



राष्ट्रीय उन्नत विनिर्माण प्रौद्योगिकी संस्थान  
(पूर्व नेशनल इंस्टीट्यूट ऑफ फाउंड्री एंड फोर्ज टेक्नोलॉजी)  
हटिया, राँची - 834 003 (झारखण्ड)

**National Institute of Advanced Manufacturing Technology**  
(Formerly National Institute of Foundry and Forge Technology)  
Hatia, Ranchi – 834 003 (Jharkhand)

सं No. – NIAMT/S&P/70/2025-26

दिनांक Date - 29/7/2025

Limited Tender Enquiry

To,

LAST DATE FOR RECEIPT OF BID

ON 18/8/25 BY 3:00 PM

OPENING OF BID

ON 18/8/25 AT 3:30 PM

Sir/Madam,

We intend to purchase the commodities specified below and invite quotations in accordance with the terms and conditions mentioned overleaf. If you are interested, kindly send your offer by Speed/Registered Post with filled Annexures, price and complete terms on or before date mentioned above

Item No.	Description of Item	Qty.	EMD	Performance Security
1.	Thermal Conductivity Measuring Apparatus (Specification enclosed in Annexure -5)	1	₹4,600	5% of P.O.

## **TERMS & CONDITIONS FOR SUBMISSION OF QUOTATION**

1. **Rate:** The rate quoted must be net inclusive of packing, forwarding, freight, and all other incidental charges. The stores are required to be delivered at this Institute under the supplier's own arrangement free of additional charges. The risk of damage or loss in transit, if any, will be the suppliers. In case the aforesaid terms are not considered, the acceptable charge payable will be required to be specified clearly at ad variorum or lump sum rate. Manufacturer's price list wherever applicable, should be submitted. Packing, forwarding, freight, entry tax etc., when not included in the price, are reimbursable at actual. If external agencies are employed, their receipts must be enclosed with the invoice.
2. **EMD/Bid Security:** Bid Security/EMD may be furnished in the form of A/c payee demand draft, Fixed Deposit Receipt, Bank Cheque or Bank Guarantee from any commercial banks or ₹ 4,600/- to be submitted online (RTGS/NEFT) in the following Institute a/c-

- a. Name of Beneficiary: **National Institute of Advanced Manufacturing Technology (NIAMT)**
- b. Account No.: **2730101006939**
- c. Name of Bank: **Canara Bank, NIFFT CAMPUS Branch,**
- d. Bank Address: **Hatia, Ranchi – 834 003 (Jharkhand)**
- e. IFS Code: **CNRB0002730**
- f. MICR Code: **834015008**
- g. Swift Code: **CNRBINBBCFD**

Bidders registered with MSME for services and upon submitting valid certificate will be exempted from submission of EMD. The details of transaction for EMD viz. Name of bidder firm, Tender Description, Transaction ID Number Transaction date, Amount of Transaction, Name of Bank, Address of Bank shall be furnished by the tenderer on their letterhead separately along with their tender.

3. **Taxes:** Excise Duty and GST should be quoted as separate items. It may be noted that the Institute is exempt and/or entitled for concessional rate. An appropriate certificate in prescribed format will be provided with the Purchase Order, wherever applicable.
4. **Warranty:** Items must be under warranty for minimum **one year(s)**. The quotation must contain the terms of warranty, and extended warranty, if available.
5. **Delivery Period:** The stores are required to be delivered at our location within **30 days** from the date of issue of the Purchase Order. Purchase Order will be sent by post with a scan copy by email. All offers of delivery should be made ex-stock, and a clear note should be inserted in case exstock delivery is not possible.
6. **Quality & Specification of Stores:** The stores offered should be of the best quality available, unless otherwise specified, confirming strictly to the specifications cited. The Institute reserves the right to reject the stores as found unacceptable on these grounds.
7. **Performance Security:** To ensure due performance of contract, Performance Security is required to be submitted by successful bidder has been awarded the contract. The Performance Security will be **5%** of the value of the contract. The Performance Security may be furnished in the form of Account payee, Demand Draft, Fixed Deposit, Bank Guarantee from nationalized bank or online payment. The Performance Security shall remain valid for period 60 days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations.
8. **Liquidated Damage:** If a firm accepts an order and fails to execute the order in full or part as per the terms and conditions stipulated therein, it will be open to this Institute to recover liquidated damages from the firm

at the rate 0.5% of the value of the undelivered stores per week or part thereof, subject to a maximum of 10% of the value of the undelivered stores. It will also be open to this Institute alternatively, to arrange procurement of the required stores from any other source at the risk and expense of the firm, which accepted the order but failed to execute the order.

