



INDIAN INSTITUTE OF ASTROPHYSICS
2ND BLOCK, SARJAPUR ROAD, KORAMANGALA
BANGALORE-560 034

PUBLIC TENDER NOTICE NO: PT-IIA/ACD/NEWTO/CAP/197 DATED: 19TH SEPTEMBER 2008 (TWO BID SYSTEM)

The Director, Indian Institute of Astrophysics invites Quotations/Bids from reputed firms for the following items. The reputed firm(s) interested in offering bids should have executed similar items/works.

Sl. No.	Description in Brief	Quantity	E.M.D (refundable) Rs.	Tender Fee (non-refundable) Rs.
1.	Manufacture, Assembly and Supply of 100 mm Newtonian Telescope (as per details mentioned in the Annexure II)	1000 Nos.	50,000/-	300/-

Note: (1) The Tender documents with Specification details are available on IIA website WWW.IIAP.RES.IN/TENDERS.HTM. Hence the interested tenderers may at their option download the same from our website (as **“NO” hard copies of Tender document is/are provided from this office**) and submit their offers along with EMD (refundable) & Tender fee (non-refundable) prescribed therein, only in the form of Demand Draft drawn in favour of Director, IIA. However, your offers (both Technical & Commercial/price bids) should be superscribed in separate envelopes mentioning the tender notice no., and date with Date of opening. Both the Bids shall be submitted in a sealed envelopes addressed in favour of Director, Indian Institute of Astrophysics, Bangalore – 560 034.

2. The firms who fulfill the following requirements shall be eligible to submit their Bids. Joint ventures are not acceptable.

a). Tendering company should have adequate shop floor space for manufacture, assembly and testing.

b). Tendering companies should be capable to fabricate and supply spare parts, if necessary, at least for a period of 10 years.

(c) Tenderer should have executed, in the last 3 financial years (i.e., current year and two previous financial years) atleast one similar equivalent supply for a minimum value of Rs.20 Lakhs.

(d).The total contract amount received during the last 3 financial years, and the current financial year should be a minimum of Rs.20 Lakhs. The tenderer should submit latest Audited Balance Sheet duly certified by the Chartered Accountant to this effect. They should also submit Bankers Solvency Certificate to a minimum value of Rs.20 Lakhs.

(e) The Private Body Contractor shall be required to produce the latest TDS Certificate indicating the Income Tax deducted by the client for the excursionsion of similar items, completed individually of value not less than Rs.20 Lakhs.

3. Both Technical/Commercial/price Bids (as per Two part tender instructions – Annexure-I) supported by the above information should be submitted in Sealed envelope duly superscribed with the name of item/work. The completed Bids will be received by this office **upto 1500 Hrs. on 23rd October 2008.**

4. If any information furnished by the tenderers is found incorrect at a later stage, the firm shall be liable to be debarred from tendering and taking up of work in IIA. The Institute reserves the right to verify the particulars furnished by the tenderers.

5.The interested tenders may contact Dr.A.K.Saxena with prior permission on or before **14th October 2008** to discuss Technical clarifications, if necessary only, before submitting both Technical / Price bids.

6.The firms should submit both Technical and Commercial/Price bids (as per Two part tender instructions-Annexure-I) separately superscribed along with EMD/Tender fee of prescribed amount **upto 1500 Hrs. Latest by 23rd October 2008.** The Technical Bids will be opened on the same day in presence of the bidders or their authorized representatives **at 15.30 hrs.**

7. Incomplete Technical Bids are liable for rejection. Commercial/price bids will be considered for opening only for the Qualified Technical Bidders.

8. Late & / delayed offer will not be considered at all.

9. IIA is not responsible for any delay / loss of documents in transit.

10. No bids will be considered if prescribed EMD and Tender Fee are not found with Technical bids (Part I).

-: 2 :-

11. The Commercial / Price Bids will be opened on **10th November 2008 at 15.30 hours** of those firms technically qualified and recommended by the committee constituted for the purpose, in the presence of such bidders or their nominated representatives.

12. The Director, IIA reserves the right to reject any or all tenders / bids without assigning any reasons.

**Administrative Officer
IIA, Bangalore-34**

-: 3 :-

Annexure-I
IMPORTANT: TWO PART TENDER INSTRUCTIONS

1. It is proposed to have a two cover system for this tender.
Part I: (a) Technical part (without price) is one cover.
Part II: (b) Commercial /Price part alone is another cover.

2. TECHNICAL PART:

Technical part should clearly indicate the technical details. A compliance statement indicating whether the tendered specifications are met is to be submitted with reasons for deviations if any. Complete with Drawings, in relevant to the offer are also to be enclosed to the technical part.

3. COMMERCIAL PART (without price)

Commercial part should indicate commercial terms like, delivery period, place of delivery, payment terms, validity, warranty/guarantee etc. and should be sent along with the price part. The Technical part should be kept in one cover along with EMD & Tender Fees superscribing tender number and due date duly sealed.

4. COMMERCIAL AND PRICE PART alone should be kept in a separate cover superscribing tender number date and due date.

5. The Technical part in one cover and **Commercial / Price part** in another cover should be put in one large cover, and should be superscribed with the tender number, due date and time of opening.

5. The cover as above should be sent to the following address:- **THE DIRECTOR, INDIAN INSTITUTE OF ASTROPHYSICS, 2ND BLOCK, KORAMANGALA, BANGALORE – 560 034.**

6. The offer should be valid for a minimum period of 120 days from the date of opening of price bids.

7. Offer shall be submitted duly superscribed only as said above.

8. No conditional discounts will be allowed.

9. EMD & Tender fee of prescribed value should be sent along with the Technical Bids /tenders in the form of demand draft only, drawn in favour of “The Director, Indian Institute of Astrophysics., Bangalore” obtained from any Indian Nationalized / reputed Banks in India.

10. Tender shall be submitted as above without fail.

Ph.25530672-676, Fax: 25534043

Website: www.iiap.res.in, E-mail: astron@iiap.res.in

INDIAN INSTITUTE OF ASTROPHYSICS

2nd Block, Koramangala, Bangalore - 560 034

No.PT-IIA/ACD/NEWTO/CAP/197

Dated: 19th September 2008

M/s.

Dear Sirs,

The Director, Indian Institute of Astrophysics, Bangalore invites Sealed Tenders for the supply of Stores detailed in the Tender Form hereto annexed. The Tender Terms enclosed are also may be noted carefully. If you are in a position to quote for the supply in accordance with the requirement, please submit your quotation in the attached Tender Form also.

Your Tender (Technical, Commercial & Price Bids) must reach this office on or before the date and time indicated in the Tender Schedule.

Thanking you,

Yours faithfully,

Encl: as above.

(AJ Raghupathy)
Admin. Officer
For Director

-: 5 :-

INDIAN INSTITUTE OF ASTROPHYSICS
BANGALORE-560 034

PUBLIC TENDER DOCUMENT NO:PT-IIA/ACD/NEWTO/CAP/197

DT: 19th September, 2008

TENDER FORM

FROM:

TO

THE DIRECTOR,
Indian Institute of Astrophysics.,
Bangalore-560 034.

Sir,

I/We hereby offer to supply the stores indicated below at the price hereunder quoted and agree to hold this offer open till_____. I/We shall be bound to supply the store hereby offered upon the issue of the Purchase Order communicating to the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of such stores. I/We notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance.

Sl.No.	Description of the item(s)	Quantity	Unit	Rate	Dely. Period
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01. Manufacture, Assembly and Supply of 100mm Newtonian Telescope. (as per details mentioned in the Annexure II).

-: 6 :-

Place at which the Delivery is required : **at 2nd Block, Koramangala, Bangalore**

Date by which the supplies are required : **With 8-10 months – FDO.**

02. I/We have understood the items of the tender annexed to the invitation to this Public Tender and have thoroughly examined the specifications/drawing and /or pattern quoted or referred to herein and/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions contained in the Purchase Order, if communicated on the acceptance of this tender either in whole or in part.

Date:

Signature and seal of Tenderer

-: 7 :-

ANNEXURE II

Manufacture, Assembly and Supply of 100mm NEWTONIAN TELESCOPE.

- Encl:**
- a) Lists of Part drawings.
 - b) Assembly Drawing.

Indian Institute of Astrophysics(IIAP)
Koramangala, Bangalore -560034.

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8. Inspection, testing and Acceptance criteria
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12. Terms and conditions

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1. Annexure-A (Pictorial view of Newtonian telescope picture)
2. Annexure-B (Engineering drawings of Newtonian telescope)

1.Introduction / Background

Galileo scope

The year 2009 marks the four hundredth anniversary of the first astronomical observation through a telescope by the great Italian scientist Galileo Galilei. The United Nations General Assembly have voted to adopt the year as the International Year of Astronomy (IYA2009) at the instance of the International Astronomical Union (IAU). The theme of IYA2009 is 'The Universe, Yours to Discover'. IAU has proposed several IYA2009 global cornerstone projects to promote widespread access to the universal knowledge of fundamental science through the excitement of astronomy and sky-observing experiences. Developing a simple and low cost optical telescope, 'The Galileoscope', (telescope) for wide distribution to the people is one, if not the most important, of the projects envisaged under this scheme.

In the context of IYA2009, IIA has adopted the motto 'Astronomy for all'. Keeping in mind our expertise in optical astronomy and our mandate of disseminating the knowledge and practice of astrophysics as widely as possible, we have concentrated our efforts in designing 'The Galileoscope'. The aim is to make a sturdy, affordable and easy-to-handle Newtonian telescope of about 100mm aperture. Our efforts have led to the creation of a prototype with the following technical specifications:

2.Technical Specification

100mm Newtonian telescope on a simple Alt-Azimuth mount with dual axis movement. convertible to polar mount with an optional wedge to suit the local latitude.

Mechanical Specifications are as per the drawings enclosed.

Optical Specifications :

Primary Mirror

Diameter -100mm

Edge Thickness -12mm

Focal length -600mm

F ratio – F/6

Surface – Parabolic

Surface Accuracy – $\lambda/4$

Coating –Aluminium

Diagonal Flat Mirror

Size : 25mmx35mmx2mm

Surface : flat

Surface Accuracy - $\lambda/4$

Coating Aluminium

Eye Piece

10X (Standard eye piece –Bought out)

We would like to have this telescope fabricated in large numbers by a suitable engineering company with expertise in manufacturing optical instruments. Our plan is to make the telescope available throughout India. In addition to direct viewing, the telescope will also have the facility to do astrophotography which is becoming increasingly popular. During 2009 our scientists will visit educational institutions, science popularisation centres and other public institutions to train people in the usage of the simple telescope (Galileoscope) and demonstrate simple experiments that can be performed with the instrument.

3.Scope of the work.

The vendor shall be responsible for the manufacture, which includes fabrication, assembly of components, inspection, testing and delivery of 100mm size Newtonian telescopes as listed in the RFP. The items shall be supplied in accordance with the applicable drawings/standards specified herein and the schedules setforth. The following are the objective and scope of work of this RFP in detail.

