INSTITUTE FOR PLASMA RESEARCH

An Aided institute of department of Atomic Energy, Govt. of India)
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Web : www.ipr.res.in

MINOR FABRICATION WORKS
ENQUIRY

Office Copy

ENQUIRY NO :IPR/MFW/22-23/154
Date : 13-10-2022
Due Date : 09-11-2022 13:00 IST

Please send your offer in sealed envelope specifying Inquiry No, Date & Due Date, ALONG WITH your credentials for the following items:

Important Note:

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to **kgotewal@ipr.res.in**

Please Ensure that your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following document properly before Quoting which are available on the IPR web portal i.e., http://www.ipr.res.in/documents/tenders.html/ attached here with.

1. Technical specification as enclosed.
2. Instruction to the bidders & terms and Condition (refer Form NO:**IPR-MFW-01-V1**)
3. Bidding format(refer Biddingformat MFW-Bid.pdf)

GST fro Goods and Services (IGST/CGST/SGST TAX BENEFITS): PLEASE REFER clause no:8 of Form No:**IPR-MFW-01-V1**

QUOTATION SHOULD BE ADDRESSED TO **KRISHAN KUMAR GOTEWAL** ONLY.

Sr.No.	Description	Quantity	Rate
1	FABRICATION, ASSEMBLY AND SUPPLY OF COMPACT ROBOTIC SYSTEM (CRS)	1	No.

Free Issue Material

Sr.No.	Description	Quantity	Unit	Value
1	Motor	3.00	No.	150000.00
2	Encoder	3.00	No.	13500.00

Note : Please quote with complete technical details (Technical Compliance sheet and product data sheet)

Encl:As per attachment

Sd/-
KRISHAN KUMAR GOTEWAL
Scientific Officer-F

SPECIFICATIONS DOCUMENT FOR FABRICATION, ASSEMBLY AND SUPPLY OF COMPACT ROBOTIC SYSTEM (CRS)

Signature and Stamp of Bidder with Date

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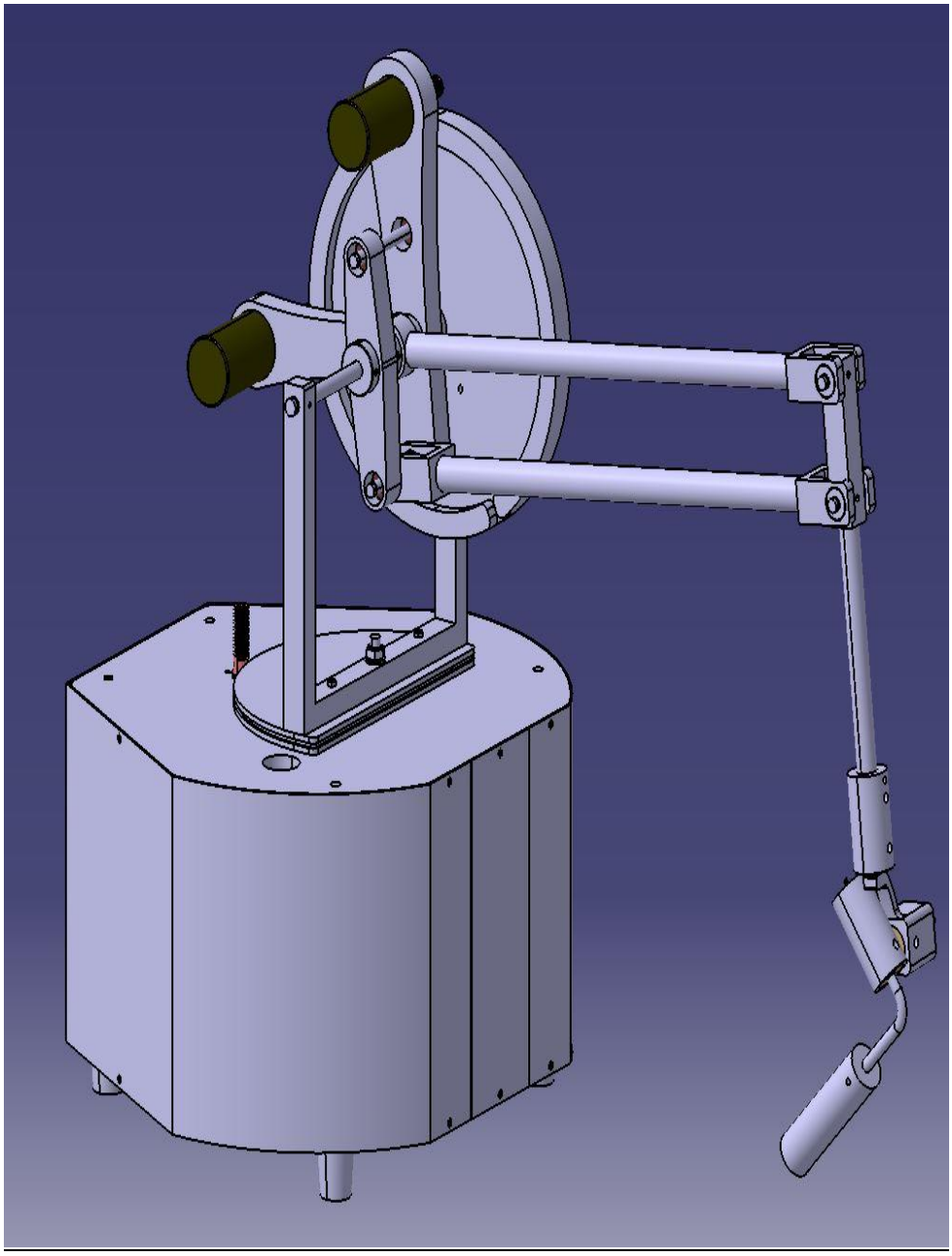
Signature and Stamp of Bidder with Date

1.0 INTRODUCTION:

This tender document gives the specifications for supply, fabrication and assembly of, components and other mentioned sub-components as per the annexure for **C**ompact **R**obotic **S**ystem (CRS) with its support structure. The engineering CAD model of the CRS is as shown below for the purpose of introduction.

Fig.1: Assembled System



Note: Kindly refer to the drawings (annexure 1) and specifications annexure 2 for details of the components as well as the material of construction

SCOPE OF WORK

2.1 Scope of Work under the responsibility of the VENDOR/BIDDER

The scope of work for this tender document includes, but not limited to, the following activities:

Sr. No.	Scope of Work
1.	Development of 3D CAD model along with fabrication drawings based on the engineering drawings supplied by IPR (in Annexure 1 of this tender) and seeking approval from IPR.
2.	Vendor shall supply all necessary material test certificate from NABL accredited lab.
3.	Vendor shall supply final bill of materials (BOM) for approval from IPR
4.	The vendor shall be responsible for material and COTS procurement, high precision fabrication, testing and supply of the complete assembled system as per drawings (Annexure1) & specifications (Annexure2) attached in this tender.
5.	Fabrication of all components in accordance with final drawings approved by IPR
6.	Surface preparation, primer, spray painting and nickel-chrome/black oxide/equivalent coating of all components are in vendor scope.
7.	Procurement and Supply of all integrated components, COTS and spares as per the BOM in Annexure 2.
8.	Vendor may suggest any change required for ease of assembly and proper functioning of assembled system. Approval shall be taken from IPR for any deviation/change from provided specifications in drawings.
9.	Any deviation from the specified material, dimensions and tolerances should be intimated to IPR for approval before proceeding with fabrication.
10.	Design, development and manufacturing of tools, jigs, fixtures and other accessories required for manufacturing of components & assemblies and equipment required for FAT/SAT is in vendor scope.
11.	Testing & Inspection of the materials, parts, components & sub-assembly at appropriate stages before the final assembly shall be done in presence of IPR representative.
12.	All materials and components should be cleaned thoroughly before assembly to ensure the proper alignment.

13.	Vendor shall discuss the fabrication methodology, and shall share complete breakup of activities, facilities to be used and time schedule with IPR. Periodical review of work progress/status with IPR is mandatory.
14.	Procurement of COTS items (SS wire, electrical cable, bearings and other mechanism components etc.) should be from original equipment manufacturer (OEM) or authorized agents/dealers. List of COTS items are in Annexure-2 and shall compliance with IS standards.
15.	Factory acceptance tests (as per section 9.1 of this tender) shall be carried out by vendor in presence of IPR personnel.
16.	Packaging and delivery of components to IPR with appropriate unloading instructions at IPR site. Transit insurance has to be taken by vendor. Along with this, vendor must take transit insurance for FIM items while collecting the FIM from IPR.

2.2 IPR Responsibilities

Sr. No.	Scope of Work
1.	Supply of engineering drawings (Annexure-1) and tentative BOM of COTS components (Annexure-2).
2.	Review of CAD model and Approval of fabrication drawings supplied by the vendors.
3.	Review and Approval of BOM as supplied by the vendors.
4.	Review and Approval on selection of sub-components like bearings, end peripherals, other COTS as per assembly.
5.	Periodic review of work progress.
6.	Review and Approval of any deviation from the specified material, dimensions and tolerances and COTS specifications.
7.	Witness of FAT (as per section 9.1 of this tender).
8.	Site acceptance (as per section 9.2 of this tender) test will be done by IPR. Vendor may witness the tests.

TECHNICAL REQUIREMENTS

3.1 The following important points have to be considered for smooth functioning of the system

Sr. No.	Scope of Work
1.	All parameters shall be taken into account by vendor before fabrication to ensure smooth **functioning** of the system at all stages, i.e. the functioning of joints shall

	not be deviated even after assembly of motor along with SS wire arrangement.
2.	In final assembled system, run out of the-shaft mounted on motor shaft and encoder shaft shall not be deviated from motor's and encoder's shaft run out definition range (refer the OEM's run out acceptance range).
3.	All manufacturing/mating tolerances (in assembly) shall be as per OEM defined tolerances of COTS.
4.	The vendor must ensure the parallelism and perpendicularity in the components as per the assembly and sub-assembly drawings.
5.	Vendor has to ensure that in Encoder shaft assembly, load other than rotational should not pass on to encoder shaft.
6.	Provision for controller mountings and suitable cut outs in the base of the system will be in vendor scope. Details of cut-out dimensions will be provided by IPR
7.	Vendor will consider the Coatings at joints assembly while defining the tolerances

DELIVERABLES:

The deliverables and tentative phase timing are mentioned as below

Phase	Deliverable	Time
1.	Kick-Off Meeting (KOM) (Date of P.O)	T0
2.	Submission of fabrication drawings and bill of materials with specifications of COTS components by vendor	T0 + 03 Weeks
3.	Approval on fabrication/assembly drawings and COTS components by IPR	T0 + 04 Weeks
4.	Submission of material test certificates (MTC) by vendor	T0 + 05 Weeks
5.	Approvals of MTC by IPR	T0 + 06 Weeks
6.	Fabrication and Assembly of components	T0 + 12 Weeks
7.	FAT of the components/system and approval by IPR's personnel at vendor site	
8.	Delivery of system at IPR	T0 + 13 Weeks
9.	Site Acceptance Tests (SAT)	T0 + 14 Weeks

INSURANCE, PACKING AND SUPPLY OF PRODUCT

- Vendor shall pack the system with the proper packing material to avoid damages during transportation.
- Vendor must take insurance of FIM items while sending back to IPR.
- All components shall be cleaned and painted before packing and shipment.
- The transit insurance of fabricated components and shall be in the scope of vendor.
- Vendor shall load the system at vendor's works and unload at RH lab, IPR.

WARRANTY

Vendor shall give warranty of one year (1 year) from the date of final acceptance for the performance of the fabricated components. During this period if any fault occurs, the vendor shall rectify at no extra cost. The faults may be due to poor workman ship/welding/fabrication, faulty material, malfunctioning COTS components procured from OEMS, electronics items etc. During this warranty period, if any fault occurs/detected in system, vendor shall rectify the same at no extra cost. In the event vendor fails to fulfil his guarantee obligations, IPR shall have the right to remedy or to have remedied the defect/fault, in both cases to vendor's account.

LIST OF DRAWINGS

Refer Annexure 1.

MATERIAL DESCRIPTION

Refer Annexure 2 for bill of materials for COTS, and Annexure 1 and 2 for material of fabrication of individual components.

FIM (FREE ISSUE MATERIAL)

Refer Annexure 3, supplied by IPR.

ACCEPTANCE CRITERIA:

9.1 Factory Acceptance Tests (FAT)

- Physical dimensions check of individual components and their assembly compatibility. (*The run out accuracy of the shaft mounting assembly /machining surfaces complies with the ISO standard)*
- Run out, Coaxiality and other parameters of the assembly shall be checked before assembly and after assembly of SS wire. The all parameters shall be as per ISO standards to achieve the smoothness of the actuation.
- Functionality test for functioning of joints.
- All joint will be tested with motor for smooth movement. IPR personnel will assist the vendor to test the sub-assembly as well complete assembly of the system.

9.2 Site Acceptance Test (SAT)

- Visual inspection of system for damages.
- Dimensional and assembly compatibility check.
- Alignment of the assembled system as per Drawings.
- System Functionality test.

GENERAL TERMS AND CONDITIONS:

- Any deviation / discrepancy / change from the drawings shall be brought out in separate sheet by the vendor and approval should be sought from IPR.
- Vendor shall adhere to the deliverable schedule as given in this tender document.
- Fabrication of all the components shall be as per final fabrication drawings approved by IPR.
- All components shall be checked for the compatibility of the assembly.
- Procurement of all the tools, fixtures, jigs, equipment's, material, temporary blanks etc.; required for the fabrication, inspection and testing shall be in the scope of VENDOR.
- All the fabrication and assembly including all the components shall be carried out in accordance with applicable code or approved equivalent.
- IPR authority / representative shall have access to all manufacturing facilities, inspection and testing facilities, tools, drawings etc.; during all stages of manufacturing process.
- All the components shall be delivered only after shipment clearance from IPR.
- Delivery acceptance shall be issued by IPR authority / representative after acceptance tests and verification of dimensions, testing, etc.; to one's satisfaction of compliance with drawings, specifications and functional requirements.