9. **Submission of Quotation:** All quotations must be forwarded in sealed cover addressed to **Asst. Registrar (S&P), National Institute of Advanced Manufacturing Technology, Hatia, Ranchi-834003**, so as to reach within the specified date and time. The reference to the Enquiry No. and the last date for submission must clearly be super-scribed on the sealed envelope. To ensure receipt of quotations in time intending suppliers are advised to mail them sufficiently in advance. If no counteroffer is made in the quotation, it will be taken for granted that the offer is strictly in accordance with the specification and terms and conditions laid down in this enquiry. Quotations may be sent by Speed/Registered Post or courier or delivered in person. There is no provision for giving a receipt if the quotation is delivered in person.
10. **Opening of Quotation:** Quotations received within the scheduled time and date will be opened in the Administrative Building, First Floor at the time mentioned. A firm may send its authorized representative to witness the opening, if it so desires.
11. **Period of Validity:** A quotation shall remain valid for acceptance at least for a period of 180 days from the date of opening.
12. **GST & Income Tax Clearance:** Up-to-date GST & Income Tax Clearance Certificate should be attached with the quotation.
13. **Payment:** Payment will be made online by RTGS/NEFT only normally within 30 days from the date of receipt of the stores in good condition, and the invoice.
14. **Rejection of Offers:** The Institute reserves the right to ignore or reject any or all offer(s) including the lowest one without assigning any reason.

  
29/7/2025  
Asst. Registrar (S&P)

**SIGNATURE OF TENDERER**

**ALONG WITH SEAL OF THE COMPANY WITH DATE**



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**Annexure – 1**

**PRICE REASONABILITY CERTIFICATE**

This is to certify that we have offered the maximum possible discount to you in our Quotation No.

.....dated.....for (Value Rs.) .....

We would like to certify that the quoted price are the minimum and we have not quoted the same item on lesser rates than those being offered to NIAMT to any other customer within last 12 months from the last date of submission of quotation nor we will do so till the validity of offer or execution of purchase order, whichever is later.

**Seal and Signature of the tenderer**



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Annexure - 2

Name of Equipment with Model No: .....

Name & Address of Manufacturer: .....

Price Quoted:

A. For Indigenous Equipment :

- i) Cost of equipment (Rs.): .....
- ii) GST (Rs.) : .....
- iii) Any other charges (Rs.) : .....
- iv) Total cost of equipment (in Rs.) F.O.R, NIAMT, Ranchi. : .....

B. For Imported Equipment:

- i) Cost of equipment (In Foreign Currency): .....
- ii) Packing and Forwarding: .....
- iii) CIF Price: .....
- iv) Freight charges up-to Ranchi Airport / Ranchi Railway Station: .....
- v) Insurance (110% of the cost of the equipment): .....
- vi) For NIAMT Ranchi: .....

Signature of Tenderer with date and seal



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**Annexure - 3**

**BID PARTICULARS**

1. Name of the Supplier:
2. Address of the Supplier:
3. Availability of demonstration of equipment: Yes / No
4. Tender cost enclosed: Yes/No if yes
5. Online EMD submission information enclosed: Yes / No if Yes  
Transaction ID/No. of Transfer:.....  
Transaction date: .....  
Amount of Transaction: .....  
Name of Bank: .....  
Address of Bank: .....
6. Name and address of the Officer/contact person to whom all references shall be made regarding this tender enquiry

Name:

Address:

Ph:

Fax:

Mobile:

Email:

Web:





राष्ट्रीय उन्नत विनिर्माण प्रौद्योगिकी संस्थान

(पूर्व नेशनल इंस्टीट्यूट ऑफ फाउंड्री एंड फोर्ज टेक्नोलॉजी)

