base
		REV	

Part No.: 03
 Materials: mild steel plate
 Processes: drilling, fitting
 Number required: 1



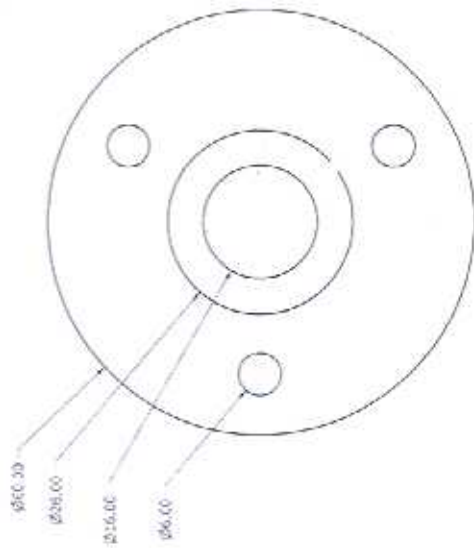
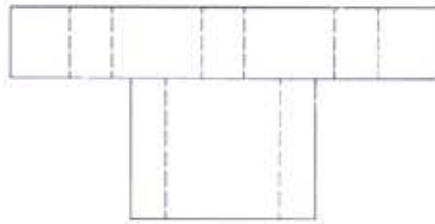
DATE	12/08/2011	TITLE	crane top base	
BY	CHENGE	SCALE	C	REV
QA				
QC				
APPROVE				
SHEET			1	OF 1

Part No.: D4
 Materials: mild steel plate
 Processes: Drilling, cutting, fitting
 Number required: 2

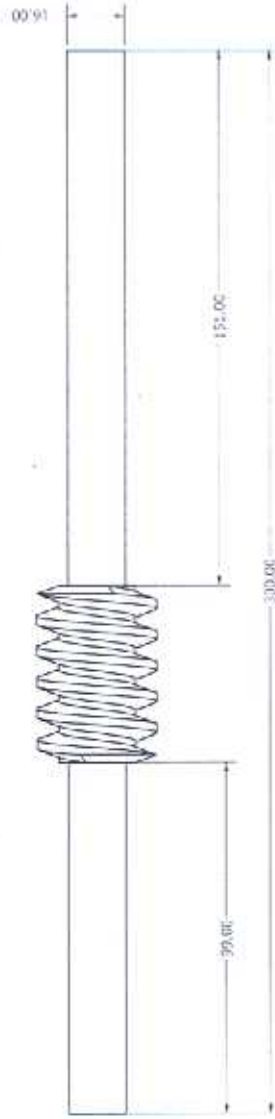
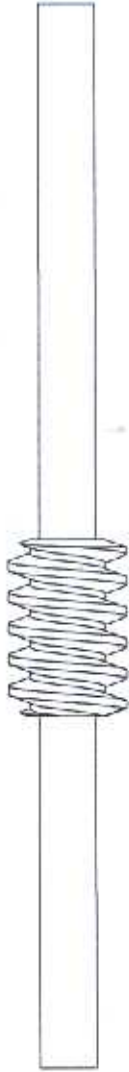


DATE	21/08/2011	TITLE	
DRAWN		SCALE	
CHECKED		SIZE	C
REV.		DWG NO	crane azimuth support
APPROVED		REV	

Part No. 05
 Materials: mild steel rod
 Processes: Drilling, cutting, fitting, lathe machine
 Number required: 4
 $\phi 62 \times 32$



DATE	21/05/2011	TITLE	
BY		SIZE	C
CHK		SCALE	
APPROVED		REV	
		REV NO	crane base axle support
			SHEET 1 OF 1