The primary scope of this RFP includes that the vendor shall manufacture, assembly and deliver the telescope on satisfactory tests and inspection as per the drawings supplied by IIA. The delivery of the components will be as per the mutually agreed time schedule between IIA and the vendor.

The pictorial view of the Newtonian telescope is given in Annexure-A. The engineering drawings of the telescope components to be manufactured are given in the Annexure-B.

The vendor shall provide information on process plans used during manufacturing, the methodology of job tracking and QA plans for approval by IIA.

The vendor shall generate fabrication drawings for all the parts/components, consistent with all specifications, dimensions and tolerances given in the design drawings.

4.System and components description:

The Annexure-B gives the complete details of the telescope components. The RFP confines that the manufacturing of telescope components having high strength to weight ratio materials.

The telescope should be manufactured in large numbers as 1000 pieces with the same accuracy. The components are made out of PVC, STEEL, aluminum and glass to bring down the manufacturing cost to low.

The following are the components of the Newtonian telescope:

1. Telescope Tube
2. Focussing Mount
3. Eye piece sleeve
4. Top Ring
5. Middle Ring with bracket for DEC axis.
6. Mirror Cell
7. Spider ring with Arm
8. Mirror base plate
9. L-Mount
10. Friction disc ,Pinion, Bush and Knob
11. Axle & Bearing Assembly(Bought out)
12. Axle cover -1
13. Telescope base
14. ALT/DEC lock cup
15. Axle cover -2
16. Teflon washer
17. Spider Arm
18. Mirrors
 - a) Dia 100mmx12mmthick primary mirror made of Material BSC (commercial)
 - b) 25mmx35mmx2mm diagonal flat made of Material BSC (commercial).
19. Simple Gun Sight arrangement on Telescope Tube.

5. Dimensions and tolerances:

All dimensions and tolerances to be strictly followed as per the drawings issued by IIA. Until unless specified all dimensions in the drawings are in “mm”. Apart from dimensions and tolerances drawings specify guide lines/instructions to be followed during welding, machining, storage, assembly and surface treatment operations.

6. Deliverables and schedule:

The expected delivery of the telescope, inclusive of testing and supply shall be within **8-10** months from the date of award of PO.

7. Eligibility criteria of vendor.

The vendor shall have reputed background in the field of manufacturing of precision mechanical components for at least three years. The vendor shall have access to necessary infrastructure, professional manpower to carryout fabrication, inspection, testing and supply of telescopes.

8. Inspection, testing and Acceptance criteria

As a part of evaluation criteria, the IIA personal will inspect the works of the manufacturer before placing the purchase order for authentication of the various technical parameters being claimed by the vendor. Job Inspection will be carried out by the IIA engineer at vendor's factory Manufacturer will furnish the inspection reports of all the materials, parts, assemblies to IIA during the course of manufacture wherever applicable.

IIA shall have the right, to perform inspection of the work at various stages either at vendor's/sub vendors sites. The vendor shall promptly rectify at his expense any deviations from the specifications/drawings or any assembly level deviations. Trial assembly of the components shall be done at the vendor site by the vendor, if found any corrections are necessary it shall be done by the vendor at his site.

All dimensions of the components to be as per the drawings supplied by IIA. Vendor shall offer for

Acceptance of one complete assembled unit of Newtonian telescope shall be submitted for inspection and approval by IIA, before effecting supplies in bulk, against the order, if finalized.

9. Documentation:

Overall plan for executing the order shall be submitted by the vendor .The vendor should identify the milestones for completing the entire job of MASS PRODUCTION and should send a list of it with time schedule along with the technical bid.

10. Proprietary Components (Bought out items)

Proprietary parts of the telescope which the vendor would procure in advance for completing the assembly. The proprietary parts are

1. Coil springs of Size Dia 6x15mm,
2. Axle and bearing assembly
3. Required fasteners etc.

11. Manufacture and Assembly

Manufacturer shall adopt processes and methods appropriate for meeting specifications of the drawings/documents and ensuring quality of the components at low cost.

Machines and manufacturing processes used shall be such that specified accuracies shall be easily achievable.

The friction disc /pinion of azimuth axes shall be made to precision contact to have smooth movement without causing jerks/vibration in the system.

Components rotating on bearings shall be inspected for free and smooth rotation with no axial or radial play.

All components entering the assembly shall be clean and dry.

Components shall be free from burrs and sharp corners.

12. Terms and conditions:

The following are the terms and conditions with respect to this RFP,

IIA reserves the access to vendor/sub-vendor sites during the contract period. Any deviation in the manufacturing process need to be brought to the notice of IIA, before proceeding.

The bid for this RFP to be in two parts, **technical** and **commercial**. **In the technical bid the vendor shall furnish the following details.**

1. The machining and metrology facilities in house with the vendor.

2. Process planning for machining and metrology with details of machine's used for each stage, done in house or subcontracted.
3. Overall plan for executing the work order shall be submitted by the vendor providing visibility of all matters relating to the phases of the activity specified here in.

13. For further information/Clarifications

Dr. A.K Saxena, Dean(E) may be contacted for any other technical clarifications, preferably on or before **October 2008**.

14. Conceptual layout/Drawings if any.

The engineering drawings of the proposed Newtonian telescope are shown in Annexure B.

Annexure 'A'

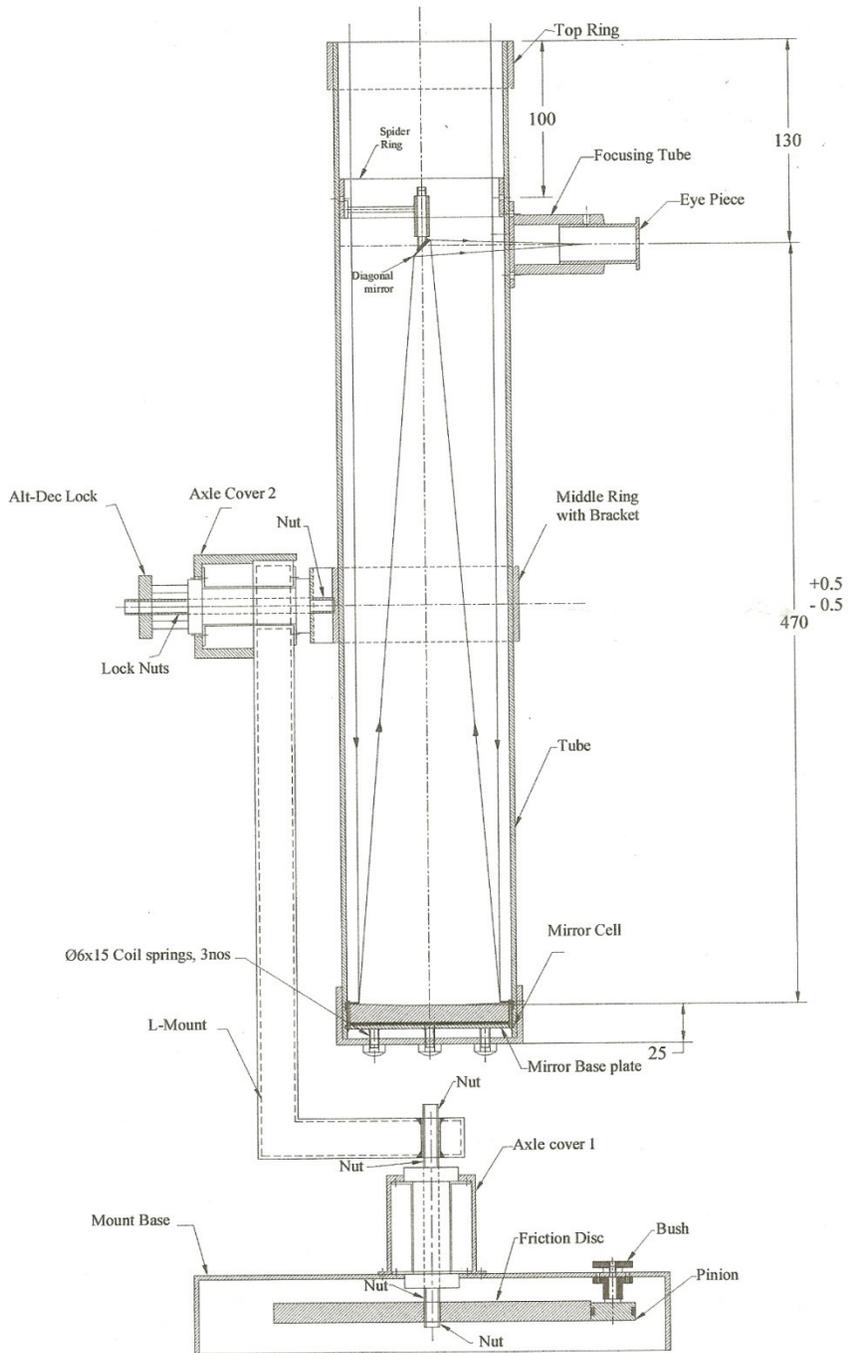
(Pictorial View of Newtonian Telescope)



11

Annexure 'B'

(Engineering drawings of Newtonian
Telescope)



PROJECT: 4" Newtonian Telescope
 General Tolerance Shall be as per IS:2709-1964 unless otherwise specified
 All Dimensions are in "mm" unless otherwise specified