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Annexure – 4A

Compliance Statement for the Tender Specifications

Tender Ref No.:

Sl. No.	Check list of documents / Undertakings	Yes / No	Remarks (give explanation if the answer is No)
01.	Is EMD details attached? (if applicable)		
02.	Is the bidder original equipment manufacturer (OEM)/authorized dealer?		
03.	If authorized dealer, recent dated certificate to this effect from OEM, attached or not?		
04.	Undertaking from OEM regarding technical support & extended warranty period.		
05.	Validity of 180 days or not?		
06.	Price Reasonability Certificate enclosed as per format?		
07.	Undertaking from bidder regarding acceptance of tender Terms & Conditions		
08.	Whether list of reputed users (along with telephone numbers of contact persons) for the past three years specific to the instrument attached?		
09.	Does the instrument comply with all the specifications detailed? Attach a separate sheet showing compliance with the specifications and explanations thereto if the equipment varies from the requested specifications.		
10.	Whether free installation, Commissioning and Application Training offered?		
11.	Whether comprehensive onsite warranty offered?		
12.	Whether Annual maintenance after expiry of comprehensive onsite warranty quoted separately?		



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**Annexure – 4B**

**Compliance Statement of Technical Specification**

Sl. No.	Parameter as per Annexure-5	Yes / No	Page No.	Remarks

Place:-

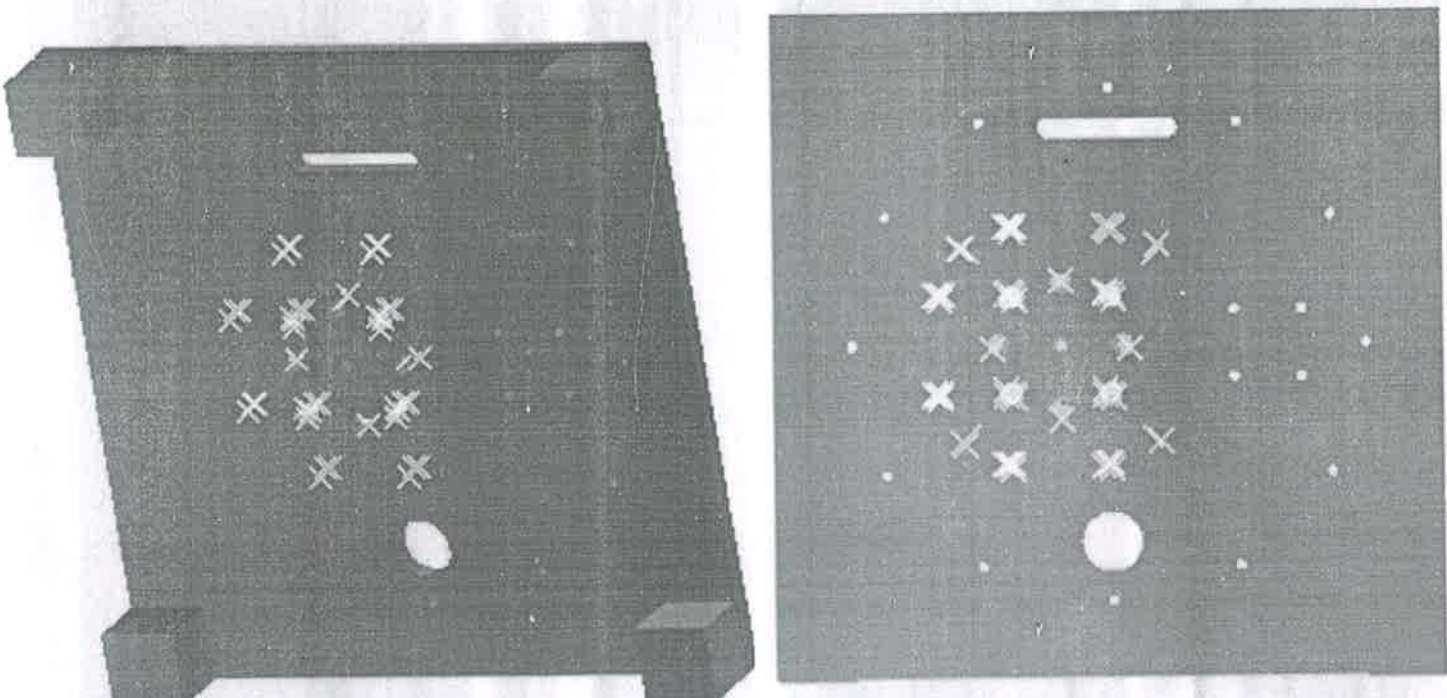
Date:-

Authorized Signatory  
Seal of bidders



## ①

Answer - 5

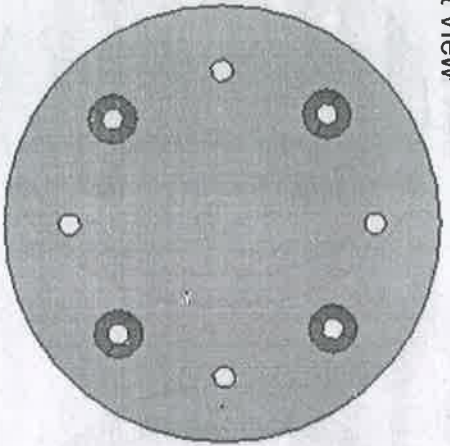


✓✓✓  
24/07/25.

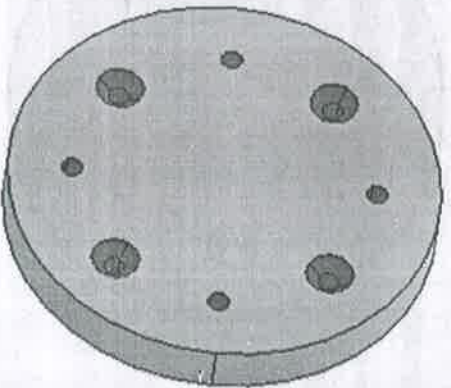
## B: Base metal plate for support

All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm  
Surface Roughness  $R_a = 0.05$   
Material: Stainless Steel SS 316L