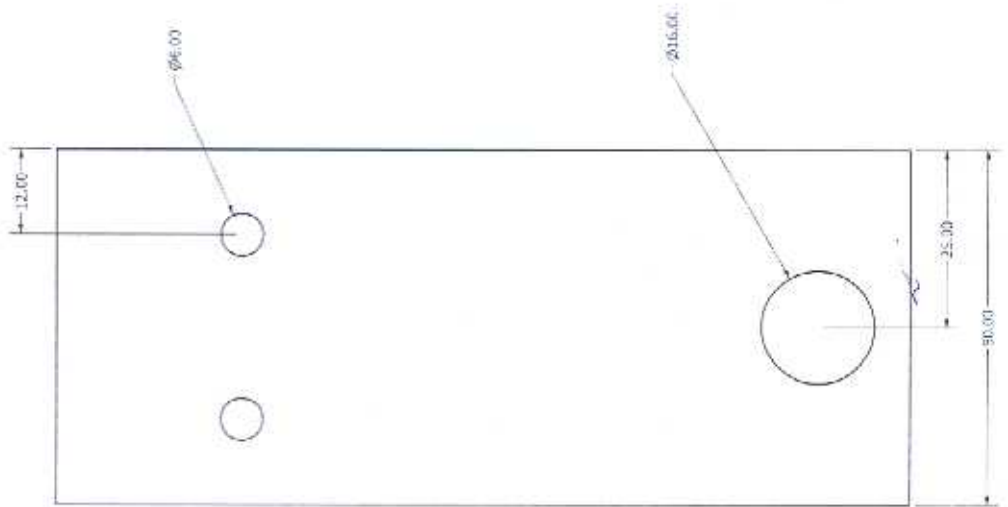


Part no : 07
 Materials required : mild steel rod
 processes used : lathe machine
 No required : 1

Addendum of worm (a) = $(d_0 - d)/2 = 1.5\text{mm}$
 Outer diameter of worm(d_0) = 28mm
 Pitch of the worm(p) = 4.71mm
 Lead of the worm = pitch X no.of start points = 4.71mm
 Pitch diameter of the worm = $(d_0 - 2a) = 25\text{mm}$
 Depth of worm tooth(ht) = $(d_0 - d)/2 = 6$
 Root diameter of worm(d) = $(d_0 - 2ht) = 22 \text{ mm}$

DATE	22/08/2011	TITLE	
BY			
CHECKED			
SCALE			
APPROVED			
SIZE	C	DATE	
SCALE		BY	
		crane bottom worm shaft	
		SHEET 1 OF 1	

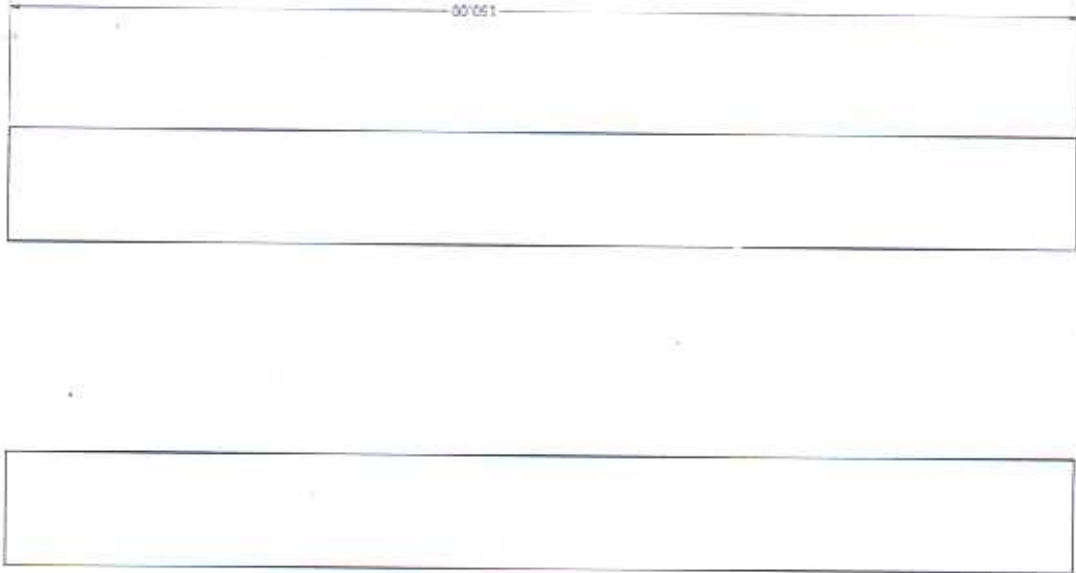
Part No.: 08
 Materials: mild steel plate
 Processes: Drilling, cutting, fitting
 Number required: 2