100mm Newtonian Telescope
 Assembly View

Scale	DR/N	P.M.M.Kemkar	31/7/08
	Mo.tl		
	Qty		

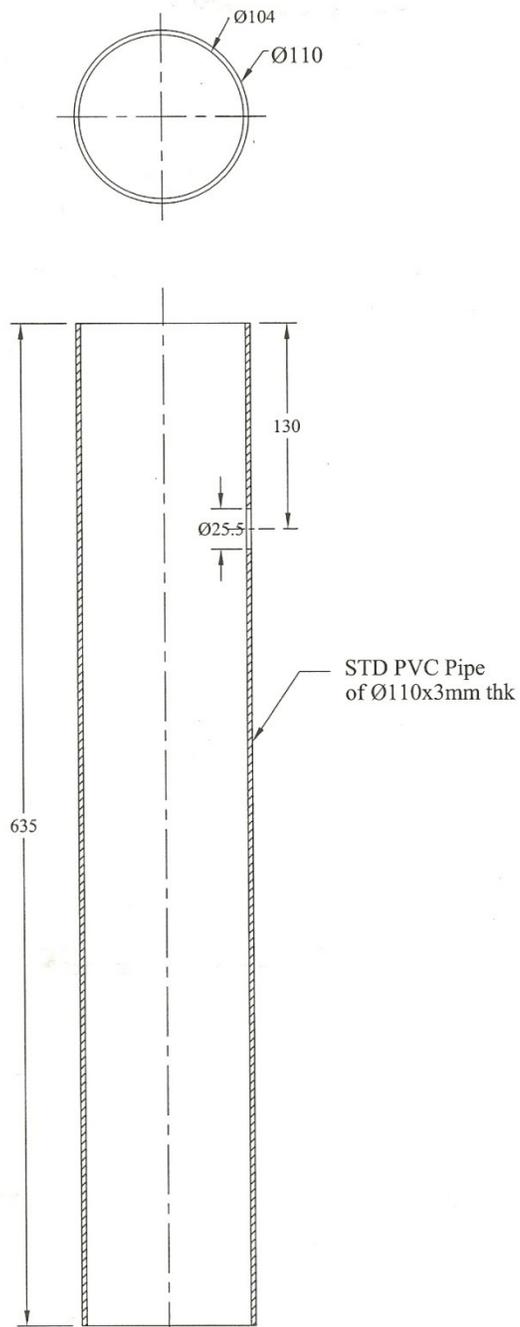


PART DRG.
 Assembly View

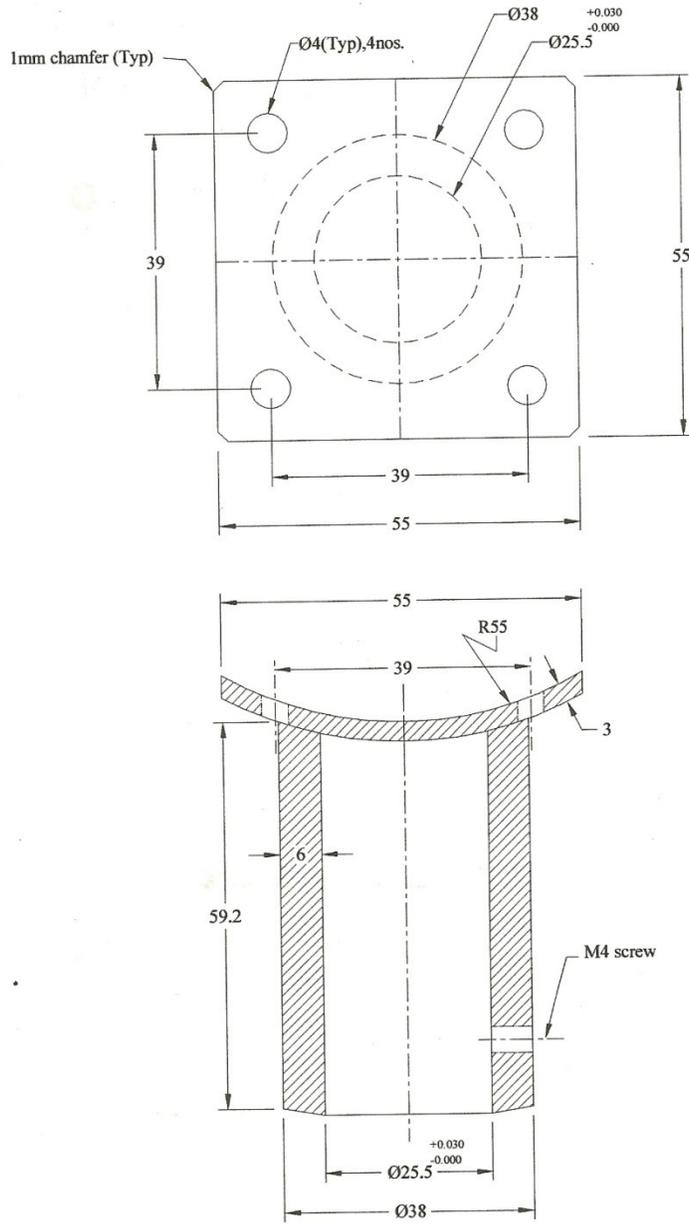


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 (Govt. of India, Ministry of Science & Technology)

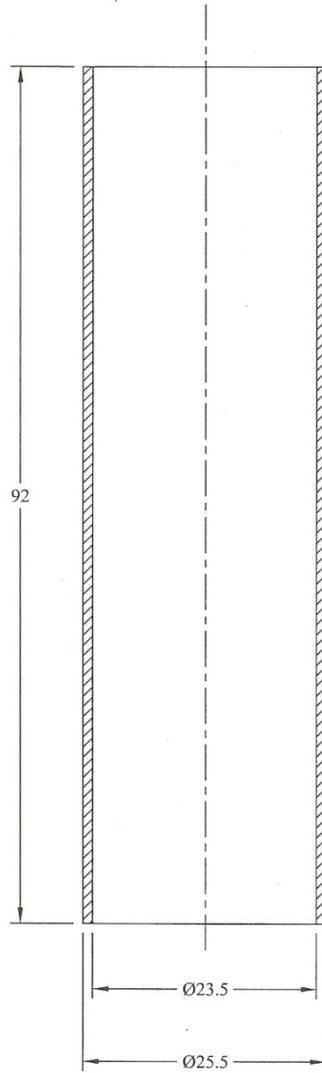
DRG. No : 0016
 Weight :



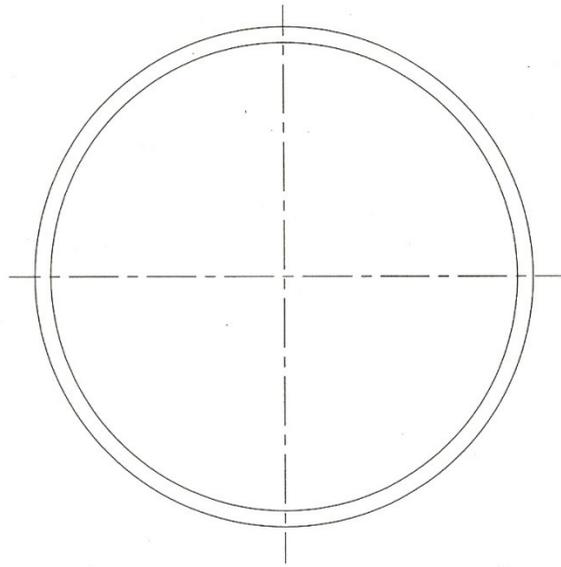
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope Telescope Tube		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Scale	DR'N	
All Dimensions are in "mm" unless otherwise specified			Ma:tl	31/7/'08
			Qty	STD PVC pipe
				1000nos
				PART DRG.
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)				TUBE
				DRG. No : 001
				Weight : 0.75kgs



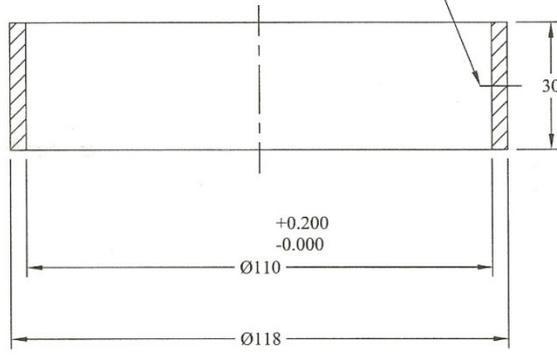
PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope Focussing Mount	
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Scale	DR'N P.M.M.Kemkar 31/7/'08
All Dimensions are in "mm" unless otherwise specified		Matl	Steel
		Qty	1000nos
 INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)	PART DRG.		
	Focussing Mount		
	DRG, No : 002		
		Weight : 0.35kgs	



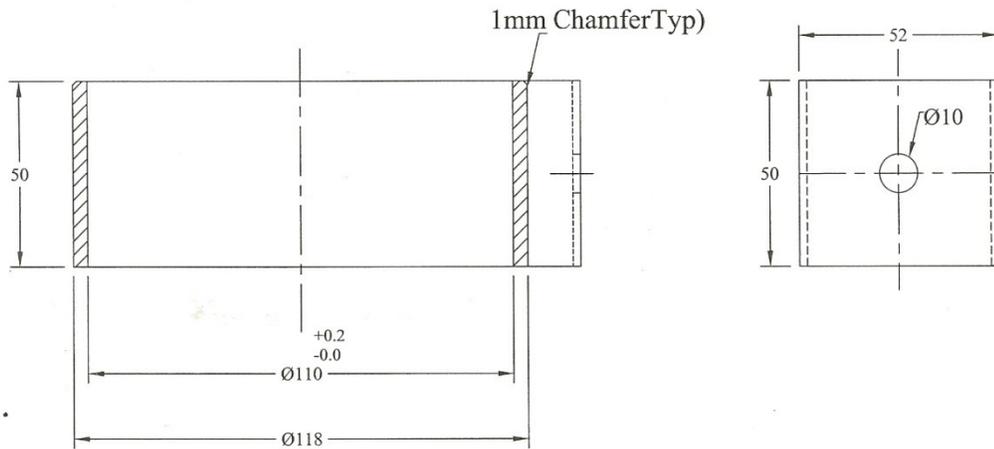
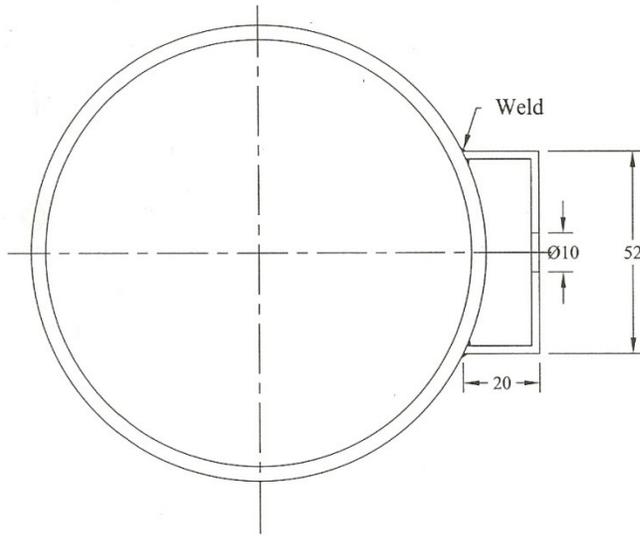
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Eye Piece Sleeve		
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/'08
	Matl	M.S.Bright Tube		
	Qty	1000nos		
	INDIAN INSTITUTE OF ASTROPHYSICS			PART DRG.
	BANGALORE - 560 034			Eye Piece Sleeve
	(Govt. of India, Ministry of Science & Technology)			DRG. No : 003
				Weight : 0.04kgs