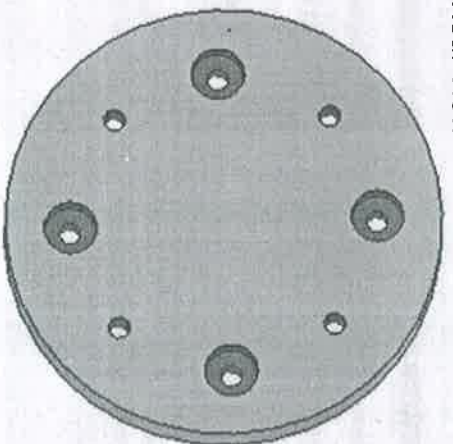
Front View



Tilted Front View



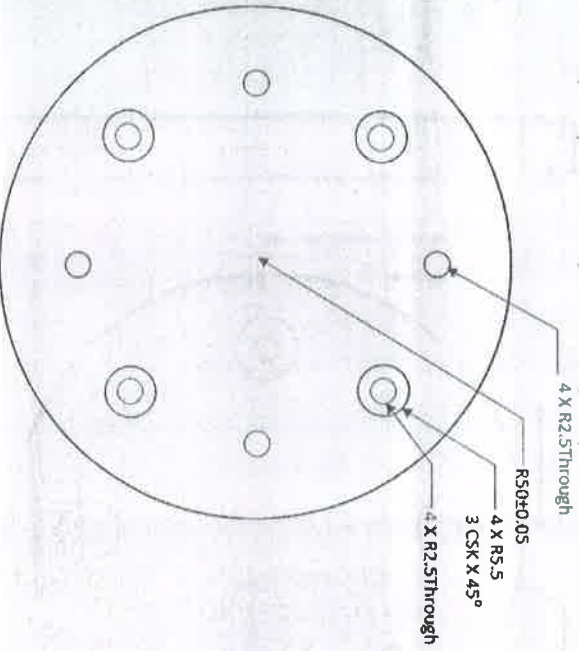
Rear View



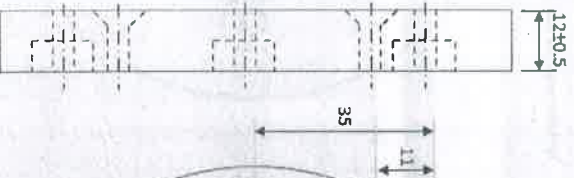
Top View



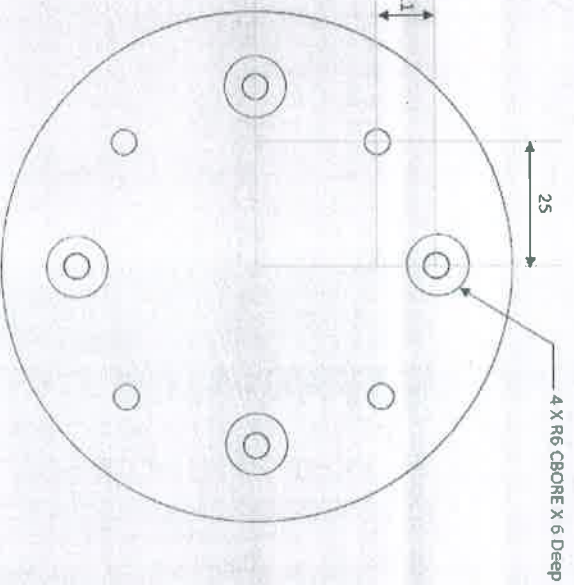
Front View



Left View



Rear View

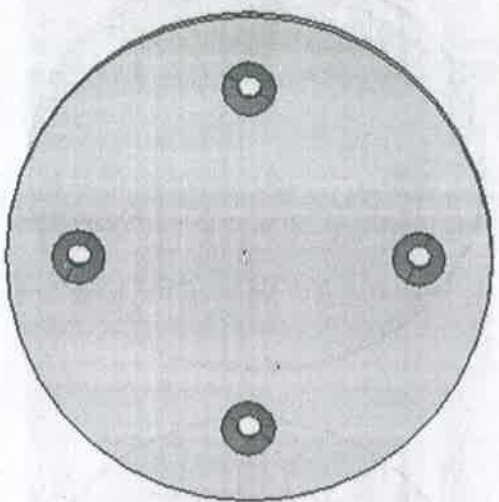




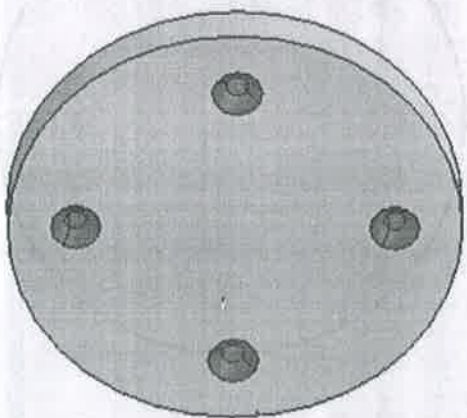
# C: Refractory plate for thermal insulation - Bottom

All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm  
Surface Roughness  $R_a = 0.05$   
Material: High density alumina refractory