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Signature and Stamp of Bidder with Date

Annexure 2

General specifications for all components & Raw materials

Sr.no.	Components (Part Name)	Reference in Annexure1 (Drawings Part no.)	Quantity in Nos.	Specifications and material details	Remarks
1.	Support Peg	1	04	Nylon or Equivalent	Machining /COTS
2.	Bottom Plate	2	01	10 micron flatness and SS 304 material with coating	Machining
3.	Support Pillar	3	04	SS 304 material with coating	Machining
4.	Top Plate	4	01	10 micron flatness and SS 304 material with coating	Machining
5.	Base Capstan	5	01	Aluminium 6061 T6 with Coating	Machining
6.	Link C	6	01	Aluminium 6061 T6 with Coating	Machining
7.	Threaded Coupler	7	03	Aluminium 6061 T6 with Coating	Machining
8.	Center Support Shaft	8	01	SS 304 with Coating	Machining
9.	Link 1	9	01	Aluminium 6061 T6 with Coating	Machining
10.	Link 2	10	01	Aluminium 6061 T6 with Coating	Machining
11.	Link 3	11	01	Aluminium 6061 T6 with Coating	Machining
12.	Link 4	12	01	Aluminium 6061 T6 with	Machining

TO BE SIGNED AND STAMPED BY BIDDER ALONG WITH QUOTATION

				Coating	
13.	Link 5	13	01	Aluminium 6061 T6 with Coating	Machining
14.	Drum C Link	14	01	Aluminium 6061 T6 with Coating	Machining
15.	Support Shaft	15	04	SS 304 with Coating	Machining
16.	Top Encoder Mounting	16	01	Aluminium 6061 T6 with Coating	Machining
17.	Middle Encoder Link	17	01	Aluminium 6061 T6 with Coating	Machining
18.	Bottom Encoder Mounting	18	01	Aluminium 6061 T6 with Coating	Machining
19.	Angle Rod	19	01	Aluminium 6061 T6 with Coating	Machining
20.	Thumb Handle	20	01	Aluminium 6061 T6 with Coating	Machining
21.	Cover Plain	21	02	SS Sheet Metal with Coating	Machining
22.	Cover Profile	22	02	SS Sheet Metal with Coating	Machining
23.	Base Support Shaft	23	01	SS 304 with Coating	Machining
24.	Spacer	24	04	Aluminium 6061 T6 with Coating	Machining
25.	Bearing 51100	For Base Capstan and Top Plate	1	Standard Bearing 51100	COTS
26.	Bearing 628ZZ	For Bottom Encoder Mounting,	1+1+1	Standard Bearing 628ZZ	COTS

		middle encoder mounting and Top Encoder mounting			
27.	Dia. 10 mm External Circlip	For Center support Shaft	02	Standard	COTS
28.	Bearing MR698ZZ	For Link 1, Link 2, Link 3 and Link 4	2+2+4+2	Standard Bearing MR698ZZ	COTS
29.	Bearing 6000ZZ	For Link 1, Link 2 and Link 4	1+1+1	Standard Bearing 6000ZZ	COTS
30.	Dia. 8 mm External Circlip	For Support Shaft	04	Standard	COTS
31.	SS Multi-strands Wire	For assembly	Approx. 2 Meter	SS Multi-strands Wire Dia. -0.7mm	COTS
32.	Suitable number of nuts and bolts/Allen bolts/decorative bolts	For assembly	NA	SS & As per assembly requirements	COTS

Note-

- **The above BOM is just indicative. The vendor shall supply all the required items (and quantity) as per the scope of work/technical specifications in the tender.**
- **Nickel-chrome /Black oxide Coating has to be done on all fabricated components and are in vendor's scope.**
- **Motor encoder and bearing interface's tolerances has to be incorporated in fabrication drawings by vendor (As per Manufacturer definition)**

Annexure 3

General details of free issue materials

Sr.no.	Components (Item Name)	Quantity in Nos.	Total Cost in Rupees	Remarks
1.	Motor	3	150000.0	Free Issue Material(FIM)
2.	Encoder	3	13500.0	Free Issue Material(FIM)

Note-

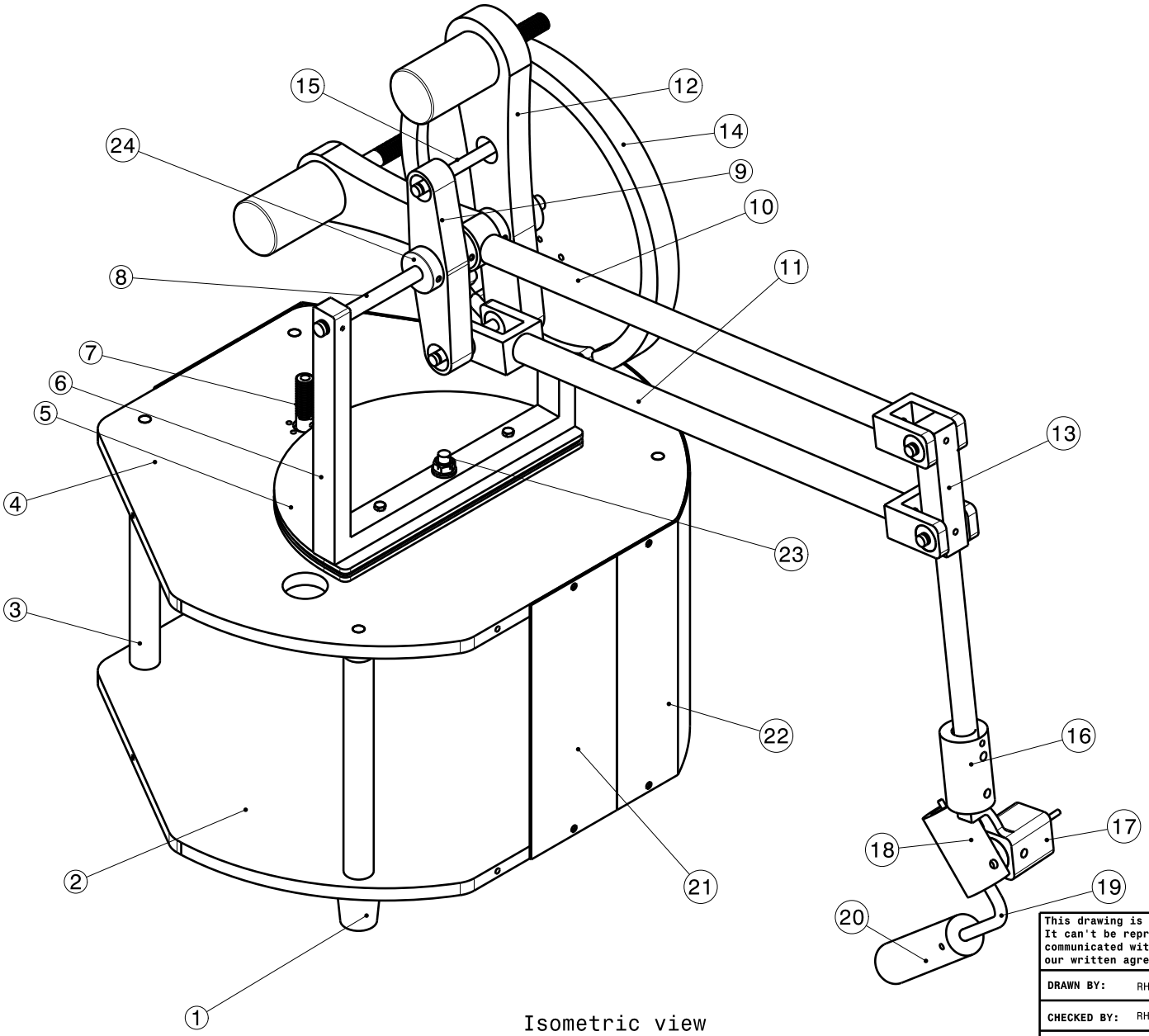
Motor and Encoder are the Free Issue material and will be supplied by IPR. Transit insurance have to be taken by vendor for all FIM

VENDOR RESPONSE SHEET

(MUST BE SUBMITTED ALONG WITH THE BID)	
I/We have read the complete tender document and Annexures for the drawings and bill of materials	□ Agreed / □ Not-Agreed
I/We agree to the scope of work mentioned in the tender	□ Agreed / □ Not-Agreed
I/We agree to all terms and conditions mentioned in the tender	□ Agreed / □ Not-Agreed

_____

(Stamp and Sign of Bidder)



Isometric view
Scale: 1:1

Part Number	Part Name	Qty
1	Support Peg	04
2	Bottom Plate	01
3	Support Piller	04
4	Top Plate	01
5	Base Capstan	01
6	Link C	01
7	Threaded Coupler	03
8	Center Support Shaft	01
9	Link 1	01
10	Link 2	01
11	Link 3	01
12	Link 4	01
13	Link 5	01
14	Drum C Link	01
15	Support Shaft	04
16	Top Encoder Mounting	01
17	Middle Encoder Link	01
18	Bottom Encoder Mounting	01
19	Angle Rod	01
20	Thumb Handle	01
21	Cover Plain	02
22	Cover Profile	02
23	Base Support Shaft	01
24	Spacer	04

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DRAWN BY: RHRTD	DATE		DRAWING TITLE: **Detailed Drawing**
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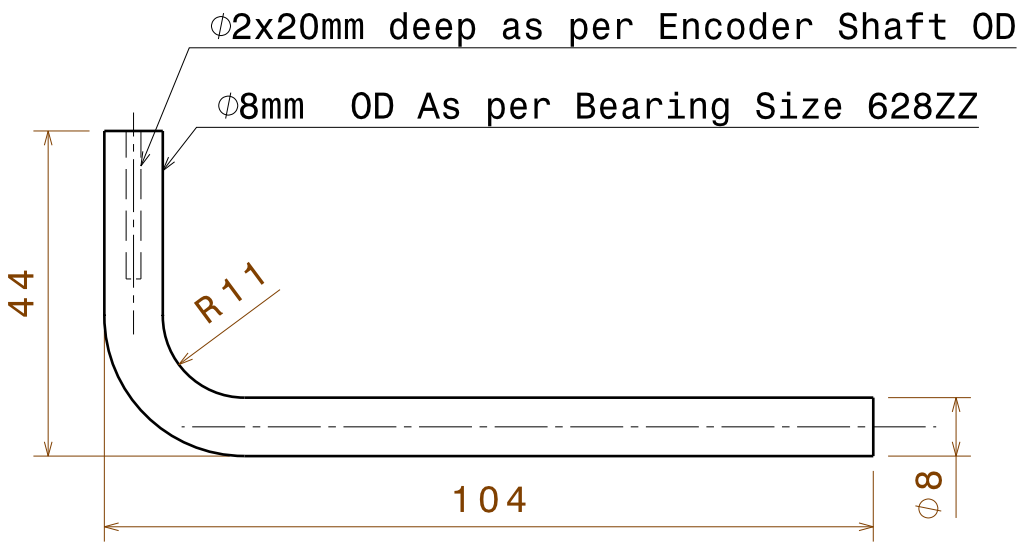

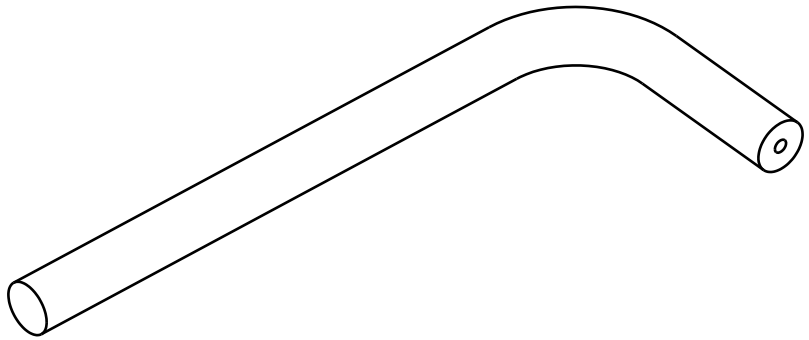

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DESIGNED BY RHRTD	DATE	

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DRAWING TITLE
Angle Rod

SIZE	DRAWING NUMBER	REV
A4		

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Front view
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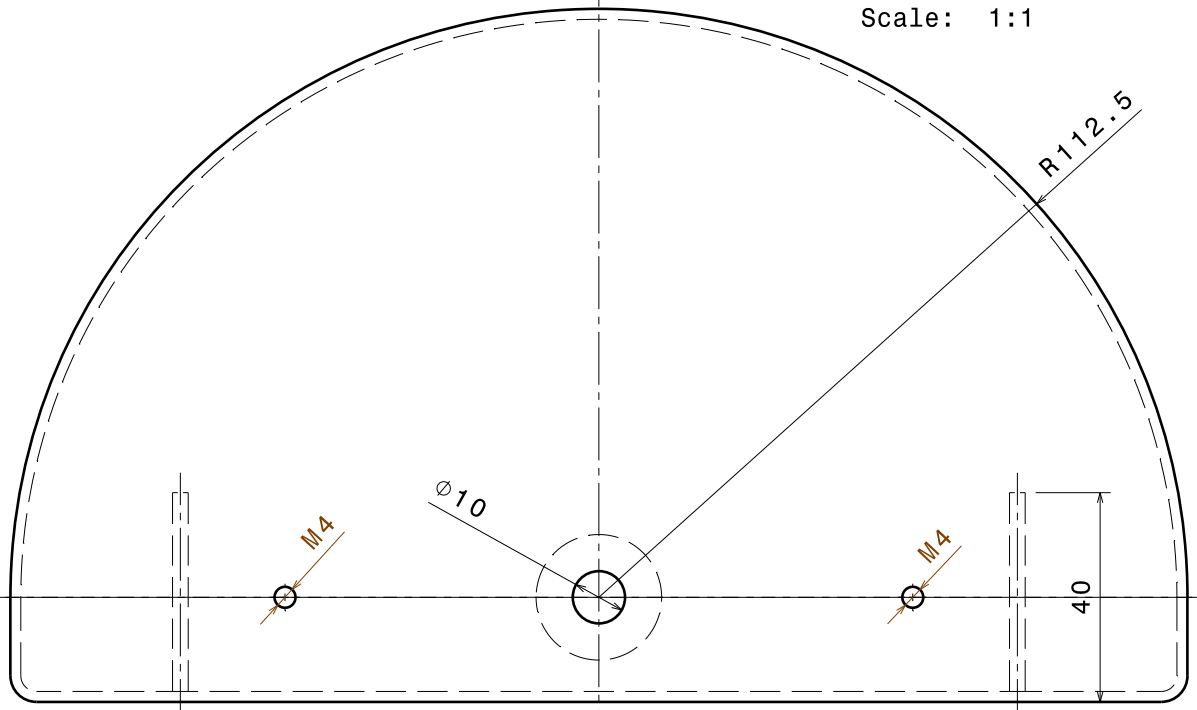