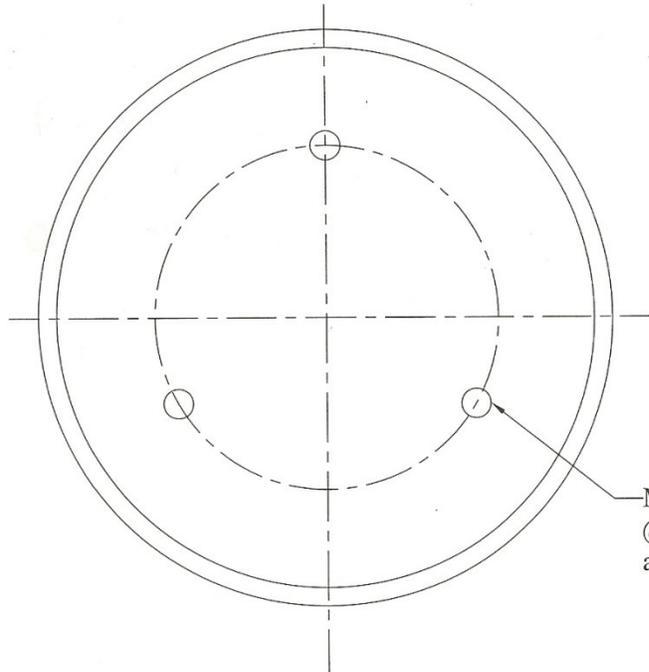
M2 self tap screws, 3 nos @120deg apart



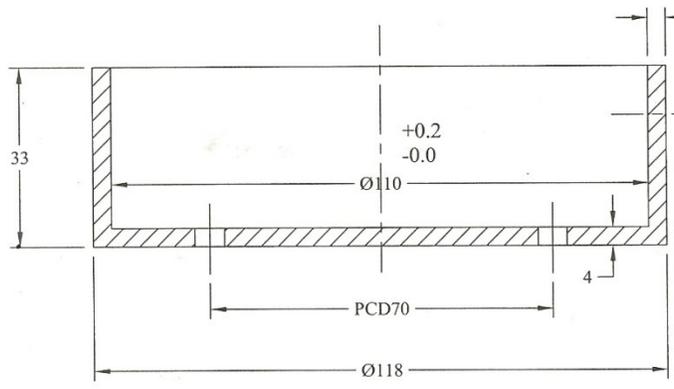
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Top Ring		
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/'08
	Matl	Steel		
	Qty	1000nos		PART DRG.
	INDIAN INSTITUTE OF ASTROPHYSICS			Top Ring
	BANGALORE - 560 034			DRG. No : 004
	(Govt. of India, Ministry of Science & Technology)			Weight : 0.34kgs



PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Middle Ring with Bracket for DEC axes			
Scale	DR'N	P.M.M.Kemkar	31/7/'08	PART DRG.	
	Mat'l	Steel			
	Qty	1000nos			
All Dimensions are in "mm" unless otherwise specified		INDIAN INSTITUTE OF ASTROPHYSICS			<small>Middle Ring with bracket for DEC axis</small>
		BANGALORE - 560 034			DRG, No : 005
		<small>(Govt. of India, Ministry of Science & Technology)</small>			Weight : 0.6kgs

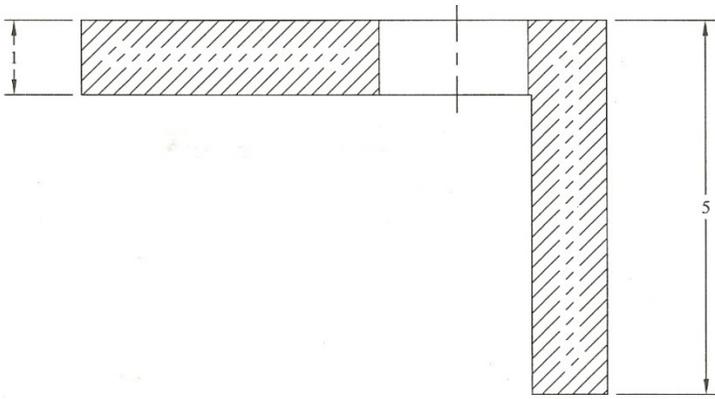
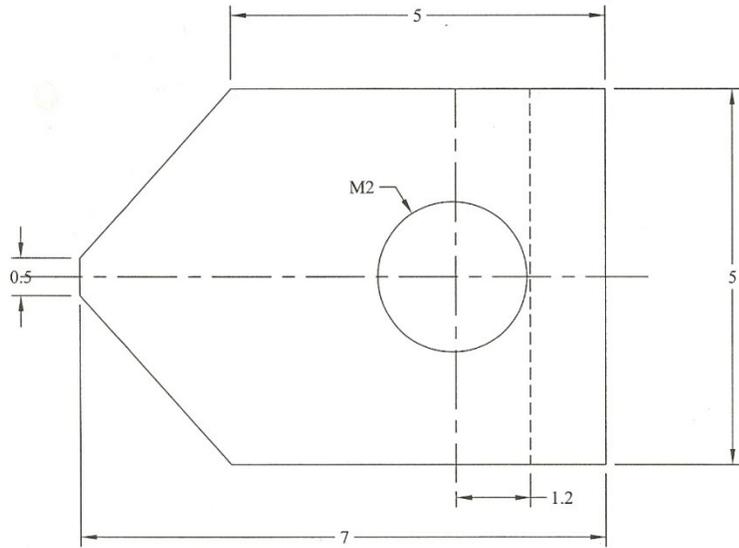


M6 through holes, 3nos
@120deg
apart on PCD70

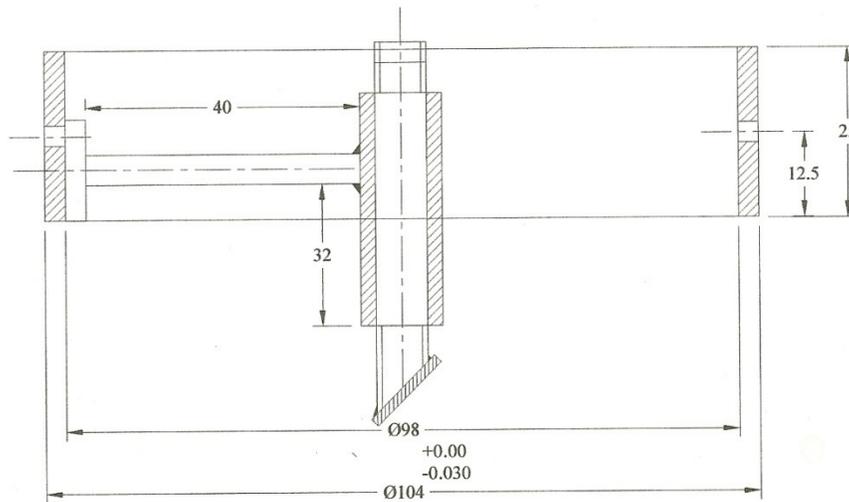
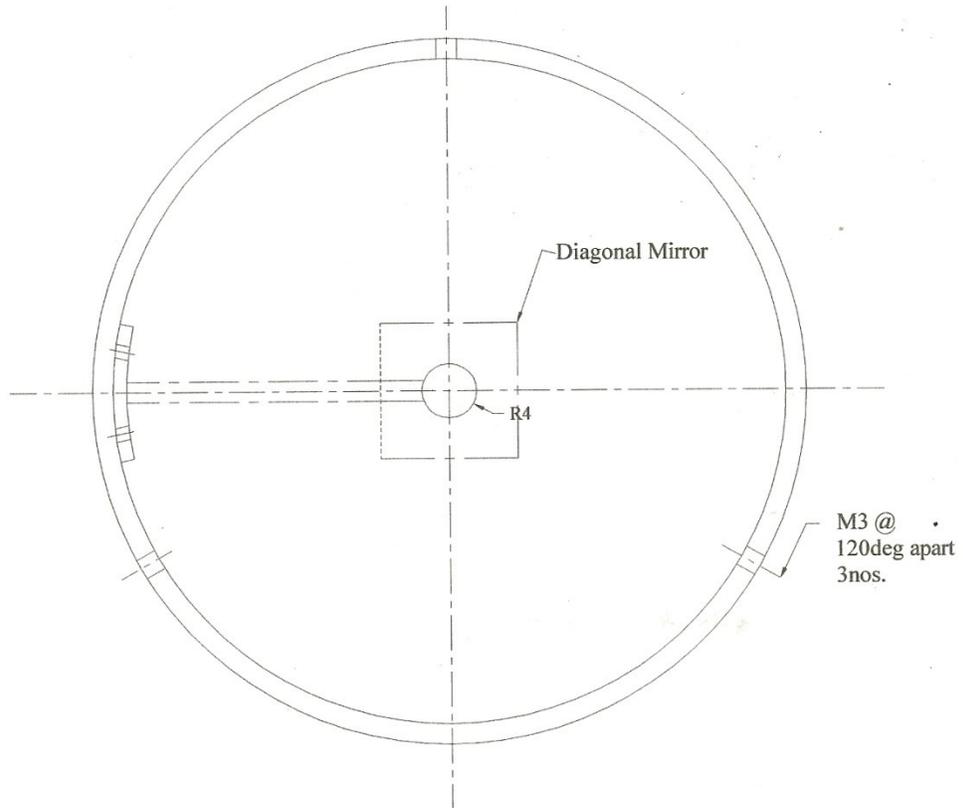


Ø3 holes, 3nos
@120deg apart

PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		MIRROR CELL			
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/08	
	Ma:tl	Steel			
	Qty	1000nos			PART DRG.
	INDIAN INSTITUTE OF ASTROPHYSICS				Mirror cell
	BANGALORE - 560 034				DRG, No : 006
	(Govt. of India, Ministry of Science & Technology)				Weight : 0.67kgs

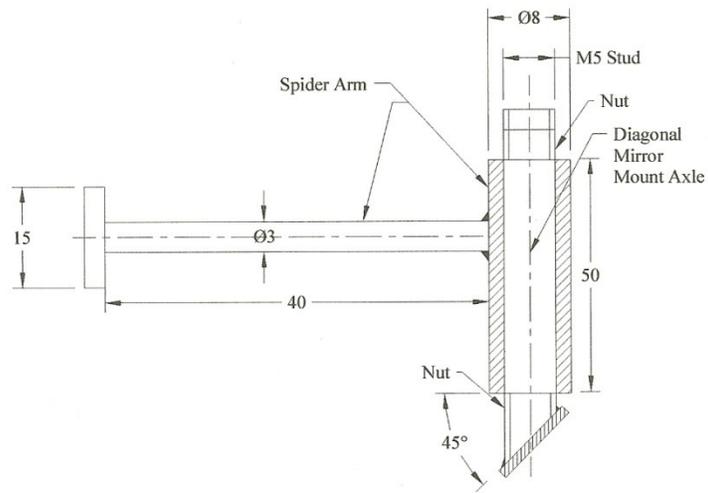
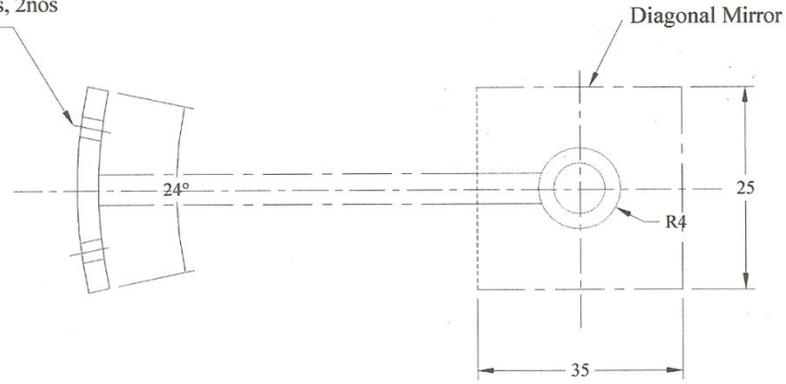


PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		MIRROR CELL LOCK PLATES		
Scale	DR'N	P.M.M.Kemkar	31/7/'08	
	Mat'l	Steel		
	Qty	1000nos		
All Dimensions are in "mm" unless otherwise specified		INDIAN INSTITUTE OF ASTROPHYSICS		PART DRG.
		BANGALORE - 560 034		Mirror cell Lock plate
		(Govt. of India, Ministry of Science & Technology)		DRG, No : 006A
				Weight :

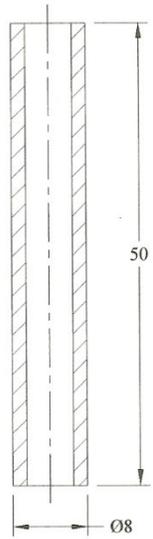
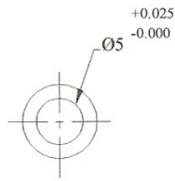


PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		SPIDER ASSEMBLY		
Scale	DR'N	P.M.M.Kemkar	31/7/'08	
	Matl	Steel		
	Qty	1000nos		PART DRG.
All Dimensions are in "mm" unless otherwise specified				Spider Assembly
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)				DRG. No : 007
				Weight :

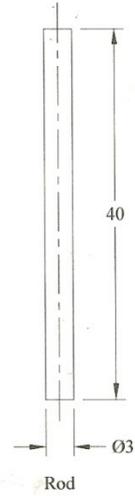
M2 screws, 2nos



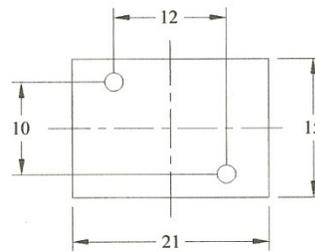
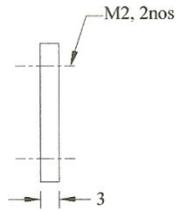
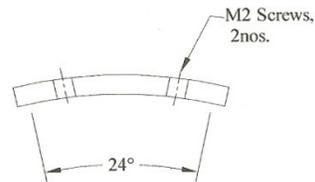
PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		SPIDER ARM ASSY DETAIL			
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/'08	
		Matl	Steel		
		Qty	1000nos		
	INDIAN INSTITUTE OF ASTROPHYSICS				Spider arm
	BANGALORE - 560 034				DRG, No : 007A
	(Govt. of India, Ministry of Science & Technology)				Weight :



Spider Arm

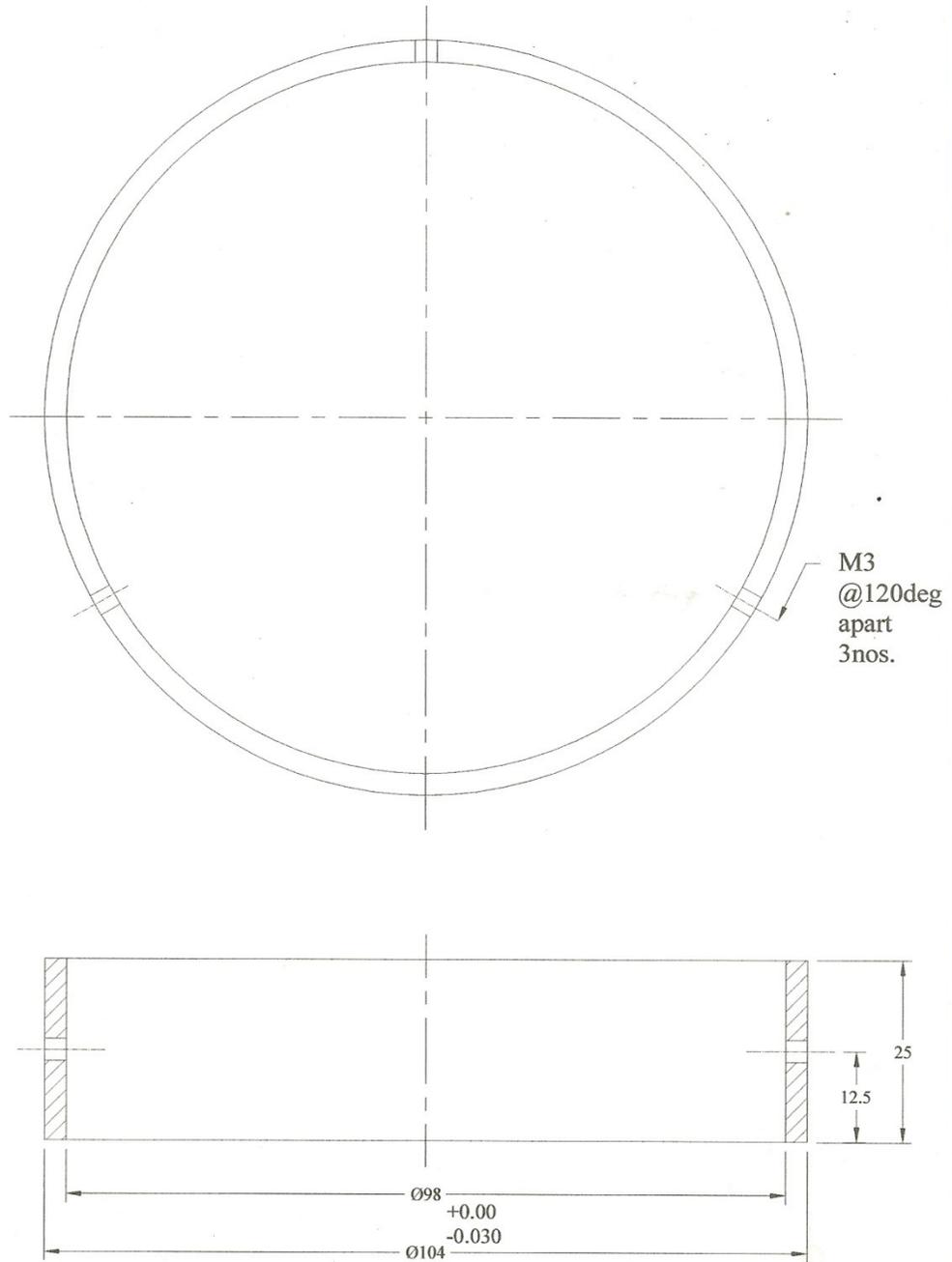


Rod

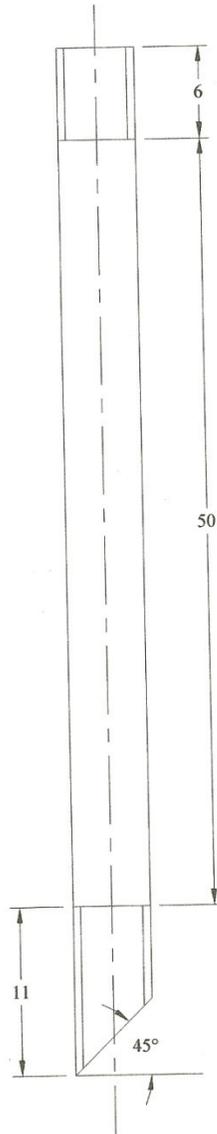


Mount Plate

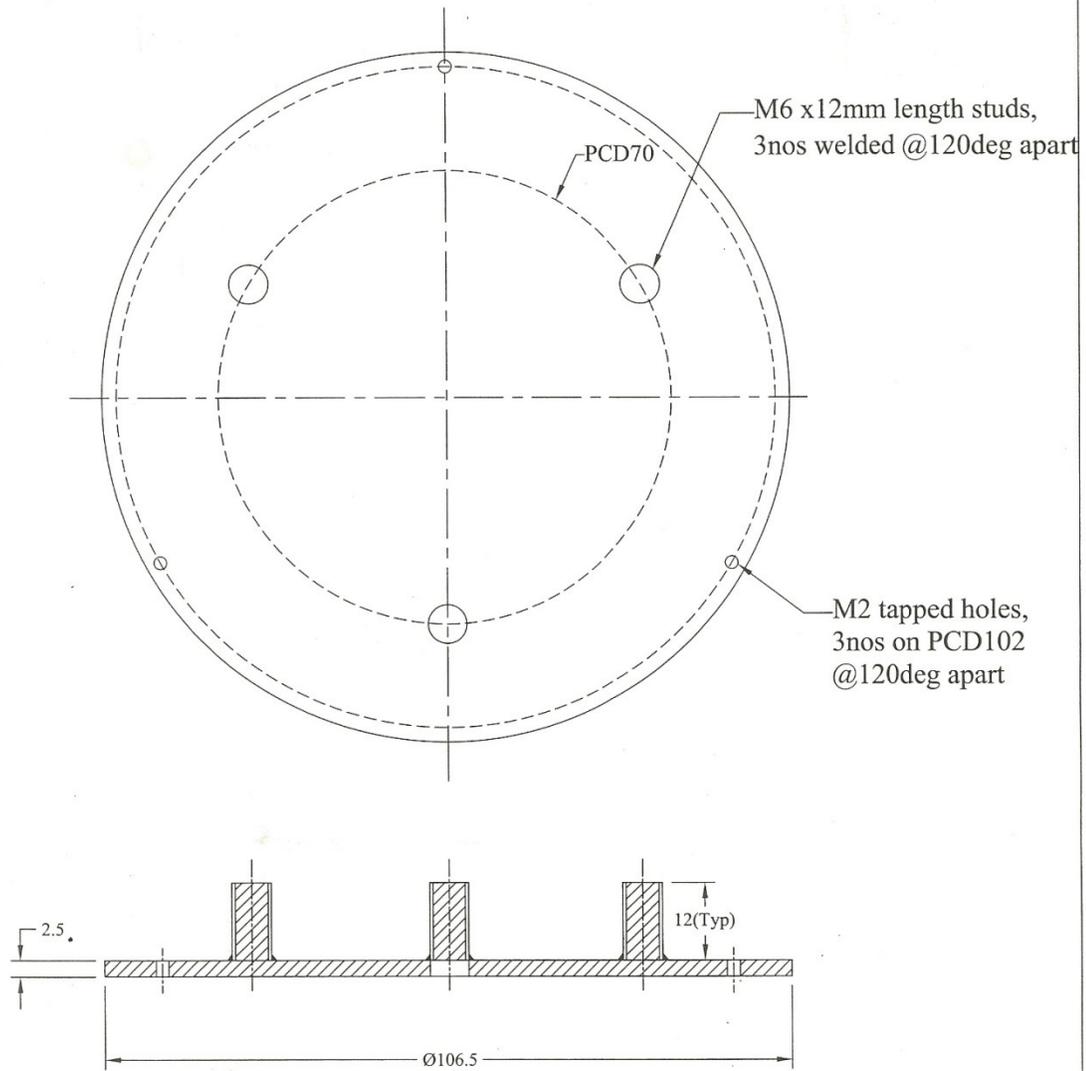
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 . unless otherwise specified		SPIDER ARM		
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/'08
		Matl	Steel	
		Qty	1000nos	
	INDIAN INSTITUTE OF ASTROPHYSICS			PART DRG.
	BANGALORE - 560 034			DRG, No : 007B
	(Govt. of India, Ministry of Science & Technology)			Weight :