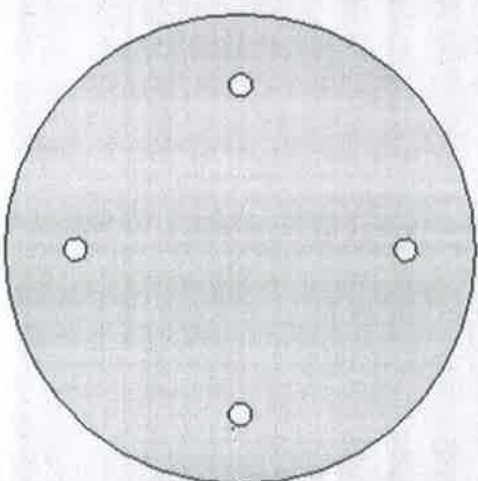
Front View



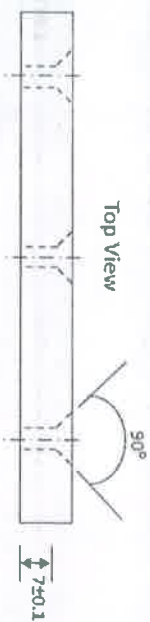
Tilted Front View



Rear View



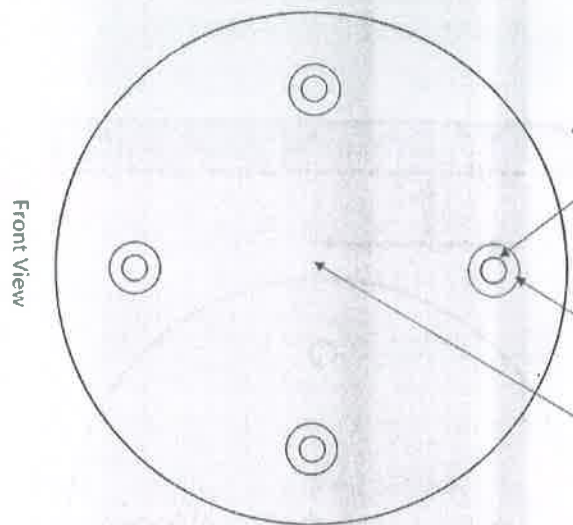
Top View



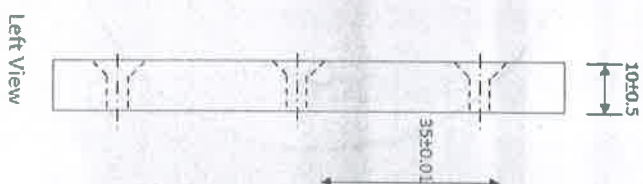
4 X R2.5THROUGH

4 X R5.5

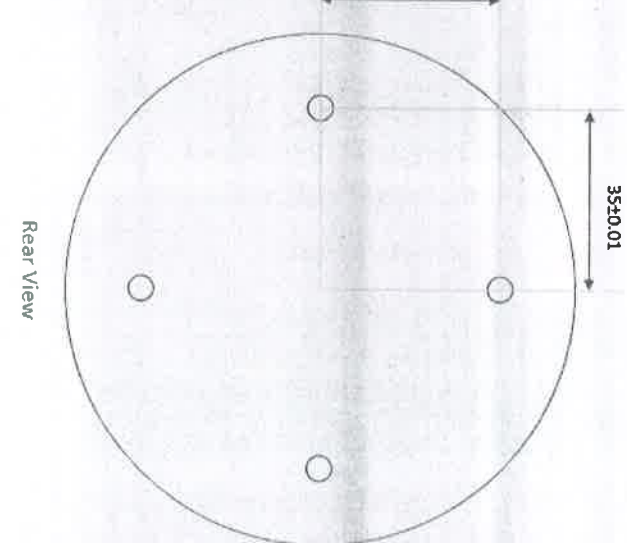
R50±0.05



Front View



Left View



Rear View

**D:** Supporting rod mounted on main plate for heating elements

Required 06 in numbers

All dimensions in mm

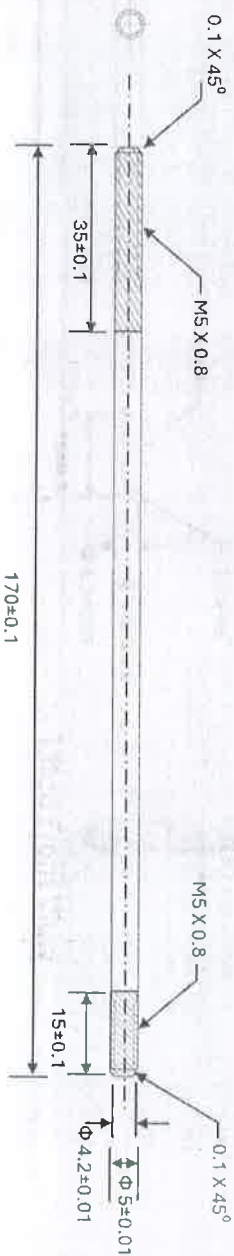
Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: ASTM A194 Grade 7 or AISI 4140/4142



Tilted Front View



Tilted Front View

**G:** Supporting rod mounted on main plate

Required 12 in numbers (03 X 04)