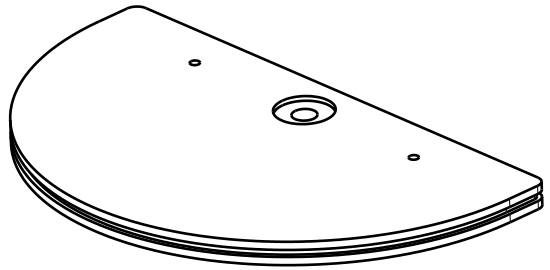

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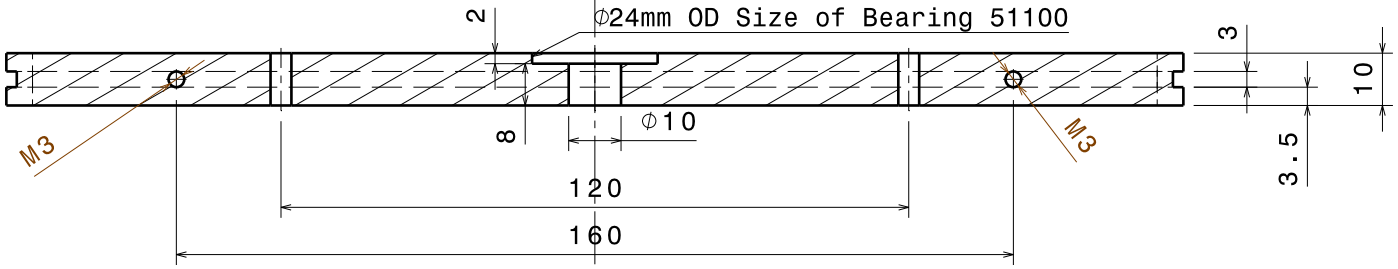
Scale: 1:2



Section view A-A
Scale: 1:1

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DRAWING TITLE **Base Capstan**

SIZE	DRAWING NUMBER	REV
A3		

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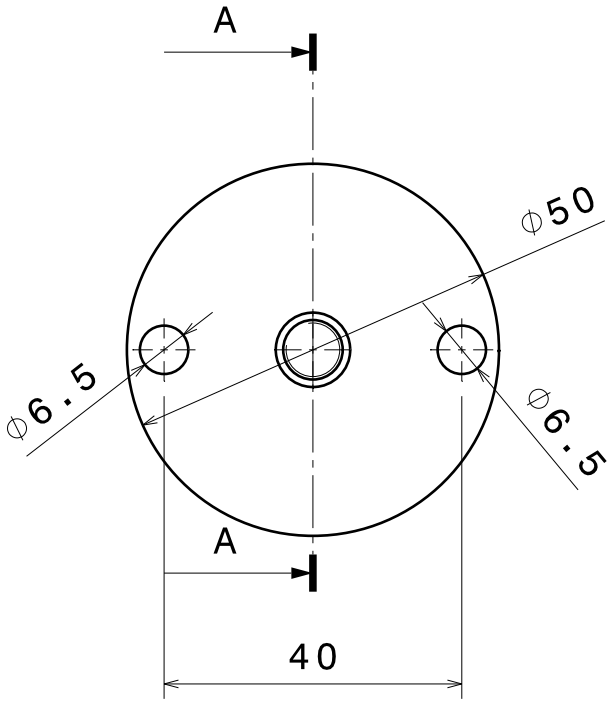

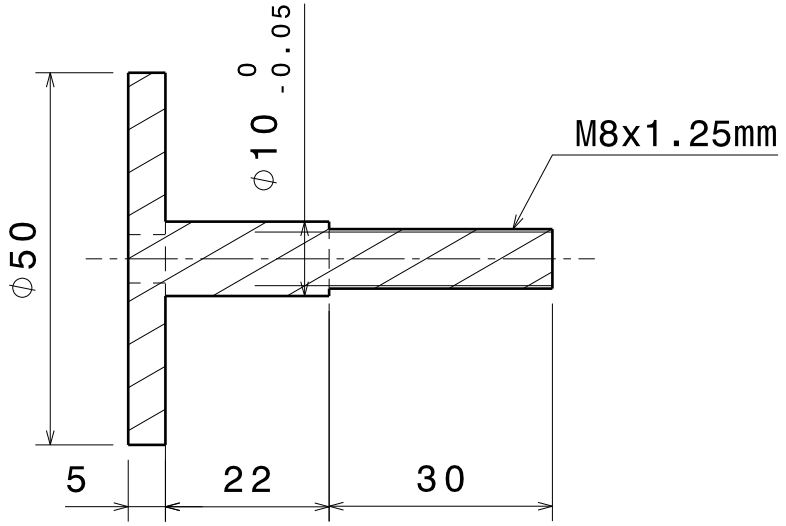

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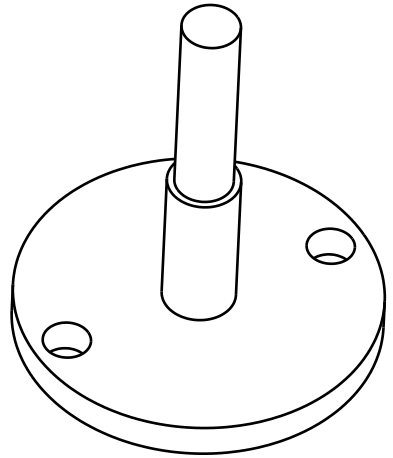

Isometric view
Scale: 1:1

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DESIGNED BY RHRTD	DATE

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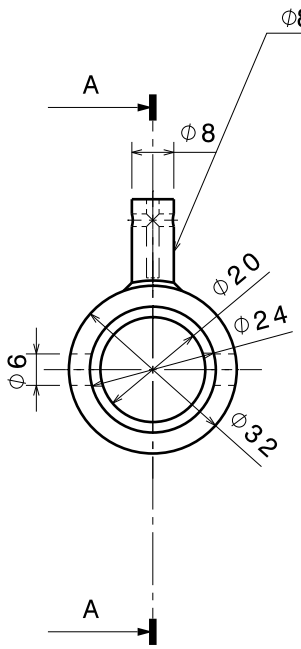
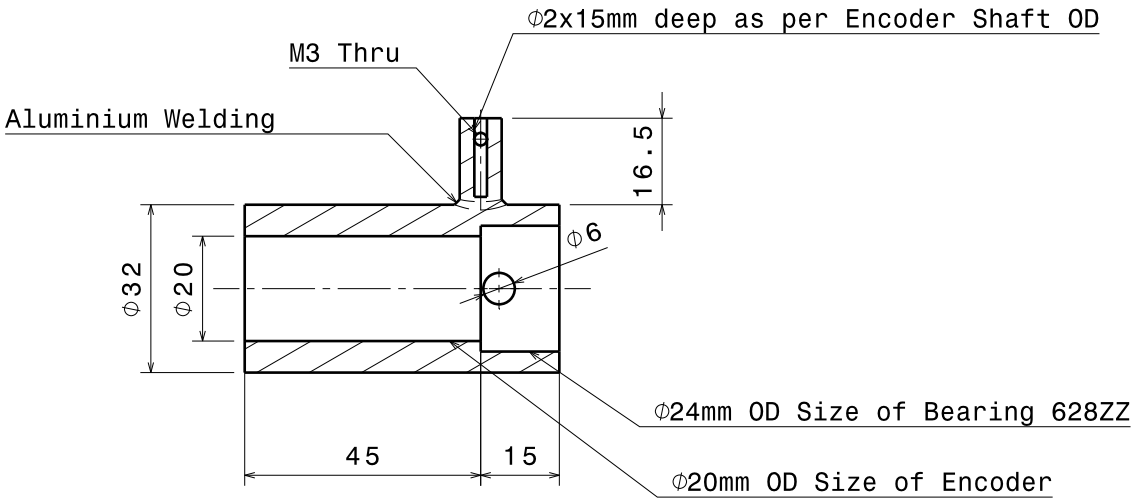
DRAWING TITLE
Base Support Shaft

SIZE	DRAWING NUMBER	REV
A4		

SCALE 1:1	WEIGHT(kg)		SHEET 1/1





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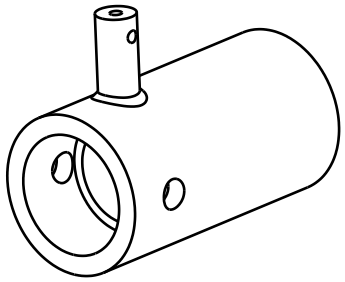

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CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
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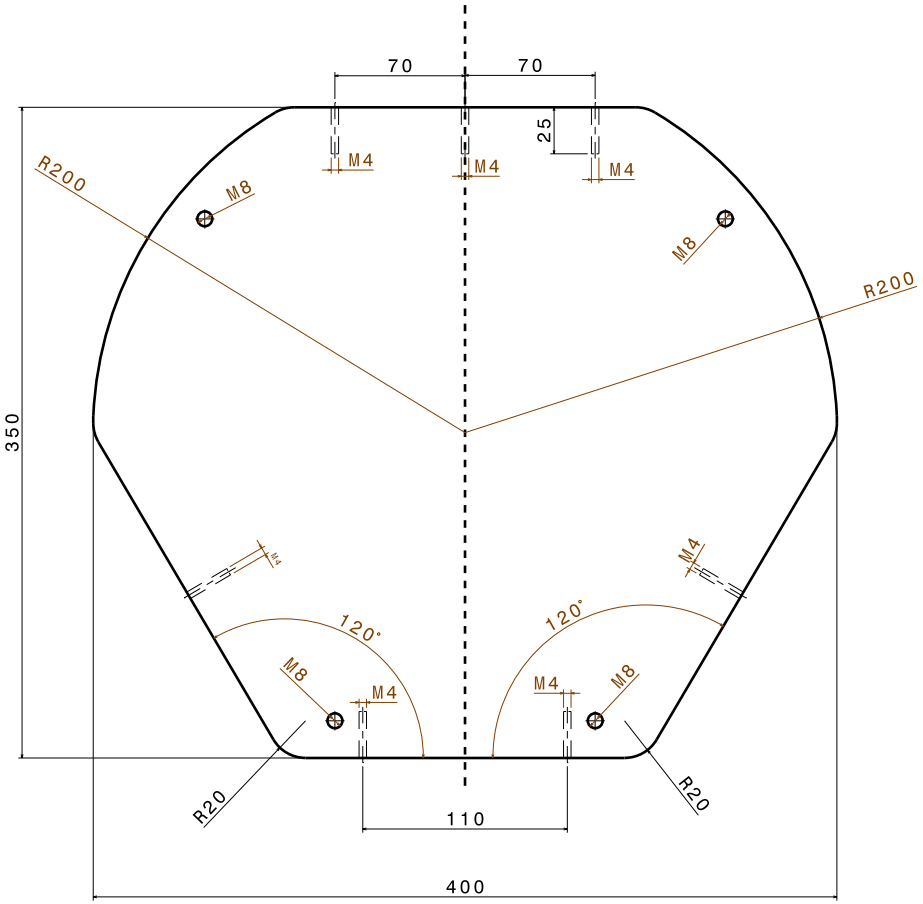

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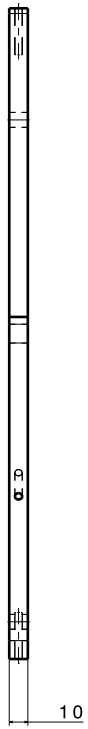

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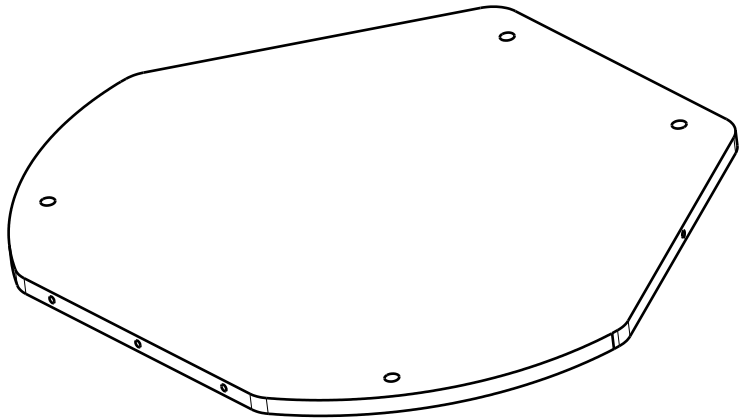