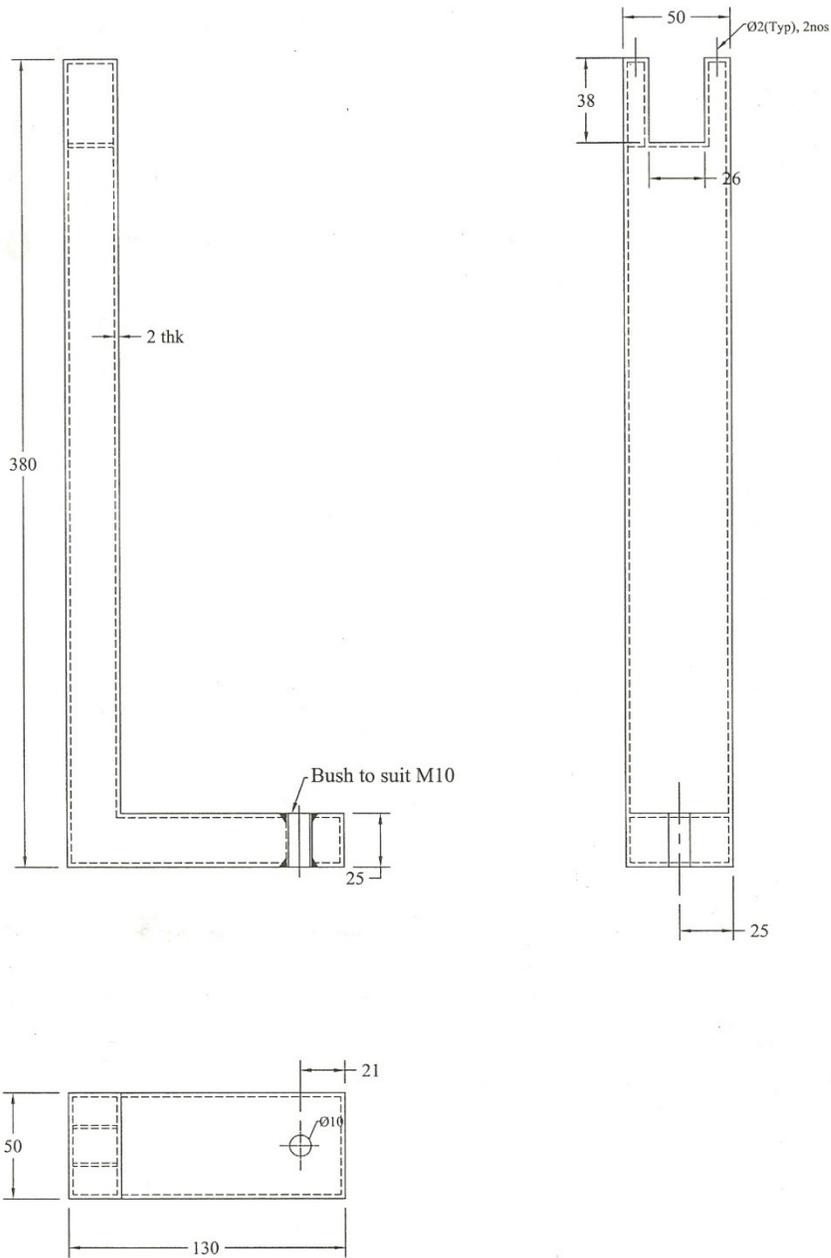
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope SPIDER RING			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Scale	DR'N	P.M.M.Kemkar	31/7/'08
All Dimensions are in "mm" unless otherwise specified		Mat'l	Steel		 PART DRG.
		Qty	1000nos		
 INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)		PART DRG.			Spider Ring
					DRG. No : 007C



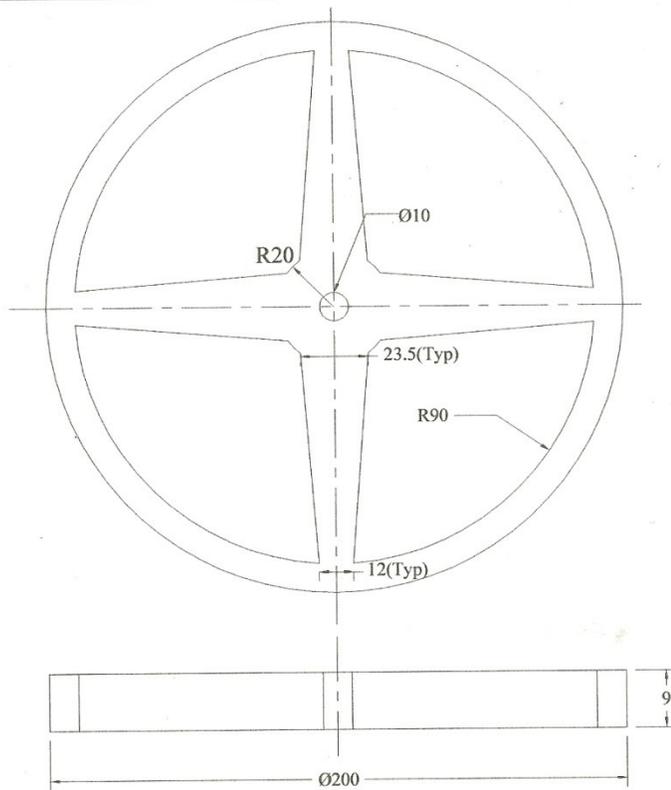
PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		DIAGONAL MIRROR MOUNT AXLE			
Scale	DR'N	P.M.M.Kemkar	31/7/08	PART DRG.	
	Matl	Steel			
All Dimensions are in "mm" unless otherwise specified		Qty	1000nos	axle	
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)				DRG, No : 007D	
				Weight :	



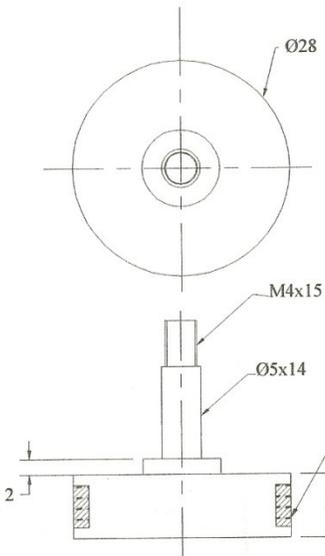
PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		MIRROR BASE PLATE			
All Dimensions are in "mm" unless otherwise specified	Scale	DR'N	P.M.M.Kemkar	31/7/'08	
	Matl	Steel		PART DRG.	
	Qty	1000nos			
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)					DRG. No : 008
					Weight :



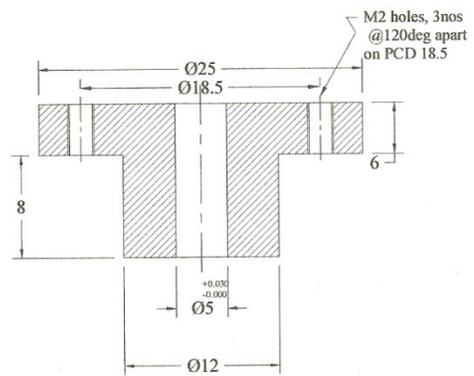
PROJECT: 4" Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		L - MOUNT		
Scale	DR'N	P.M.M.Kemkar	31/7/'08	
	Matl	Steel		
	Qty	1000nos		PART DRG.
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)				L - MOUNT
				DRG, No : 009
				Weight :



FRICTION DISC
Matl: Steel



DRIVE PINION
Matl: Steel

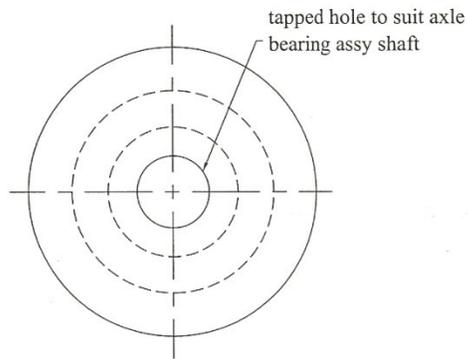
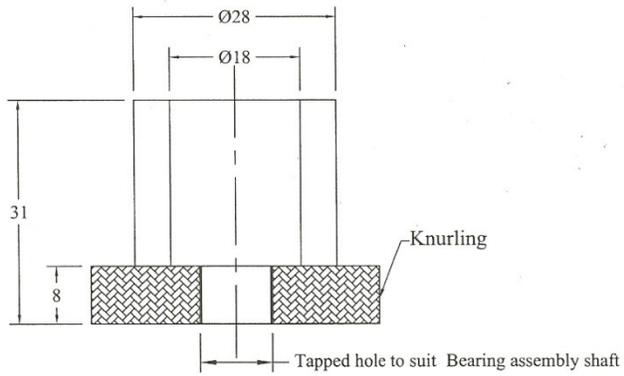


BUSH
Matl: Steel

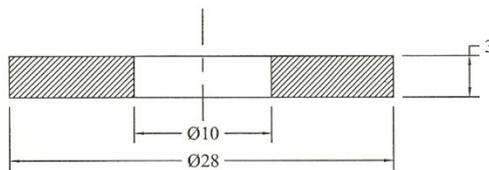
PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		FRICTION DISC, PINION & BUSH	
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		Scale	DR'N	P.M.M.Kemkar	31/7/'08
All Dimensions are in "mm" unless otherwise specified			Matl	STEEL	
			Qty	1000nos	
					PART DRG.
					Friction Disc, Pinion & Bush
					DRG. No : 0010
					Weight :