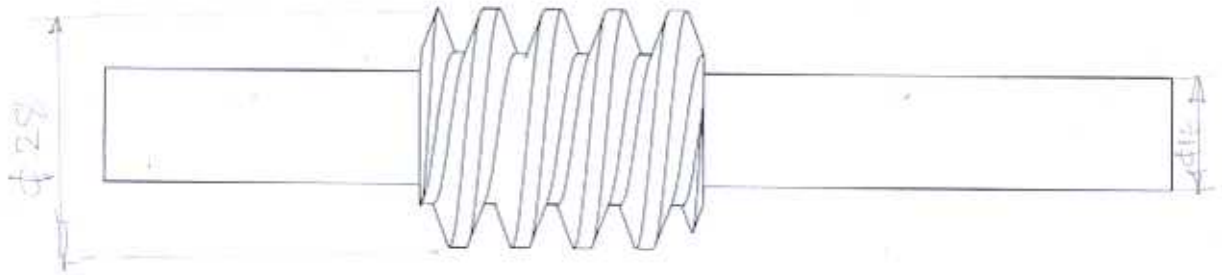
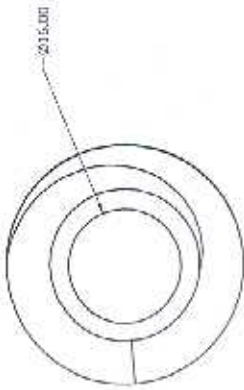


DATE	21/06/2011	TITLE	
BY	STUDENT		
QA			
REV			
APPROVED		SHEET	C
		DWG NO	crane telescope shaft support
		SCALE	
			SHEET 1 OF 1

Part No.: 09
 Materials: mild steel rod
 Processes: Lathe machine
 Number required: 1

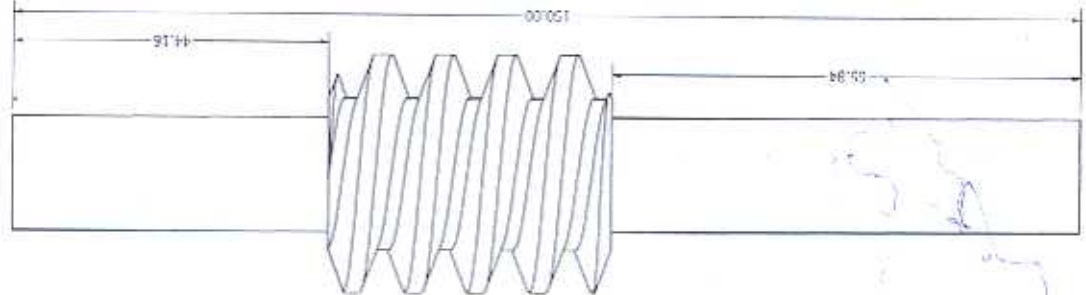
DATE	21/08/2011	TITLE	
DESIGNED		BY	
CHECKED		DATE	
APPROVED		SCALE	
		REV	
		C crane telescope shaft	
		SHEET 1 OF 1	