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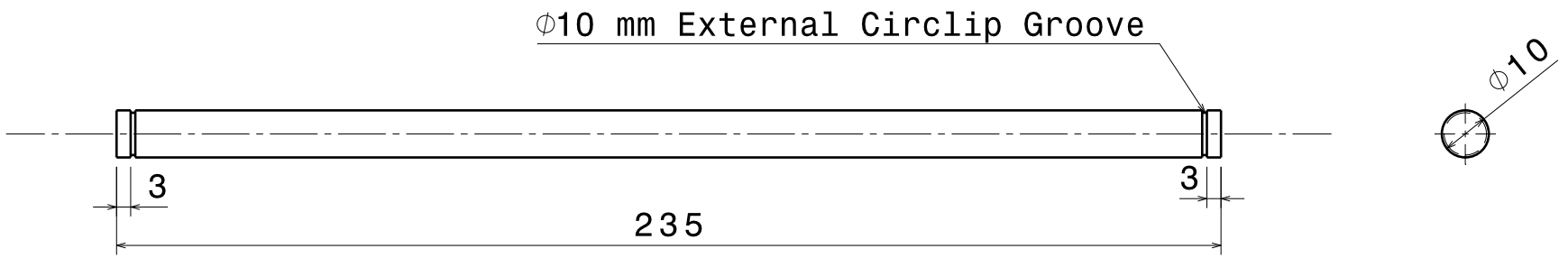
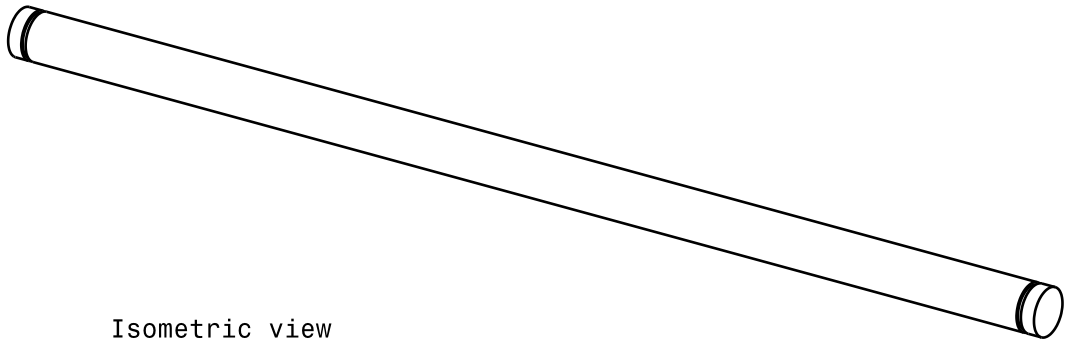
DESIGNED BY: RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET1/1





Isometric view
Scale: 1:1

Note: ϕ10 mm OD should be machined as per Bearing ID Size 6000ZZ

Qty: 01 no

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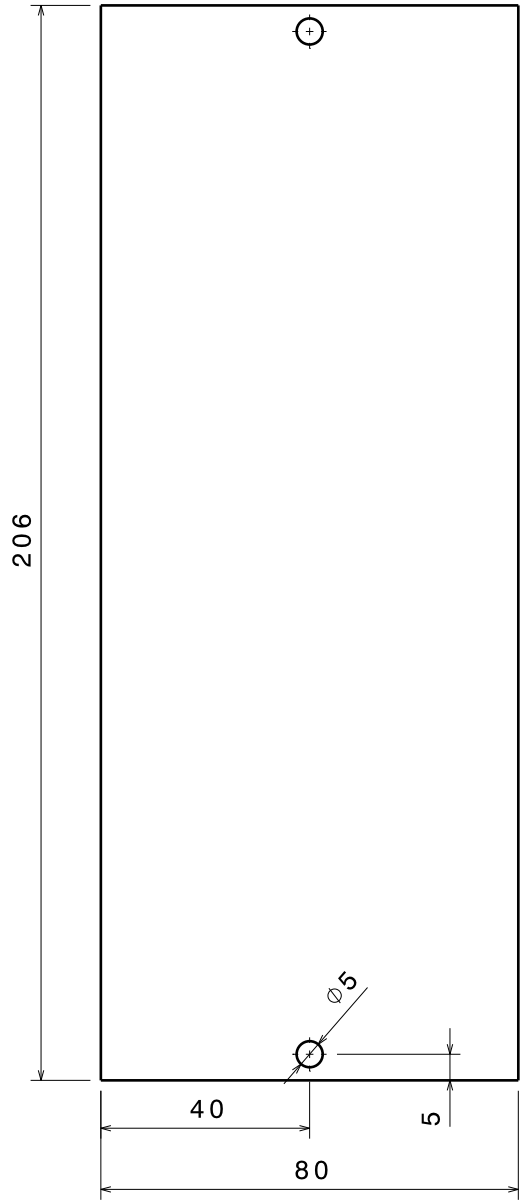
DRAWN BY RHRTD	DATE	DRAWING TITLE Center Support Shaft	
CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1



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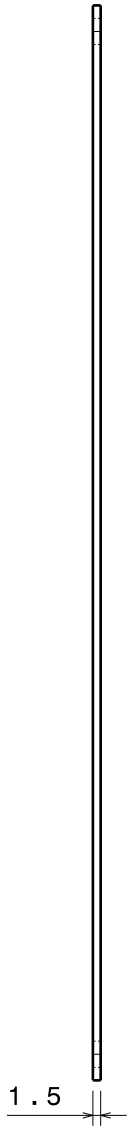

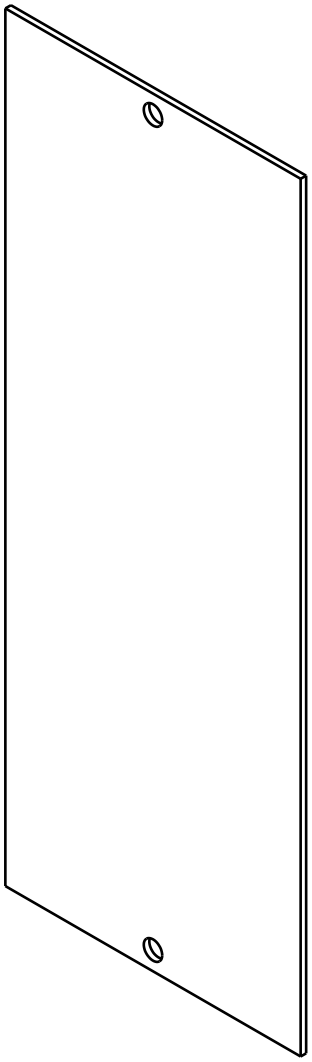

Isometric view
Scale: 1:1

DRAWN BY RHRTD	DATE
CHECKED BY RHRTD	DATE
DESIGNED BY RHRTD	DATE

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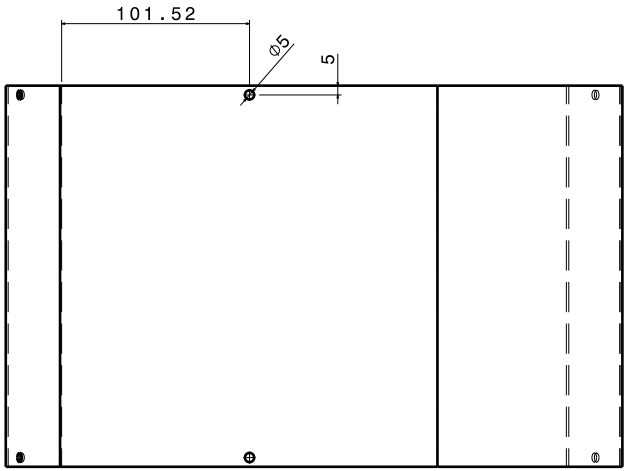
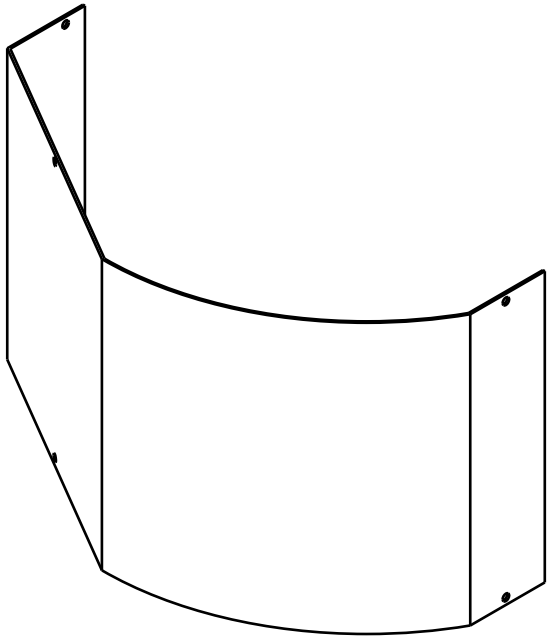
BHAT, GANDHINAGAR-382 428

DRAWING TITLE: **Cover Plain**

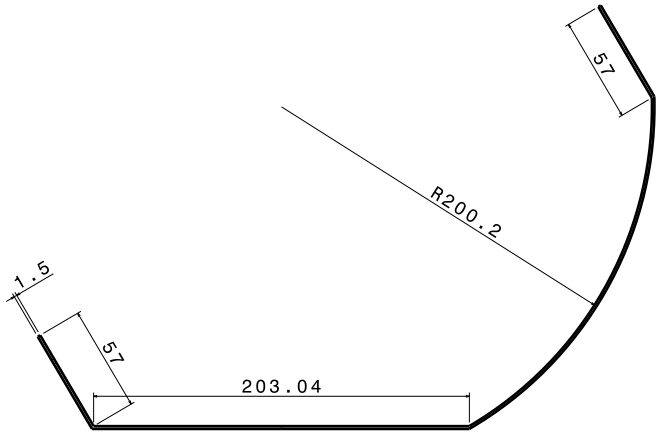
SIZE	DRAWING NUMBER	REV
A3		

SCALE	WEIGHT(kg)		SHEET
1:1			1/1





Isometric view
Scale: 1:1



Qty: 02 nos

Note: Please Refer Bottom plate drawing for the location of Dia 5mm Holes.

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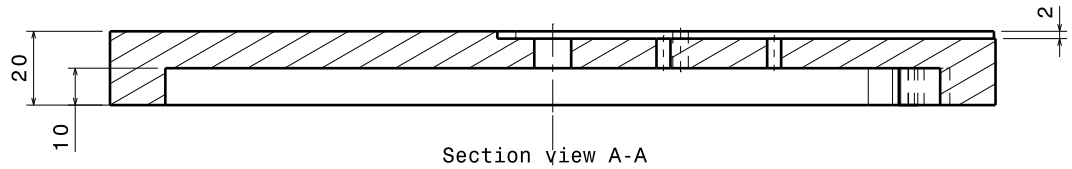
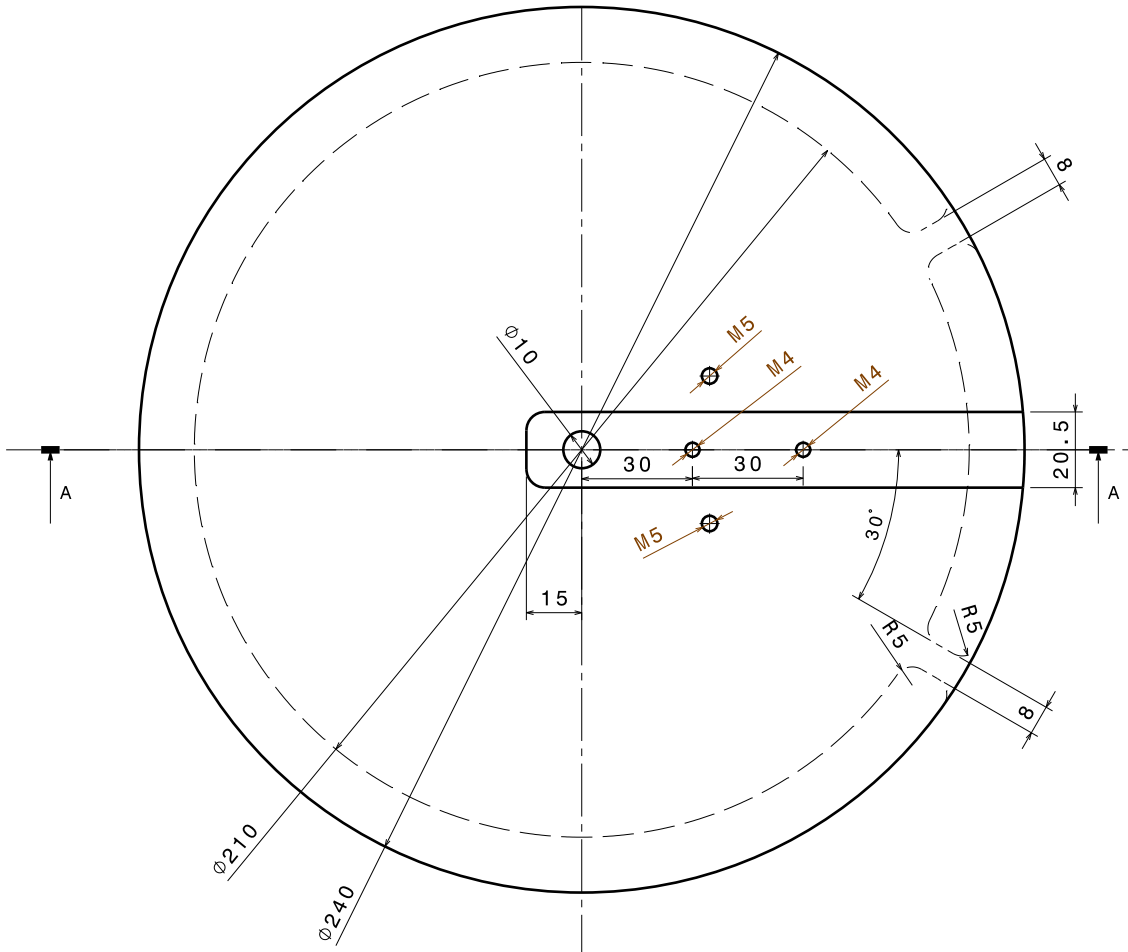
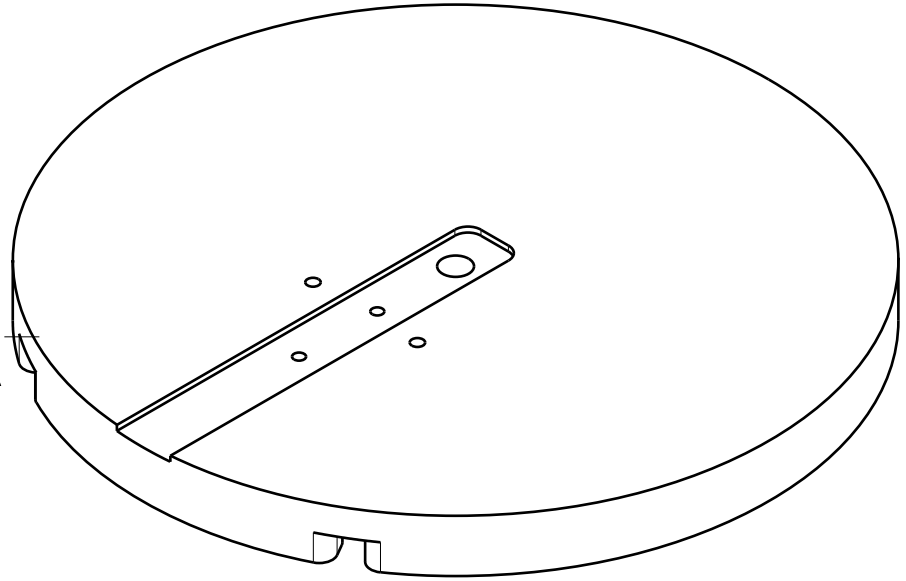
DRAWN BY: RHRTD	DATE		**DRAWING TITLE** **Cover Profile**
CHECKED BY: RHRTD	DATE		
DESIGNED BY: RHRTD	DATE		
		SIZE A0	DRAWING NUMBER / REV
		SCALE 1:1	WEIGHT(kg) / SHEET 1/1