INDIAN INSTITUTE OF ASTROPHYSICS
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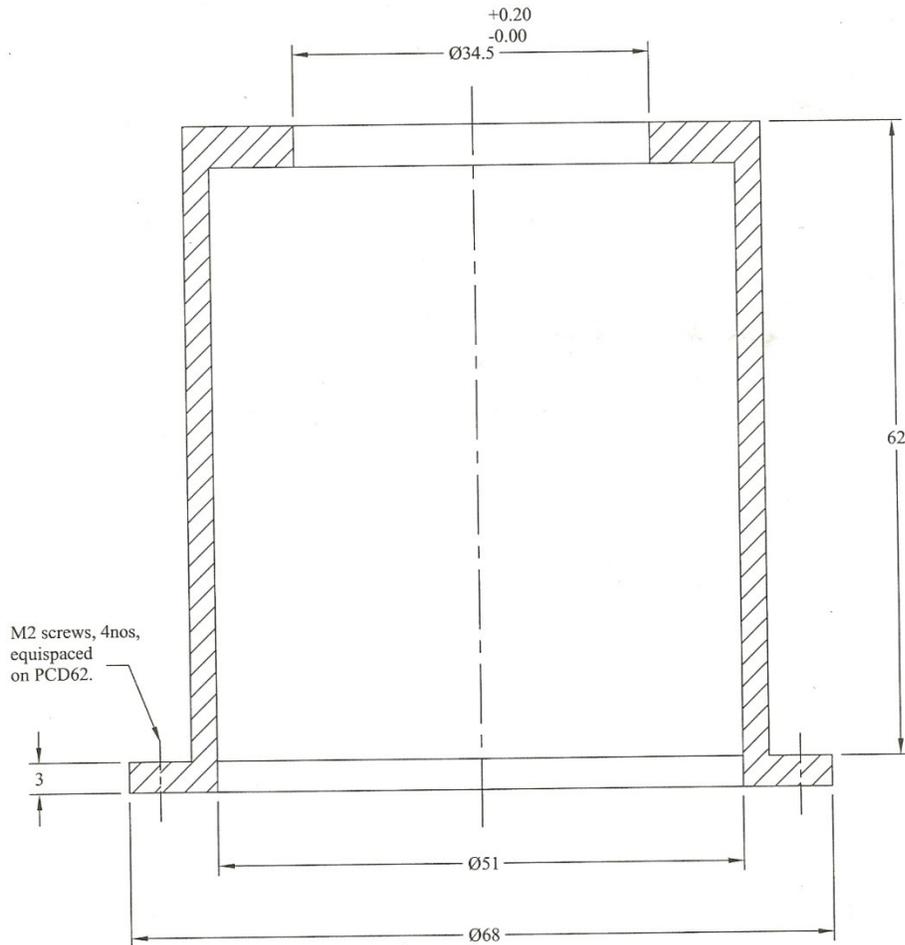


ALT/DEC Lock
Matl:Steel

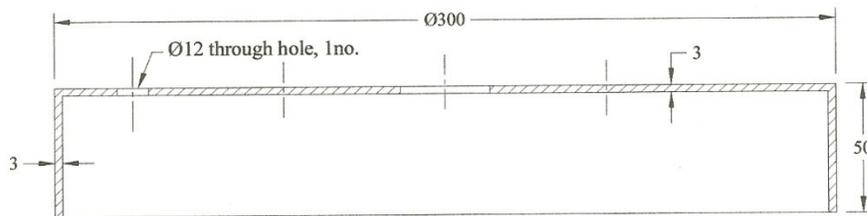
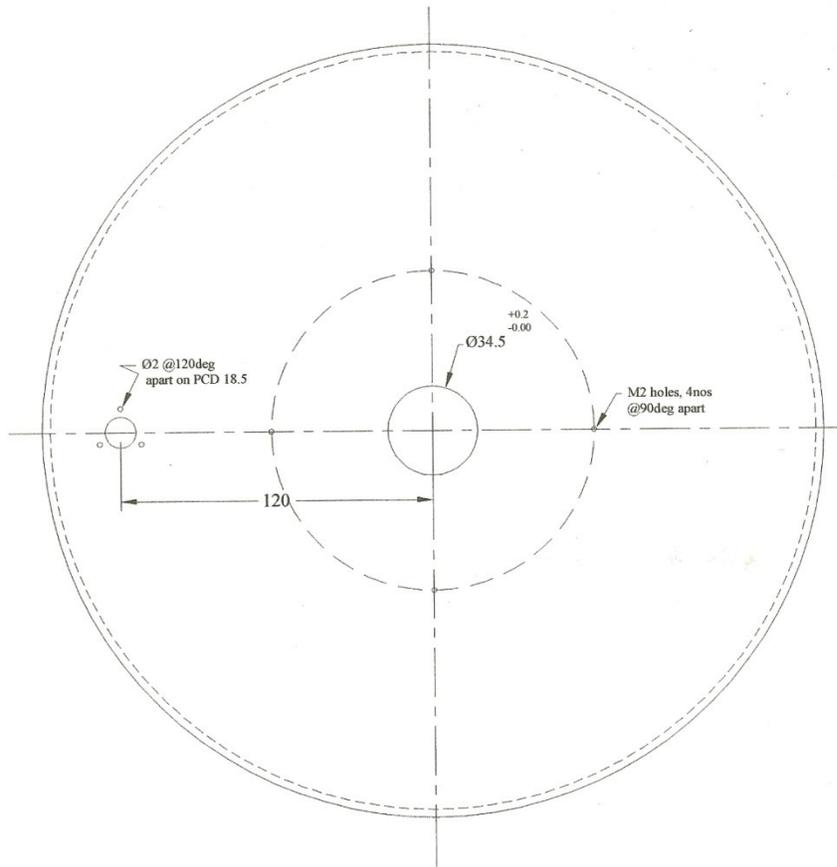


Washer
Matl:Teflon

PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		ALT/DEC LOCK & WASHER		
Scale	DR'N	P.M.M.Kemkar	31/7/'08	PART DRG.
	Matl	STEEL & TEFLON		
	Qty	1000nos		ALT/DEC LOCK & WASHER
INDIAN INSTITUTE OF ASTROPHYSICS BANGALORE - 560 034 (Govt. of India, Ministry of Science & Technology)				DRG, No : 0011
				Weight :



PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope		
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		AXLE COVER 1		
Scale	DR'N	P.M.M.Kemkar	31/7/'08	
	Matl	Steel		
All Dimensions are in "mm" unless otherwise specified	Qty	1000nos		PART DRG.
	INDIAN INSTITUTE OF ASTROPHYSICS			AXLE COVER 1
	BANGALORE - 560 034			DRG. No : 0012
	(Govt. of India, Ministry of Science & Technology)			Weight :



PROJECT: 4"Newtonian Telescope

General Tolerance Shall be as per IS:2709-1964, unless otherwise specified

All Dimensions are in "mm" unless otherwise specified

100mm Newtonian Telescope
TELESCOPE BASE

Scale	DR'N	P.M.M.Kemkar	31/7/'08
	Matl	Steel	
	Qty	1000nos	

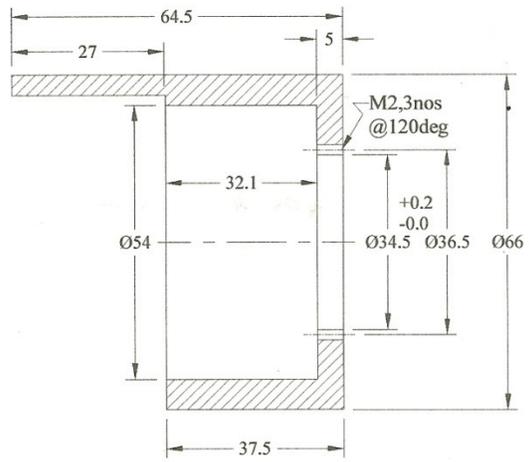
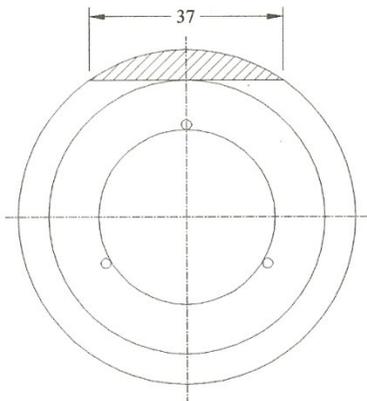


PART DRG.
Telescope BASE

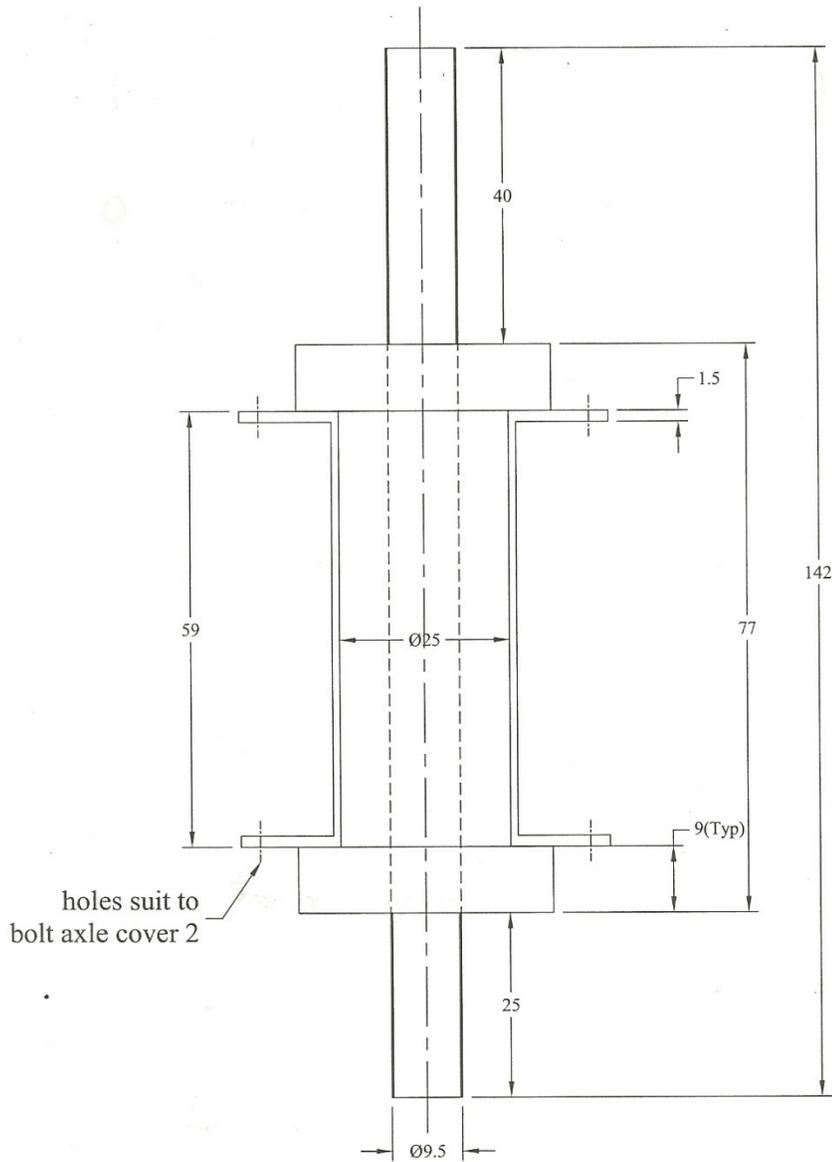


INDIAN INSTITUTE OF ASTROPHYSICS
BANGALORE - 560 034
(Govt. of India, Ministry of Science & Technology)

DRG, No : 0013
Weight :



PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope AXLE COVER 2		
General Tolerance Shall be as per IS:2709-1964, unless otherwise specified				
Scale	DR'N	P.M.M.Kemkar	31/7/'08	PART DRG. Axle cover 2
	Matl	Steel		
	Qty	1000nos		
All Dimensions are in "mm" unless otherwise specified		INDIAN INSTITUTE OF ASTROPHYSICS		DRG, No : 0014
		BANGALORE - 560 034		Weight :
		(Govt. of India, Ministry of Science & Technology)		



holes suit to
bolt axle cover 2

PROJECT: 4"Newtonian Telescope		100mm Newtonian Telescope			
General Tolerance Shall be as per IS:2709-1964 unless otherwise specified		AXLE & BEARING ASSY(CYCLE WHEEL HUB ASSY)			
Scale	DR'N	P.M.M.Kemkar	31/7/'08		
	Matl	Brought out			
All Dimensions are in "mm" unless otherwise specified		Qty	2000nos	PART DRG.	
		INDIAN INSTITUTE OF ASTROPHYSICS		Bearing Assembly	
		BANGALORE - 560 034		DRG, No : 0015	
		(Govt. of India, Ministry of Science & Technology)		Weight :	

Annexure – III

INSTRUCTIONS TO TENDERERS

1. Tenders should be sent in sealed and superscribed envelopes with mention of Tender No. date and date of opening.
2. Late and Delayed Tender will not considered at all.
3. Duties, Taxes where legally leviable and intended to be claimed should be distinctly shown separately in the Tender.
4. As a Govt. of India Department, this office is exempted from the payment of Octroi Duty and similar local levies (but not providing any C or D forms). Tenderers shall ensure that necessary exemption certificates are obtained from the officer concerned to avoid any payment of such levies.
5. a) Your quotation should be valid for 120 days from the date of opening of tender.
b) Prices are required to be quoted accordingly to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
6. Preference will be given to those tenders offering supplies from ready stocks and on the basis of F.O.R Destination/Free door delivery at Site.
7. a) All available Technical Literature(s), Catalogue(s) and other data in support of the specifications and details of the item(s) should be furnished along with the offer.
b) Samples, if any, called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer shall have to remove the samples at his own expense.
c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should indicated in your offer.

d) SPECIFICATIONS:-

Stores offered should strictly conform to our specifications. Deviation, if any should be clearly indicated by the tenderer in their quotation. The tenderer should also indicate the Make/type No. of the stores offered and provide catalogue(s), Technical literature(s) and sample(s), wherever necessary along with the quotations. Test certificates wherever necessary should be forwarded along with the supplies. Whenever options are called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us the tenderer could suggest changes to specifications with appropriate response for the same.

1. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the tenderers shall supply the same at the rates quoted.
2. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.
3. The Tenderer should supply along with the tender, the name of his bankers as well as the latest Income Tax Clearance Certificate duly countersigned by the Income Tax Officer of the circle concerned under the seal of his office.
4. The Purchaser reserves the right to place order on the successful tenderers for additional quantity upto 25% of the quantity offered by them at the rates quoted.
5. The authority of the person signing the tender, if called should be produced.
6. Complete system configuration and sub-system design details should have approval of the purchaser before actual fabrication or procurement process.
7. A complete set of instruction and operation manual should be supplied at the time of installation.
8. Final performance should be guaranteed at the site.

TERMS AND CONDITIONS OF CONTRACT

1. DEFINITIONS:

- a). The terms 'Purchaser' shall mean the Director, Indian Institute of Astrophysics, Bangalore-560 034.
- b). The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the contract.
- c). The 'Stores' shall mean that contractor agrees to supply under the contract as specified in the Purchase Order including erection of Plants and machinery and subsequent testing, should such a condition be included in the Purchase Order.
- d). The terms 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf the Purchaser on the terms and conditions mentioned or referred to in the said communications accepting the tender or offer of the contractor for supply of stores or plant, machinery or equipment or part thereof.

2. PRICES:

Tenders, offering firm prices will be preferred, where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations.

3. DUTY EXEMPTION

- (a) Excise duty exemption certificate will be provided if considered against the categories of items tendered, under the Govt. of India Notification No. 10/97 valid till 2011.

4. SECURITY DEPOSIT:-

On acceptance of Tender, the Contractor shall, at the option of the Purchaser and within the period specified by him deposit with him in cash or any other form as the Purchaser may determine, Security deposit not exceeding ten percent of the value of the contract as the Purchaser shall specify. If the contractor is called upon by the purchaser to deposit 'Security' and the contractor fails to provide the security within the period specified, such failure shall constitute a breach of the contract and purchase shall be entitled to make other arrangements for the re-purchase of the stores contracted for at the risk of contractor in terms of sub-clause (ii) and (iii) of clause 10 (b) hereof and/or to recover from the contractor damages arising from such cancellation.

5. GUARANTEE AND REPLACEMENT:-

- a) The contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material workmanship and performance.
- b) For a period of **(12)** twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use arising from faulty stores, design or workmanship, contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the store or any part thereof are faulty.
- c) If in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser provided the notice informing the contractor of the defect is given by the purchaser in this regard within the said 14 months from the date of acceptance thereof.
- d) Should the contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the contractor the whole or any portion of the defective stores.
- e) The decision of the purchaser, notwithstanding any prior approval of acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the contractor are defective or any defects has developed within the said period of 12 months or as to whether the nature of the defectives required renewal or replacement shall be final, conclusive and binding on the contractor

f) To fulfill guarantee conditions outlined in Clause 5(a) to (d) above, the contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 10% of the value of the contract along with first shipment documents. On the performance and completion of the contract in all respects, the Bank Guarantee will be returned to the contractor without any interest.

g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.

h) Even while the 12 months guarantee applied to all stores in case where a greater period is called forth by our specifications then such a specification shall apply; in such cases the period of 14 months referred to in Para 5(b) and (c) shall be 'asked for' guarantee period plus two months.

6. PACKING, FORWARDING AND INSURANCE:

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air, to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packing shall be done by and at the expenses of the contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the contractor and the Purchaser shall pay only for such stores as are actually received in good condition, in accordance with contract.

7. TEST CERTIFICATE:

Wherever required Test Certificate should be sent along with the relevant dispatch documents.

8. ACCEPTANCE OF STORES:-

- a) The Stores shall be tendered by the contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expenses and cost.
- b) It is expressly agreed that the acceptance of stores, contracted for is subject to final approval by the Purchaser, whose decision shall be final.
- c) If, in the opinion of the Purchaser all or any of the stores that do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at the price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the contractor.
- d) If the whole or any part of the store supplied are rejected in accordance with Clause No.8 (c) above, the Purchaser shall be at the liberty, with or without notice to the Contractor, to purchase in the open market at the expenses of the Contractor, stores meeting the necessary performance and quality contracted for in place of these rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

9. REJECTION OF STORES:

Rejected Stores will remain at the destination at the Contractor's risk and responsibility, if instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice or rejection, the Purchaser or his representative has, at his discretion the right to scrap or seal or consign the rejected stores to the Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

10. DELIVERY PERIOD:

a) The delivery period of the stores stipulated in the Purchase order shall be deemed to be the essence of the Contract, and delivery must be completed on or before the specified dates / period.

b) Should the Contractor fails to deliver the stores or any consignment thereof within the period prescribed for such delivery, the Purchaser shall be entitled at his option either.

i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 2% of the price of any stores which the contractor has failed to deliver as aforesaid for each month or part of a month, during which the delivery of such stores may in arrears, or

ii) to purchase elsewhere, without notice to the Contractor on the account and at the risk of the contractor, the stores not delivered or others of similar description (where other exactly complying with the particulars are not, in the opinion of the purchaser readily procurable, such opinion being final) without canceling the Contract in respect of the consignment(s) not yet due for delivery or,

iii) to cancel the contract or a portion thereof, and, if so desired to purchase or authorize the purchase of stores not so delivered or others of similar description (where others exactly complying with the particulars are not, in the opinion of the purchaser readily procurable, such opinion final) at the risk and cost of the Contractor.

In the event of action being taken under sub-clause (ii) and (iii) of clause 10 above, the contractor shall be liable for any loss which the Purchaser may sustain on that account, provided that the re-purchase, or, if there is an agreement to re-provide shall made within (6) six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. It shall not be necessary for the purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall without prejudice to the right of the purchase to recover damages for breach of contract by the Contractor.

-: 7 :-

11. EXTENTION OF DELIVERY TIME:

As soon as it is apparent that Contractor delivery period / dates cannot be adhered to, an application shall be sent by the Contractor to the Purchaser. If failure, on the part of the Contractor to deliver the stores in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final he may allow such additional time as he considers it to be justified by the circumstances of the case without prejudice to the Purchaser's rights to recover liquidated damages under clause 10(i)(ii) and (iii).

12. PAYMENT:

Contractor's Bill will be passed only after the stores have been received, inspected and accepted by the Purchaser for payment.

13. RECOVERY OF SUMS DUE:

Whenever there is a breach of contract whether liquidated or not, money arising out of or under this contract against the contract, the Purchaser shall be entitled to recover such sum by appropriating, in part or whole, the security deposited by the Contractor, if a Security is taken against the contract. In the event of the Security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be shall be deducted from any sum then due or which at any time thereafter may become due to the contractor under this or any other contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due. Similarly, if the purchaser has or makes any claims, whether liquidated or not, against the Contractor under any other contract with the purchaser, the payment of all moneys payable under the contract to the Contractor including the Security Deposit shall be withheld till such claims of the Purchaser are finally adjudicated upon and paid by the Contractor.

14. INDEMNITY:

The Contractor shall warrant and be deemed to have warranted that all stores supplied against this contract are free and clean of infringement of any patent, copy right or trade mark, and shall at all time indemnify the purchaser against all claims which may be made in respect of the stores for infringement of any right protected by patent, registration of design or trade mark and shall take all risk of accidents of damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all the means used by him for the fulfillment of contract.

-: 8 :-

15. ARBITRATION:

In the event of any question, dispute or difference arising under these conditions contained in the purchase order in connection with this contract, (except as to any matters the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of the Head of the Institution or of some other person appointed by him. It will be no objection that the arbitrator is a Government Servant, that he has to deal with matter to which the Contract relates or that in the course of his duties as Government Servant he has expressed views on all or any of the matters in dispute binding on the parties of this Contract.

(a) TERMS OF THIS CONTRACT:

If the Arbitrator be the Head of the Institution

i). In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with the reference himself, or to appoint another person as arbitrator, or,

ii). In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Institution, to appoint another person as arbitrator or,

(b) If the Arbitrator be a Person appointed by the Head of the Institution:-

In the event of his death, neglecting or refusing to act, or resigning or being unable to act for any reason, it shall be lawful for the Head of the Institution either to proceed with reference himself or to appoint another person as arbitrator in place of the outgoing arbitrator. Subject as aforesaid, the Arbitration Act, 1940 and the rules there under and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making a publishing the award. The venue of Arbitration shall be the place as the Purchaser. In his absolute discretion may determine. Work under the contract shall if reasonably possible, continue during Arbitration proceedings.

16. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:

Where Counter Terms and Conditions/printed or cyclostyled conditions have been offered by the Supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.

17. SECURITY FOR PURCHASER'S MATERIAL(S):

Successful Tenderer will have to furnish in the form of a Bank Guarantee or any other form as called for by the Purchaser towards adequate security for the materials/property provided by the Purchaser for the due execution of the Contract.