04 required for each heating element plate

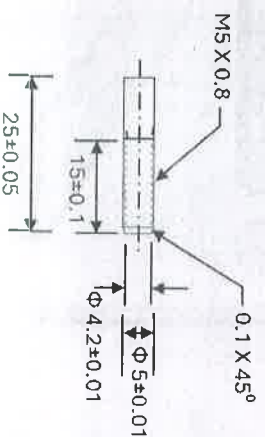
03 Heating element plates

All dimensions in mm

Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: ASTM A194 Grade 7 or AISI 4140/4142



Front View

Tilted Front View

**H:** Sample

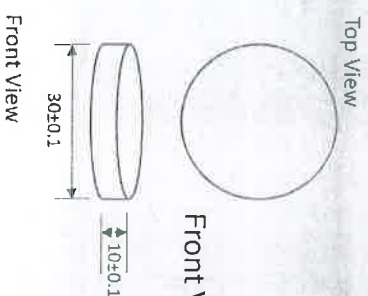
Required 02 in number

All dimensions in mm

Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: Material under test - demo



Top View

Front View

Top View

Tilted Front View

# E1: Heating element plate 1A

Front View

Required 03 in numbers (03 X 01)  
01 required for each heating element plate  
03 Heating element plates

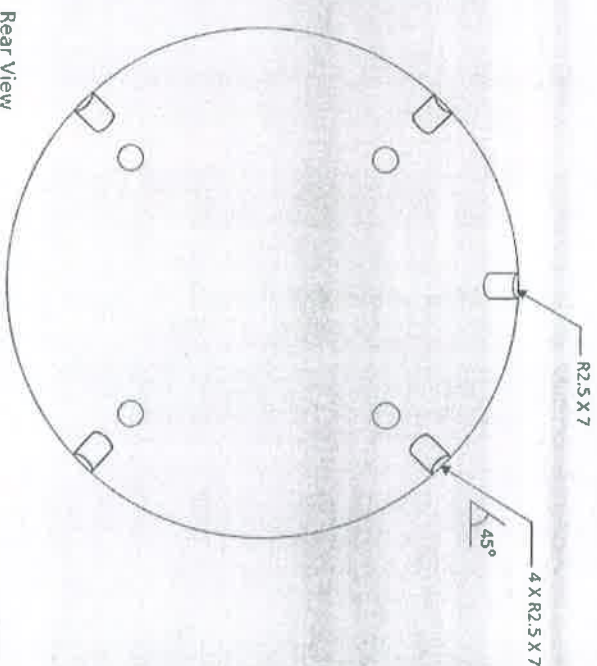
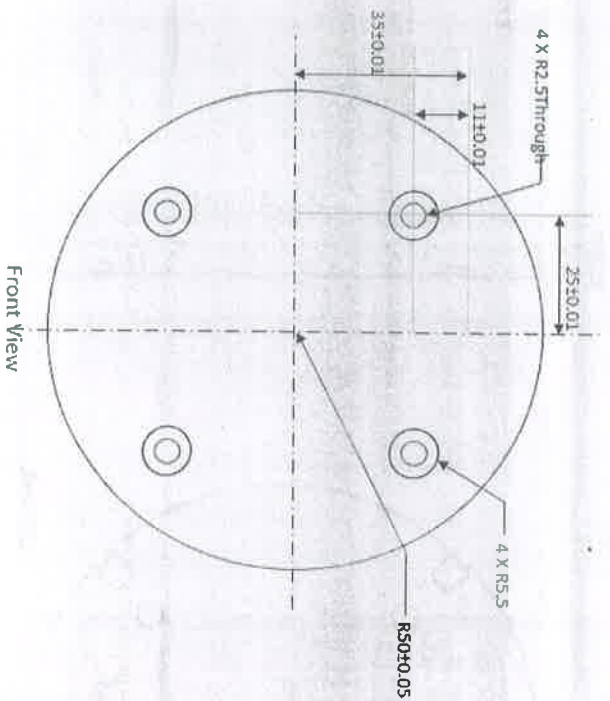
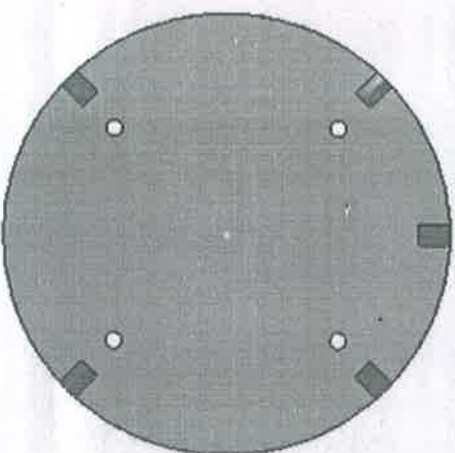
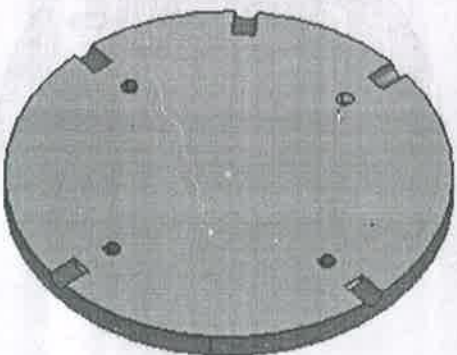
All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm  
Surface Roughness  $Ra = 0.05$   
Material: Fastcool - 55