Section view A-A
Scale: 1:1





Isometric view
Scale: 1:1

Qty: 01 no

DRAWN BY RHRTD	DATE	
CHECKED BY RHRTD	DATE	
DESIGNED BY RHRTD	DATE	

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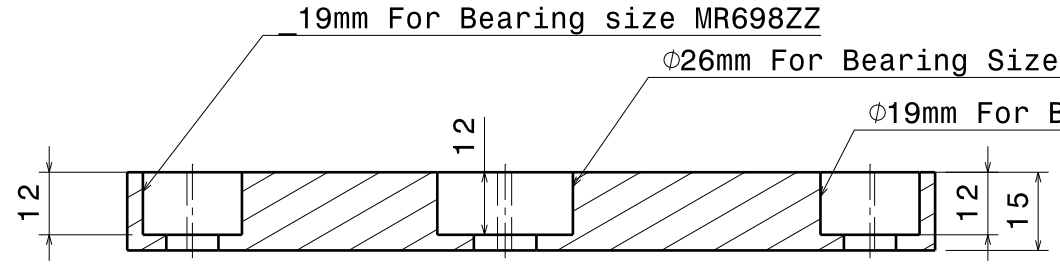
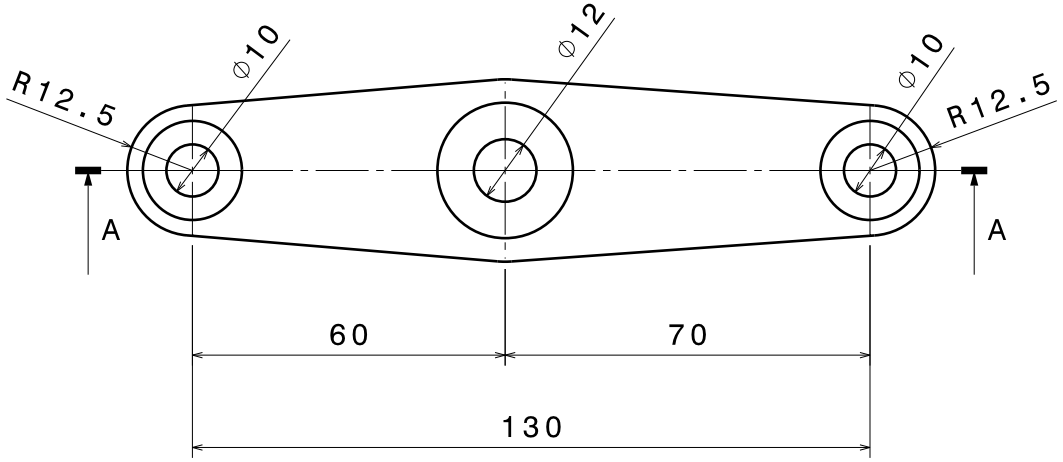
DRAWING TITLE
Drum C Link

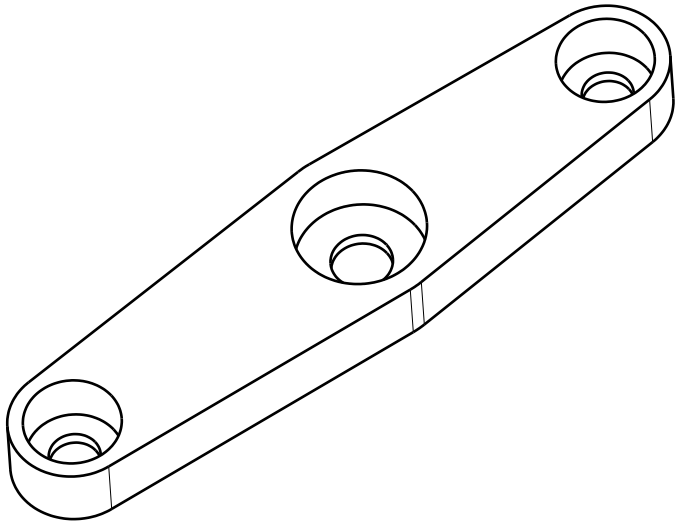
SIZE	DRAWING NUMBER	REV
A2		

SCALE	WEIGHT(kg)		SHEET
1:1			1/1



Section view A-A
Scale: 1:1





Isometric view
Scale: 1:1

Qty: 01 no

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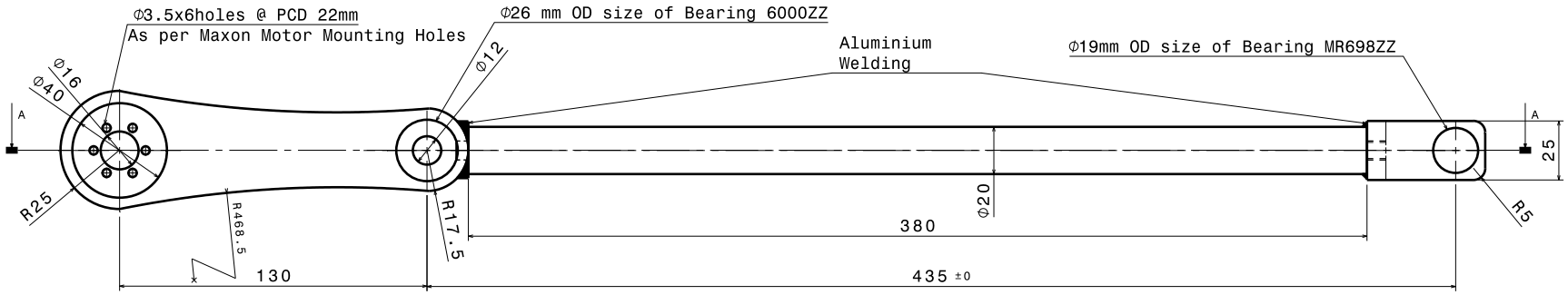
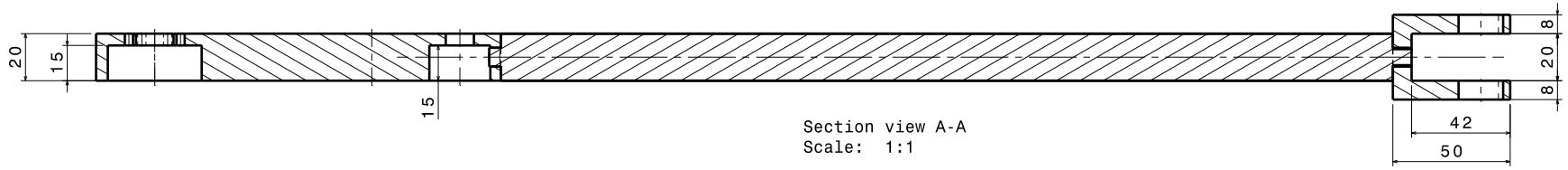
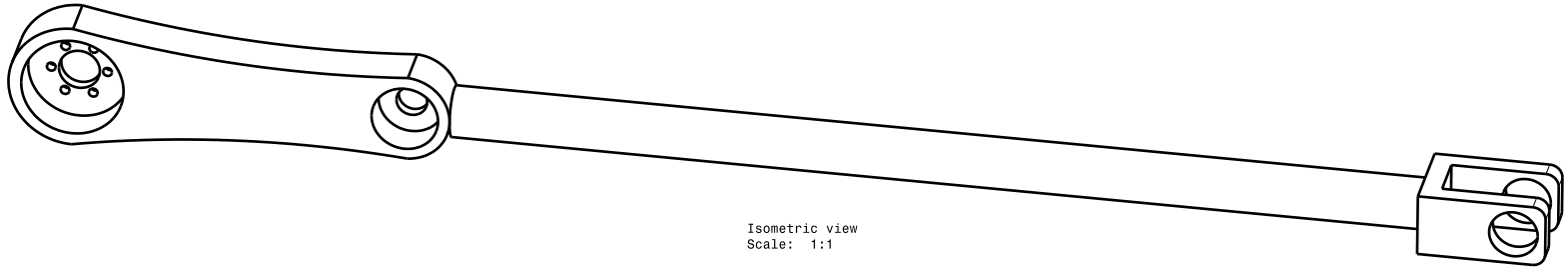
DRAWN BY RHRTD	DATE	DRAWING TITLE **Link 1**	
CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1





Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no.

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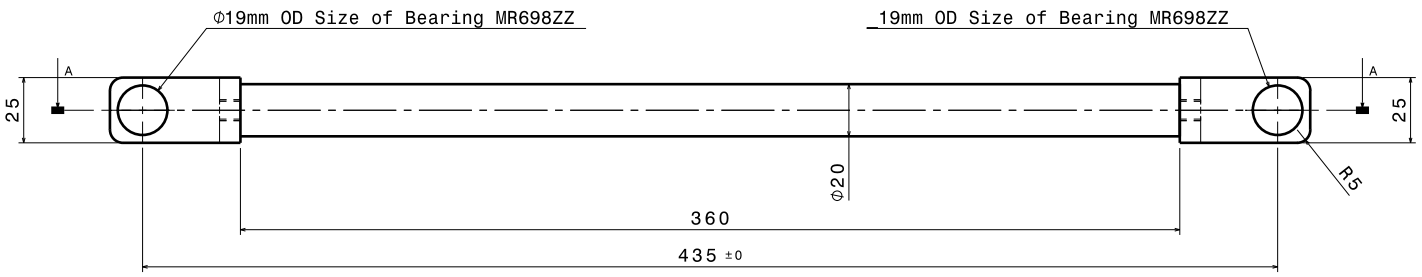
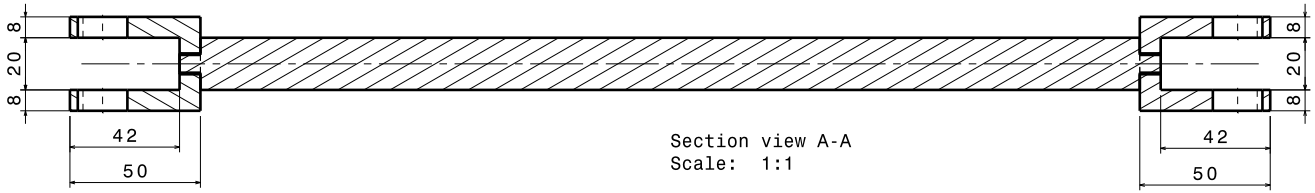
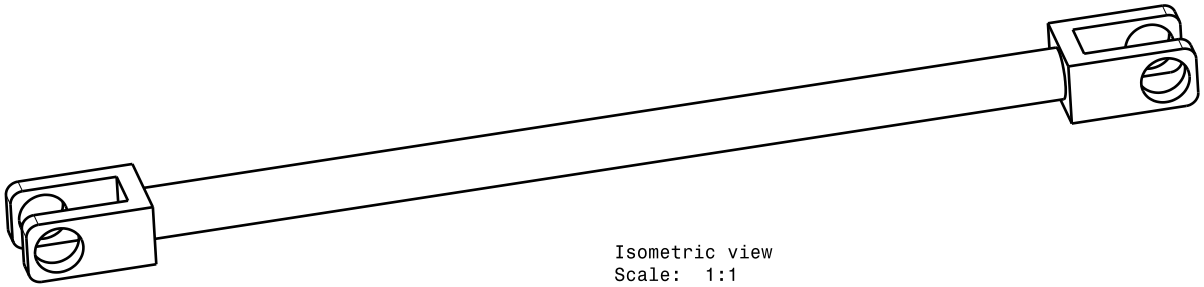
DRAWN BY RHRTD	DATE	DRAWING TITLE Link 2	
CHECKED BY RHRTD	DATE	SIZE A1	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1





Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no

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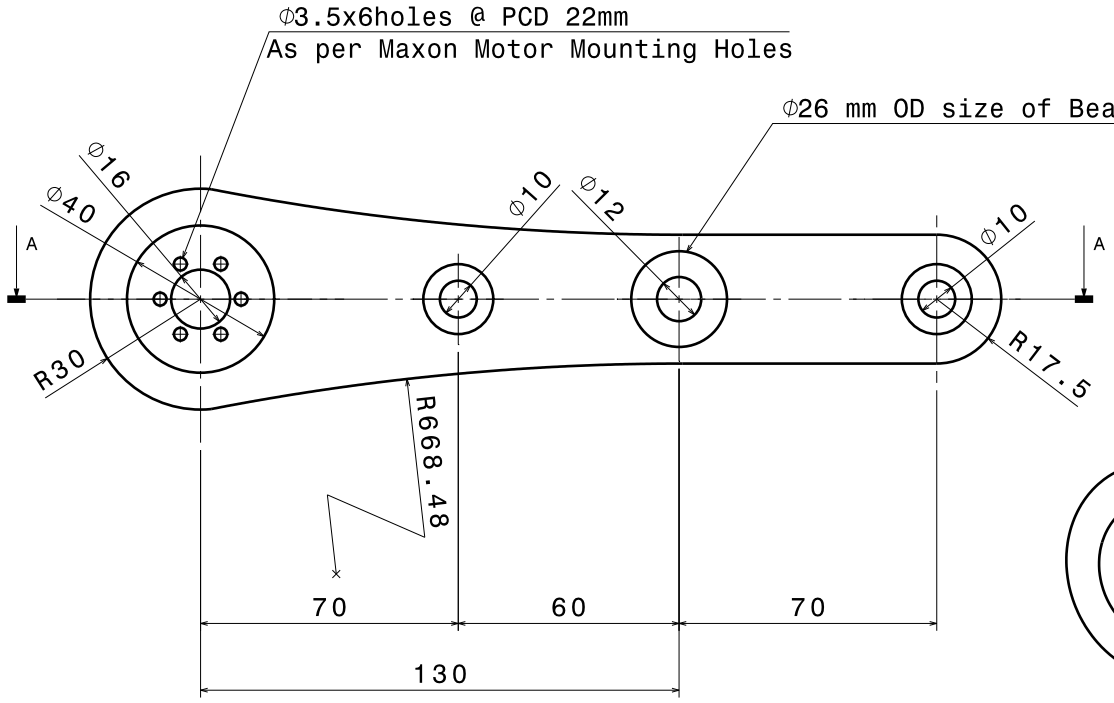
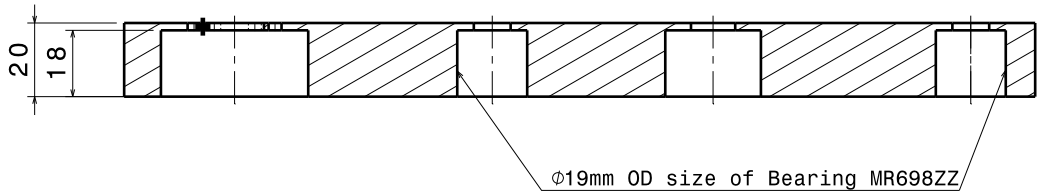
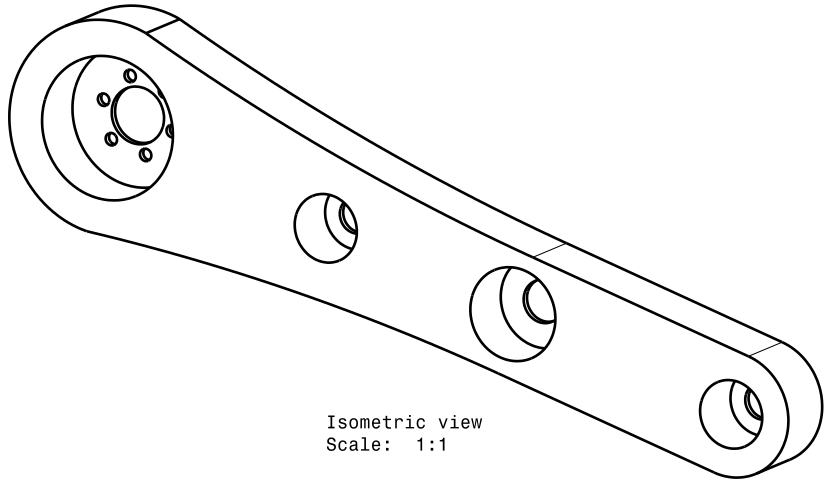
DRAWN BY RHRTD	DATE	**DRAWING TITLE** **Link 3**	
CHECKED BY RHRTD	DATE	SIZE A1	**DRAWING NUMBER** REV
DESIGNED BY RHRTD	DATE	**SCALE** 1:1	WEIGHT(kg) SHEET 1/1





Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no

DRAWN BY	RHRTD	DATE
CHECKED BY	RHRTD	DATE
DESIGNED BY	RHRTD	DATE

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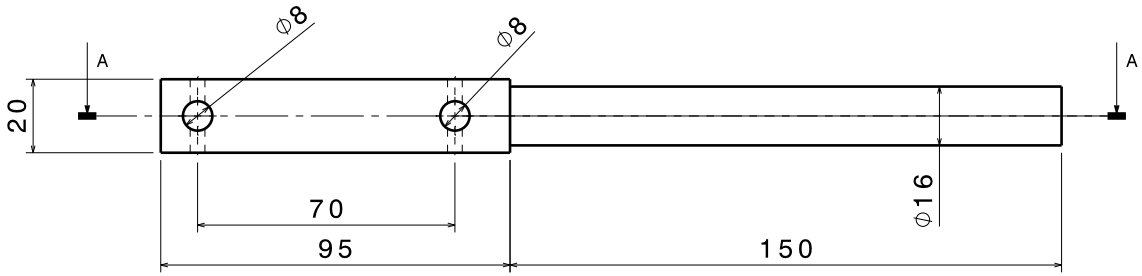
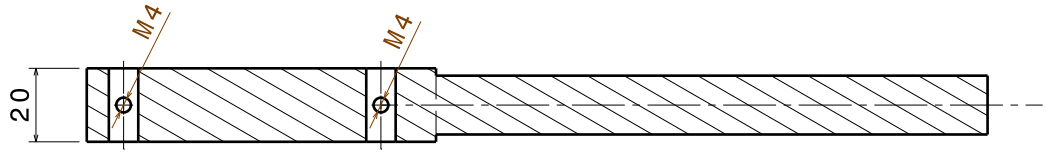
DRAWING TITLE: **Link 4**

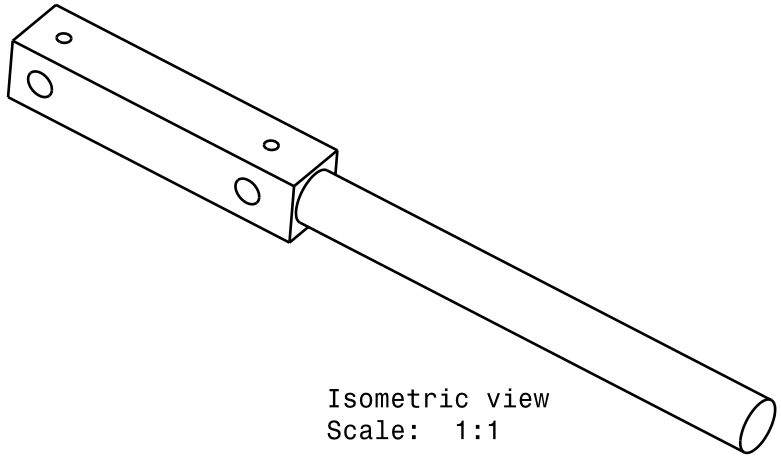
SIZE	DRAWING NUMBER	REV
A2		

SCALE	WEIGHT(kg)		SHEET
1:1			1/1





Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no

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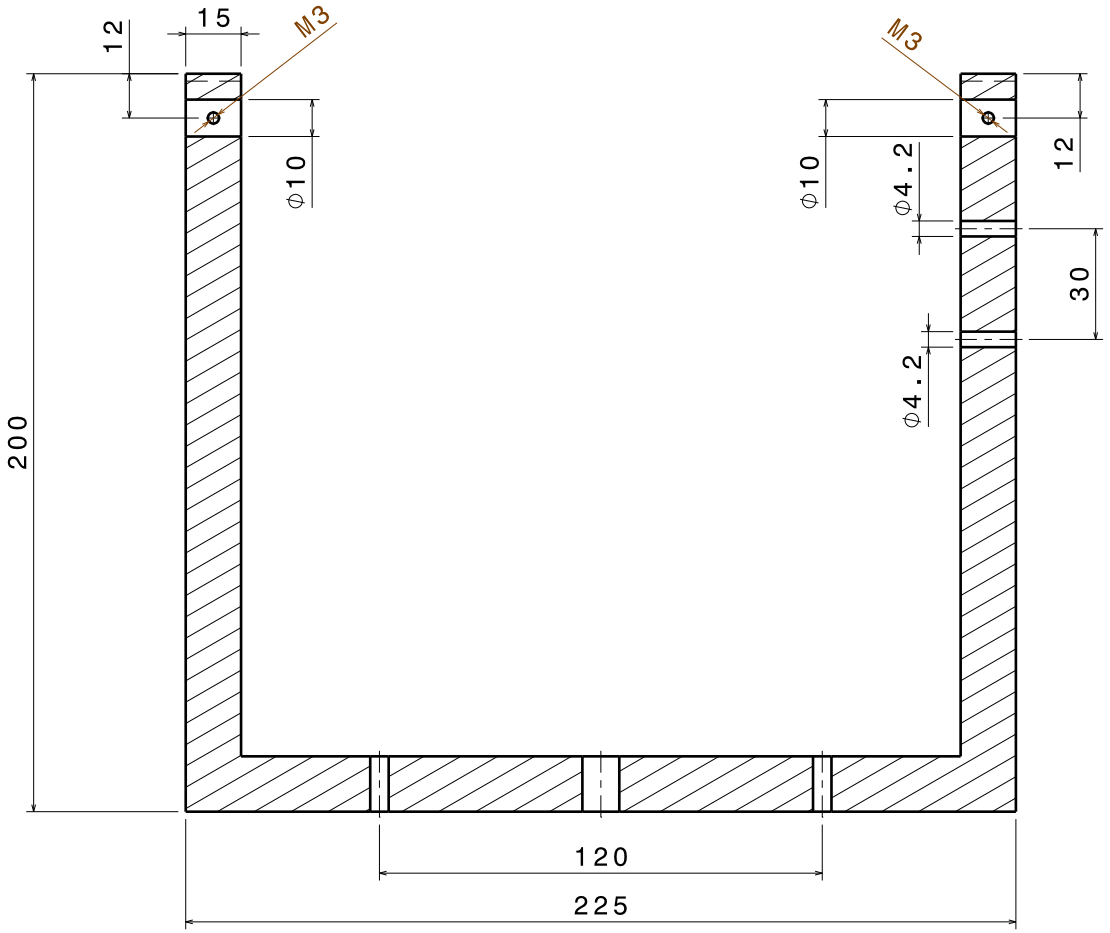
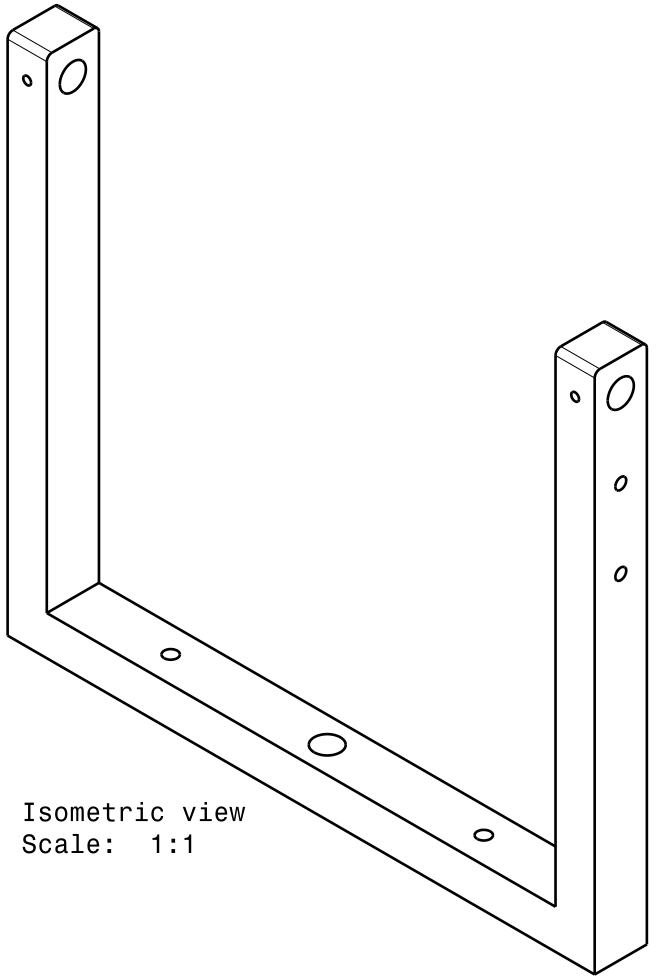
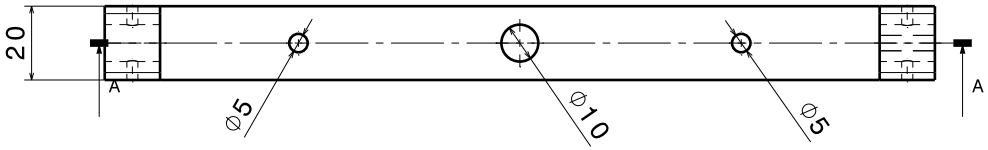
DRAWN BY RHRTD	DATE	**DRAWING TITLE** **Link 5**	
CHECKED BY RHRTD	DATE	SIZE A2	**DRAWING NUMBER** REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) SHEET 1/1



Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1



Qty: 01 no

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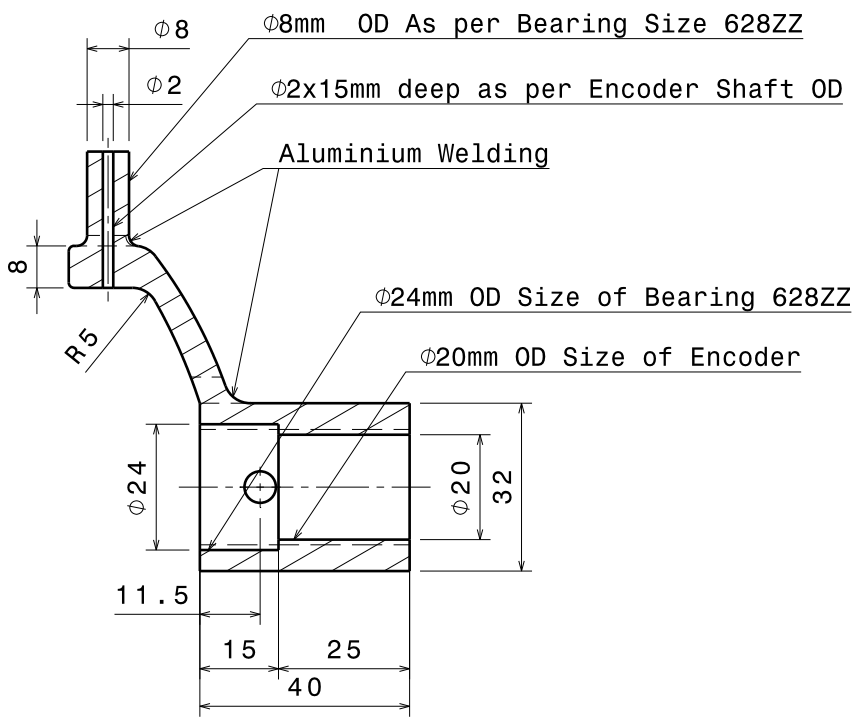
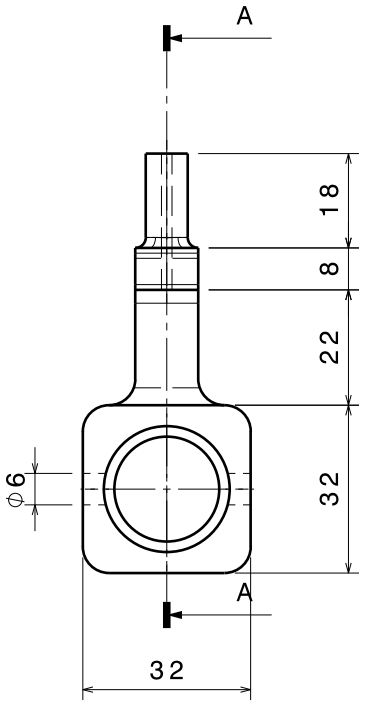
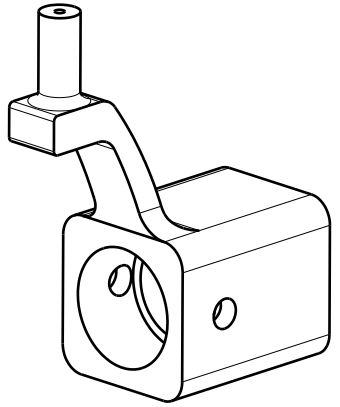
DRAWN BY RHRTD	DATE	DRAWING TITLE Link C	
CHECKED BY RHRTD	DATE	SIZE A2	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1



Section view A-A
Scale: 1:1

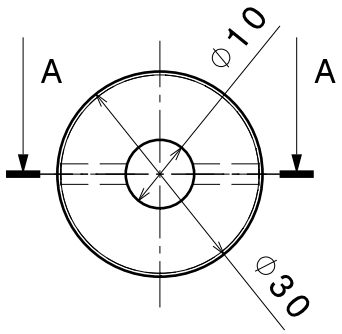


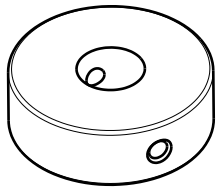


Isometric view
Scale: 1:1

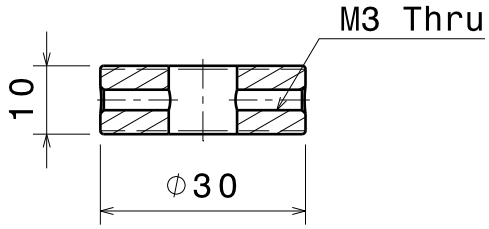
Qty: 01 no

This drawing is our property. It can't be reproduced or communicated without our written agreement.		**INSTITUTE FOR PLASMA RESEARCH** BHAT, GANDHINAGAR-382 428	
DRAWN BY RHRTD	DATE	DRAWING TITLE **Middle Encoder Mounting**	
CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1





Isometric view
Scale: 1:1



Section view A-A
Scale: 1:1

Qty: 04 nos.

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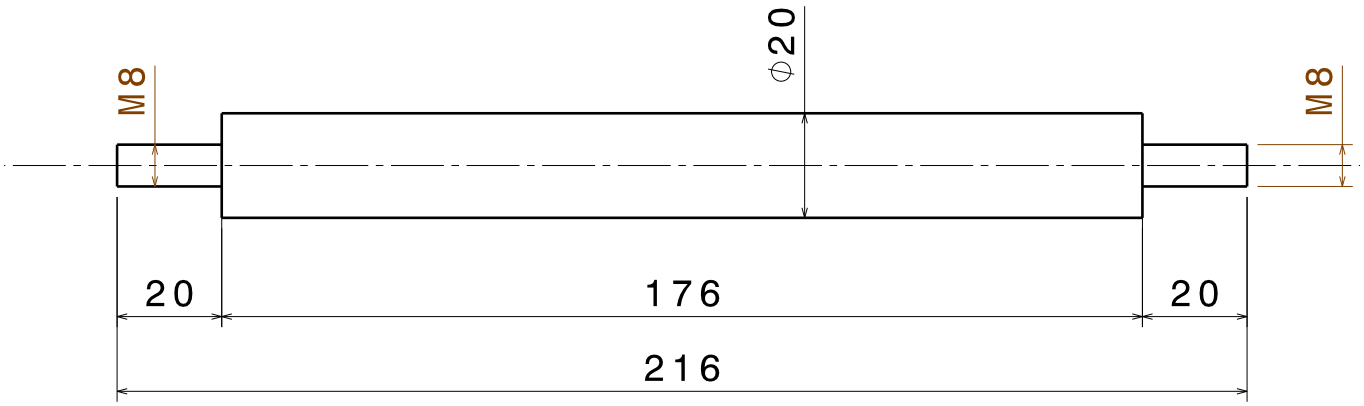
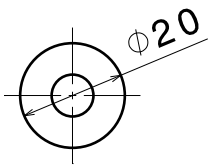
DRAWN BY RHRTD	DATE	**DRAWING TITLE** **Spacer**	
CHECKED BY RHRTD	DATE	SIZE A4	**DRAWING NUMBER** REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) SHEET 1/1



Front view
Scale: 1:1



Left view
Scale: 1:1

Qty: 04 nos.

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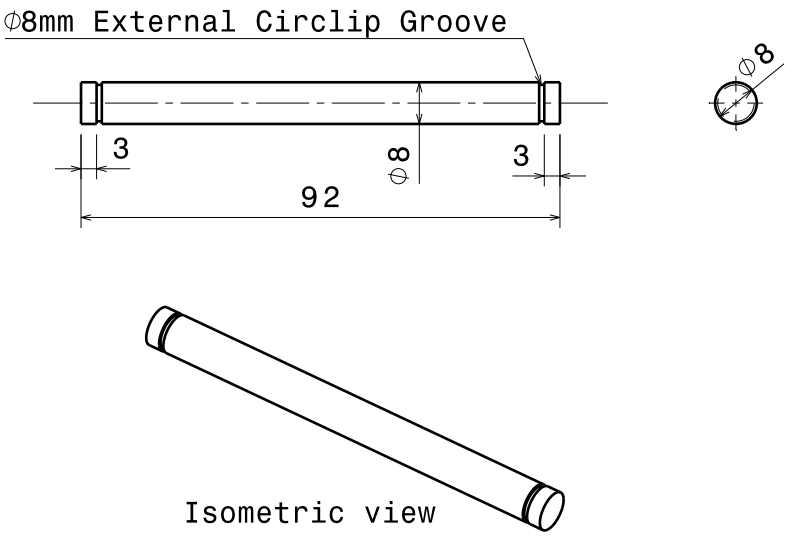
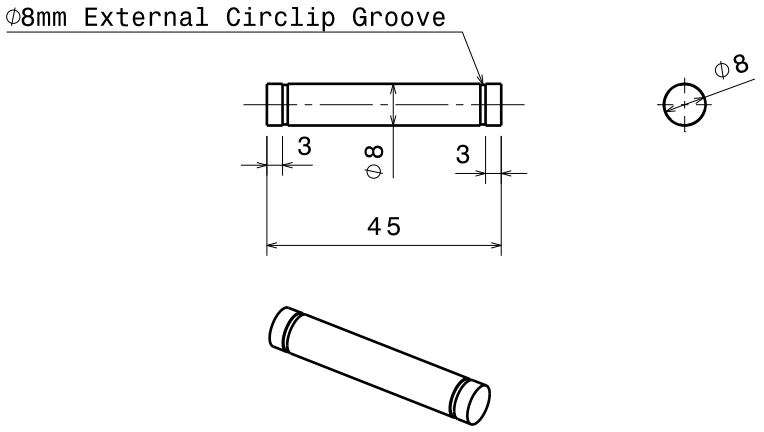
DRAWN BY RHRTD	DATE	DRAWING TITLE **Support Pillar**	
CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1





Note: ϕ8 mm OD should be machined as per Bearing ID Size MR698ZZ

Qty: 02 nos.

Qty: 02 nos.

DRAWN BY RHRTD	DATE	
CHECKED BY RHRTD	DATE	
DESIGNED BY RHRTD	DATE	

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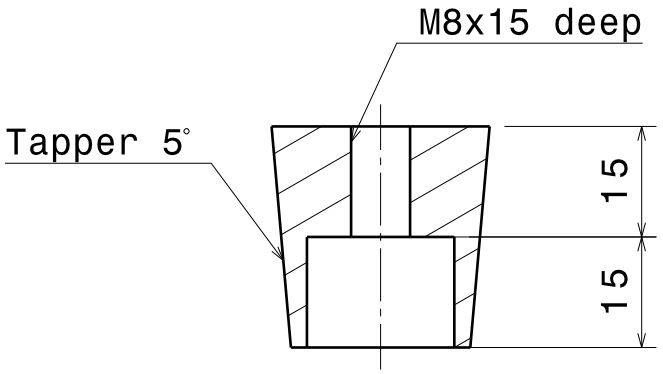
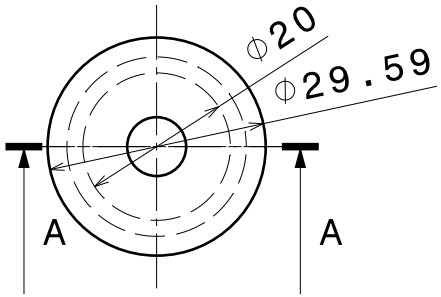
DRAWING TITLE **Support Shaft**