Addendum of worm (a) = $(d_o - d)/2 = 1.5\text{mm}$
 Outer diameter of worm (d_o) = 28mm
 Pitch of the worm (p) = 4.71mm
 Lead of the worm = pitch X no. of start, points = 4.71
 Pitch diameter of the worm = $(d_o - 2a) = 25\text{mm}$
 Depth of worm tooth (ht) = $(d_o - d_r)/2 = 6$
 Root diameter of worm (d_r) = $(d_o - 2ht) = 22\text{ mm}$

Part no : 10
 Materials required : mild steel rod
 Processes used : lathe machine
 No required : 1



DATE	22.08.2011	TITLE	
PO			
CHECKED			
CA			
PREP			
APPROVED			
SCALE	C	DWG. NO	crane top worw shaft
		REV	

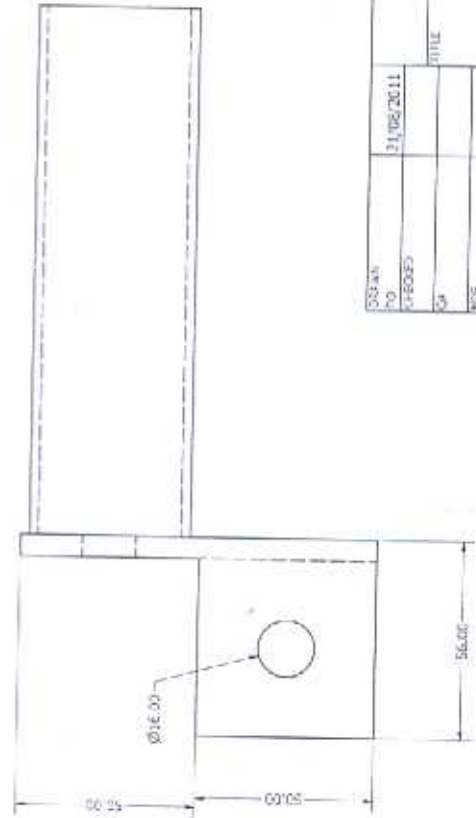
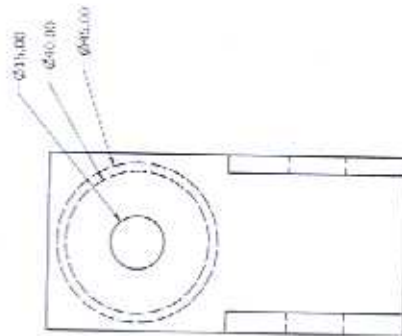
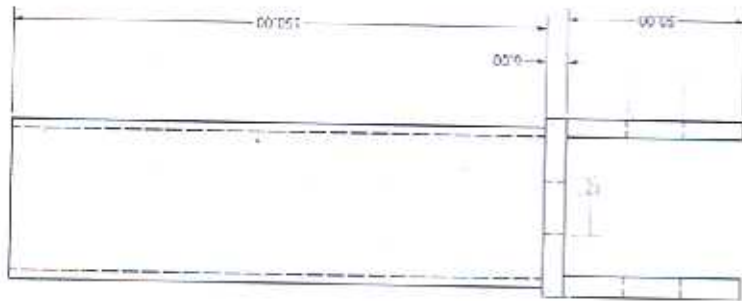
Part No.: 11
 Material: mild steel
 Process: lathe machine
 Number required: 1



SECTION A-A
 SCALE 1:1

DATE	24/08/2011	TITLE	
BY	CHC/20		
CHKD			
APPD			
DESIGNED BY			
SHEET	C	PART NO	crane telescope screw
SCALE			1:1
			SHEET 1 OF 1

Part No: 12
 Materials: mild steel pipe, channel
 Processes: Drilling, fitting and welding
 Number required: 1



DESIGN NO	31/08/2011	DATE	
TO	ENGINEER	BY	
QA		SCALE	
WRE		SIZE	C
QUANTITY		DESCRIPTION	crane telescope outer
		REV	
		NO	1
		DATE	
		SCALE	1:1
		SHEET 1 OF 1	