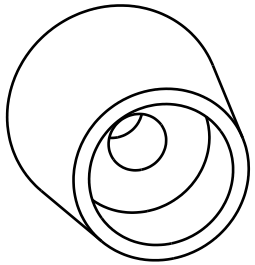
SIZE	DRAWING NUMBER	REV
A3		

SCALE	WEIGHT(kg)		SHEET
1:1			1/1

Section view A-A
Scale: 1:1







Isometric view
Scale: 1:1

Qty: 04 nos

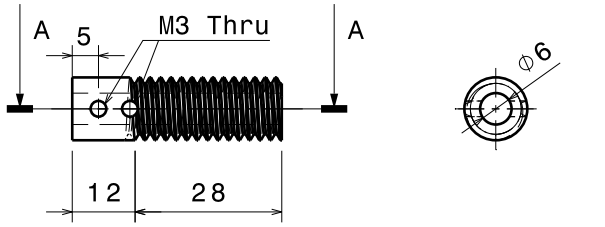
DRAWN BY RHRTD	DATE	
CHECKED BY RHRTD	DATE	
DESIGNED BY RHRTD	DATE	

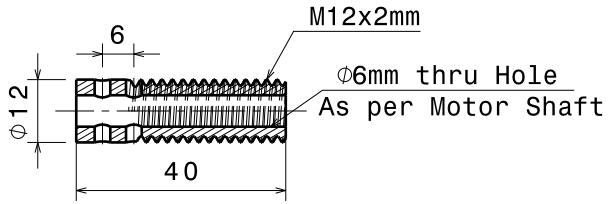
INSTITUTE FOR PLASMA RESEARCH
BHAT, GANDHINAGAR-382 428

DRAWING TITLE
Support Peg

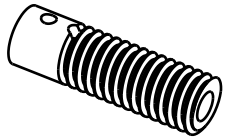
SIZE	DRAWING NUMBER	REV
A4		

SCALE 1:1	WEIGHT(kg)		SHEET 1/1



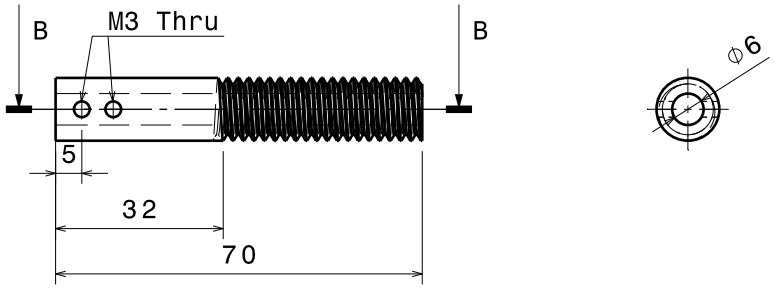


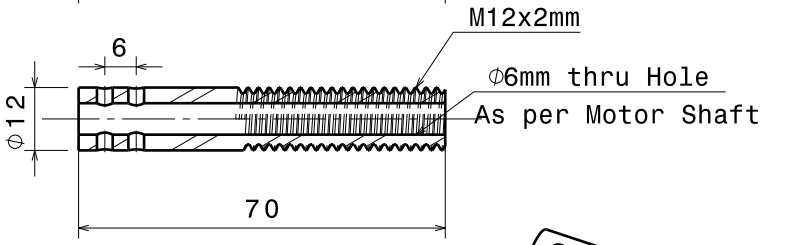
Section view A-A
Scale: 1:1



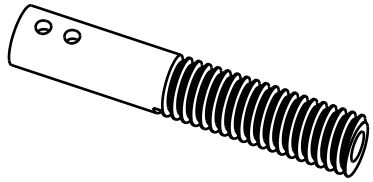
Isometric view
Scale: 1:1

Qty: 02 nos





Section view B-B
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no

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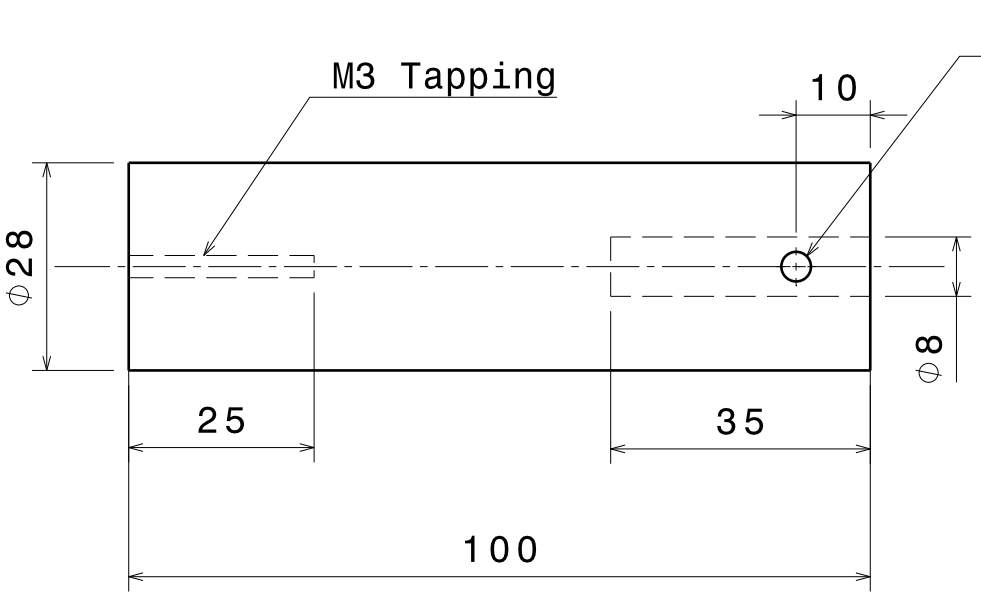
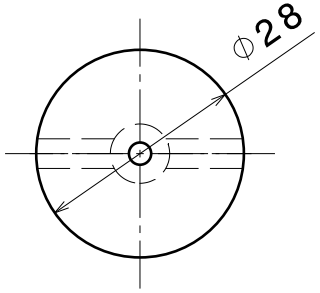
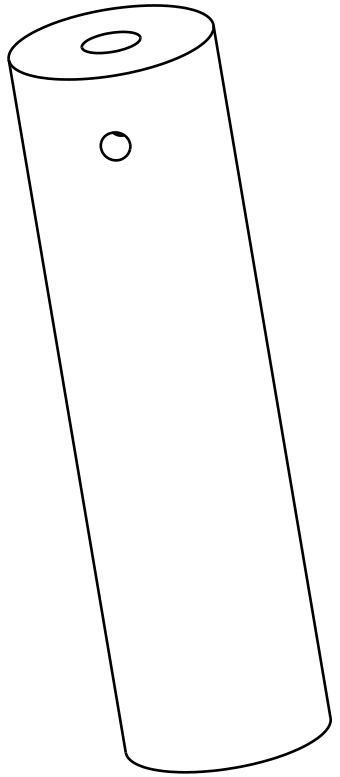
DRAWN BY RHRTD	DATE	DRAWING TITLE **Threaded Coupler**	
CHECKED BY RHRTD	DATE	SIZE A3	DRAWING NUMBER / REV
DESIGNED BY RHRTD	DATE	SCALE 1:1	WEIGHT(kg) / SHEET 1/1







Isometric view
Scale: 1:1

Qty: 01 no.

DRAWN BY RHRTD	DATE	
CHECKED BY RHRTD	DATE	
DESIGNED BY RHRTD	DATE	

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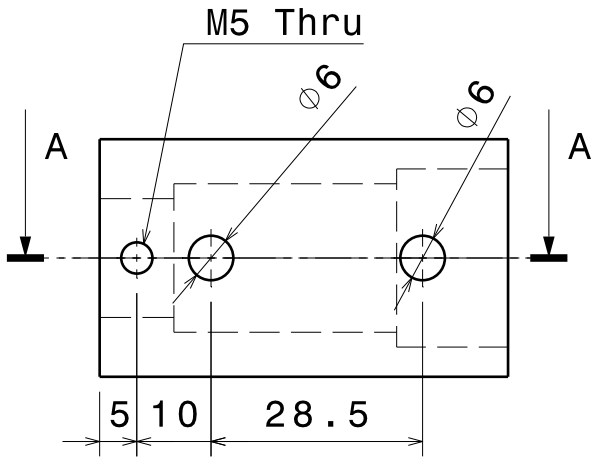
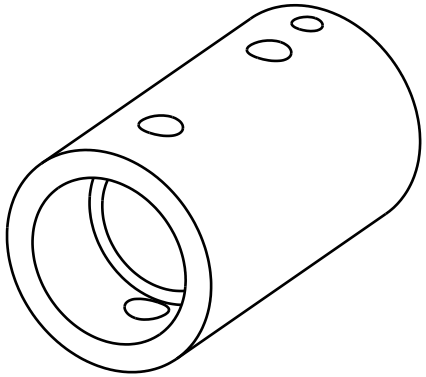
DRAWING TITLE
Thumb Handle

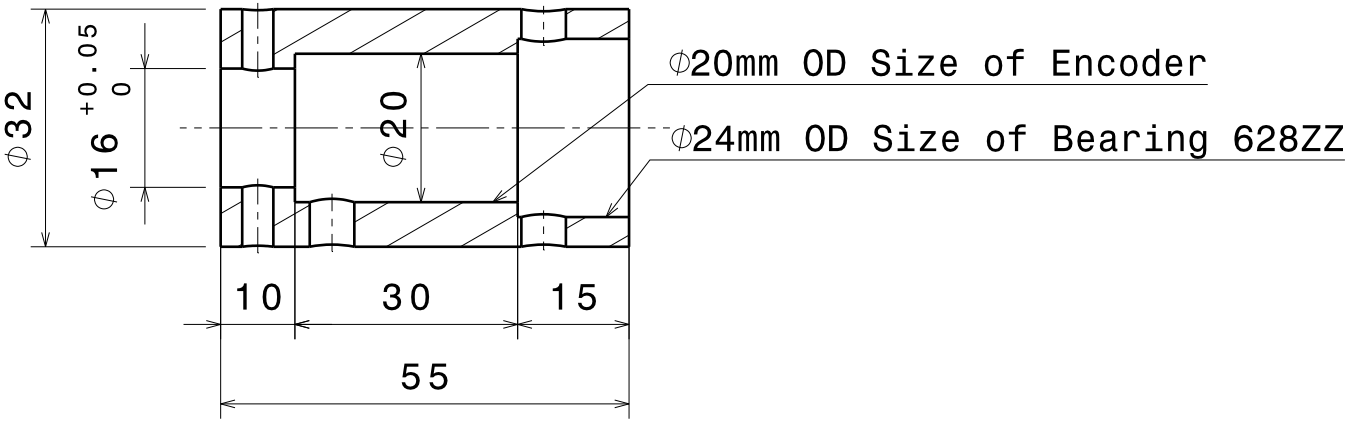
SIZE	DRAWING NUMBER	REV
A4		

SCALE	WEIGHT(kg)		SHEET
1:1			1/1





Isometric view
Scale: 1:1



Section view A-A
Scale: 1:1

Qty:01 no

DRAWN BY RHRTD	DATE
CHECKED BY RHRTD	DATE
DESIGNED BY RHRTD	DATE

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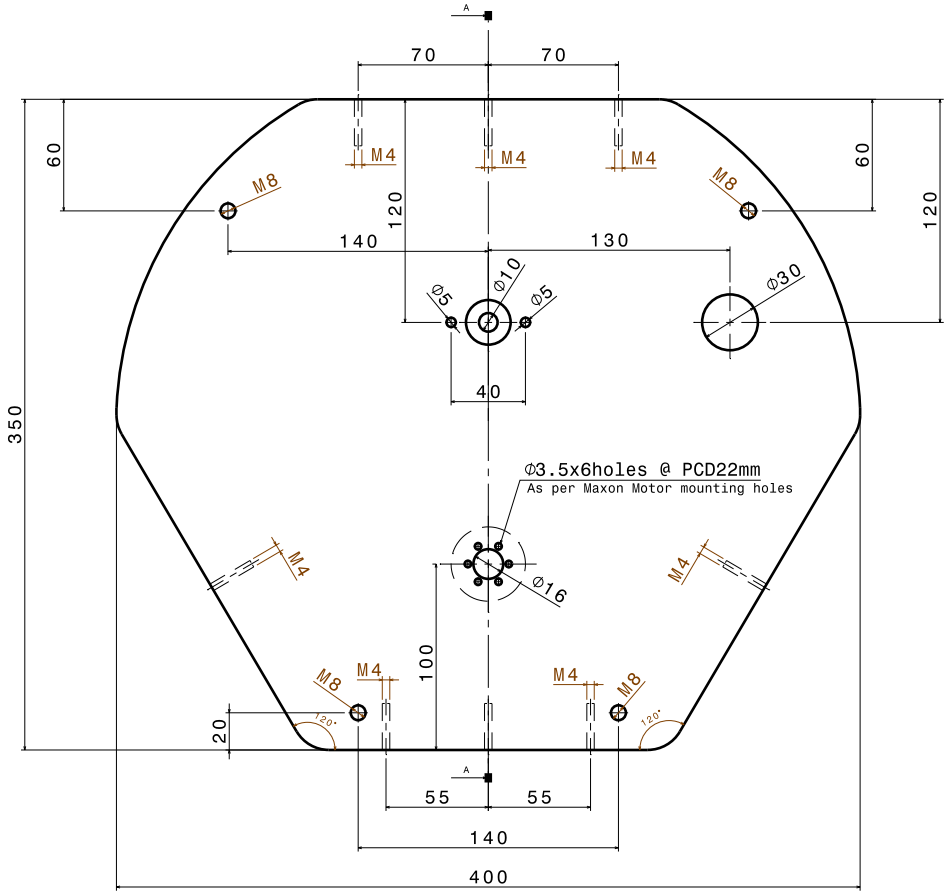
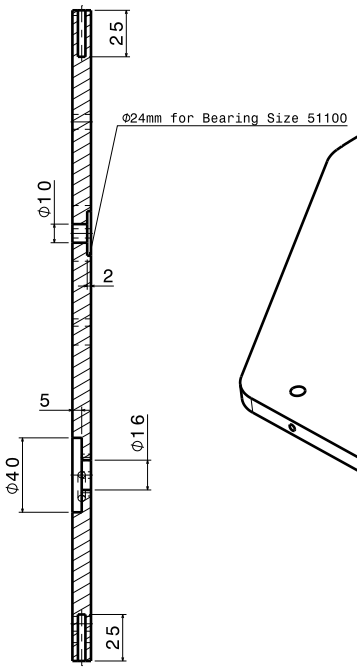
DRAWING TITLE
Top Encoder Mounting

SIZE	DRAWING NUMBER	REV
A4		

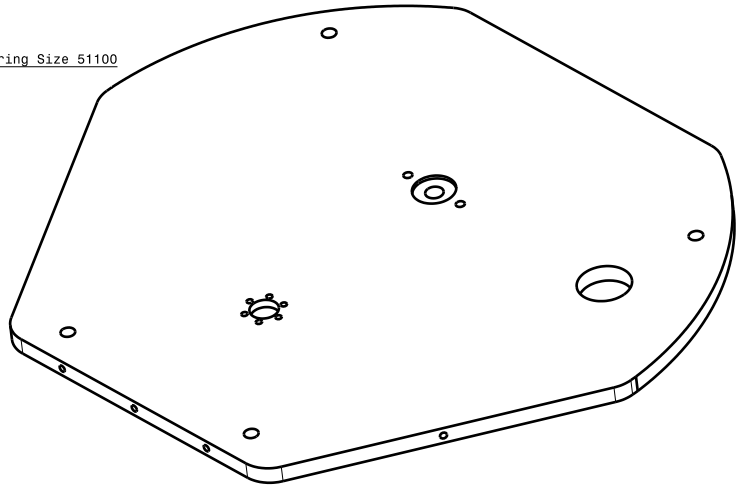
SCALE 1:1	WEIGHT(kg)		SHEET 1/1



Front view
Scale: 1:1



Section view A-A
Scale: 1:1



Isometric view
Scale: 1:1

Qty: 01 no

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BHAT, GANDHINAGAR-382 428

DRAWN BY: RHRTD	DATE		DRAWING TITLE: **Top Plate**
CHECKED BY: RHRTD	DATE		
DESIGNED BY: RHRTD	DATE		
		SIZE A0	DRAWING NUMBER / REV
		SCALE 1:1	WEIGHT(kg) / SHEET 1/1

(This need to be printed in Bidders letter head)

1. Please quote with complete technical details along with technical compliance sheet.
2. Quotation should be submitted in the format given below, else IPR shall not consider the offer by the vendor.

NAME OF PARTY : _____

ENQUIRY NO: _____

QUOTATION No. & DATE : _____

Currency of Quotation: **Indian Rupees**

Sr. No.	Item Description	HSN/SAC Code	Quantity	Unit Rate (Basic)	Packaging & forwarding (P&F)	Applicable GST	Rate (incl P&F and GST)	Total Value
			a	b	c	d	e = b + c + d	f = a * e
1								
2								
3								
4								
5								
6								

Sr. No.	Particular	Remarks
I.	Ex-works / FOR Destination	
II.	Freight	
III.	Insurance	
IV.	Delivery Period	
V.	Payment (IPR terms will apply)	
VI.	Guarantee / Warrantee	
VII.	Validity Period	
VIII.	Discount (if any)	
IX.	Remarks	

Place: Authority Signatory

Date: Company Seal

Note:

1. **Bidder should submit the copy of GSTIN / ARN Certificate along with the offer**
2. **Bidder should specify the SUPPLY and SERVICE rates/ charges separately wherever applicable**