Tilted Rear View

Rear View

Top View

Top View



Left View

Rear View



## E2: Heating element plate 1B

Front View



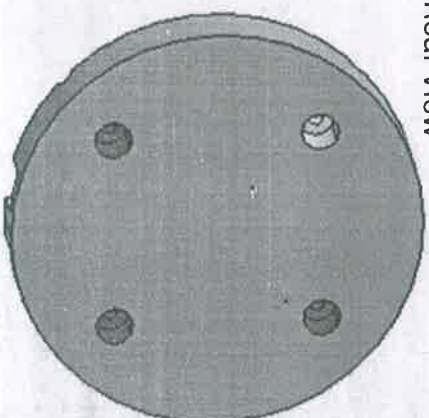
Top View



Tilted Front View



Rear View



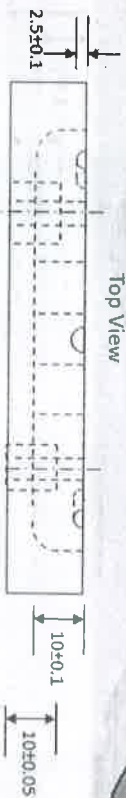
Required 03 in numbers (03 X 01)  
01 required for each heating element plate  
03 Heating element plates

All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: Fastcool - 55

Top View



4 X R1.5 Through

R1.5

R2.5 X 7

R5

4 X R2.5 X 7

45°

R50±0.05

10

10

10

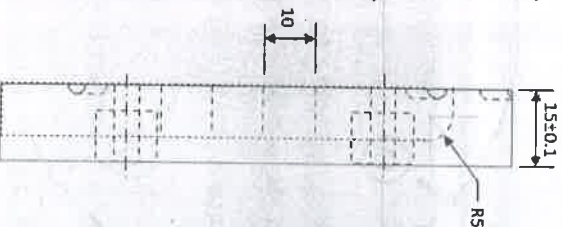
10

30

Front View



Left View



R5

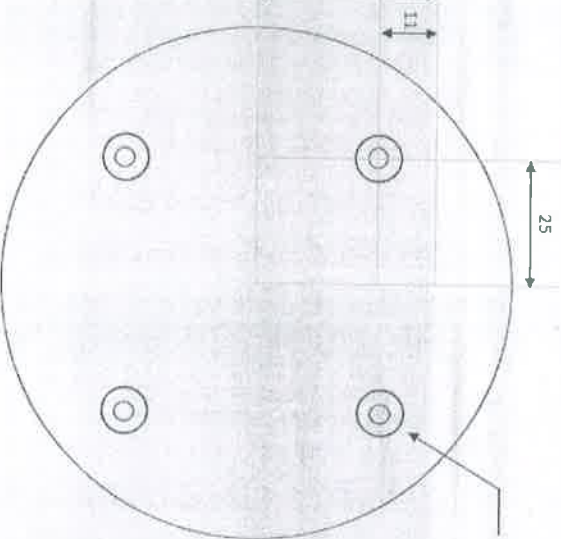
35

11

25

4 X R4.5

Rear View





# F: Support for the heating elements

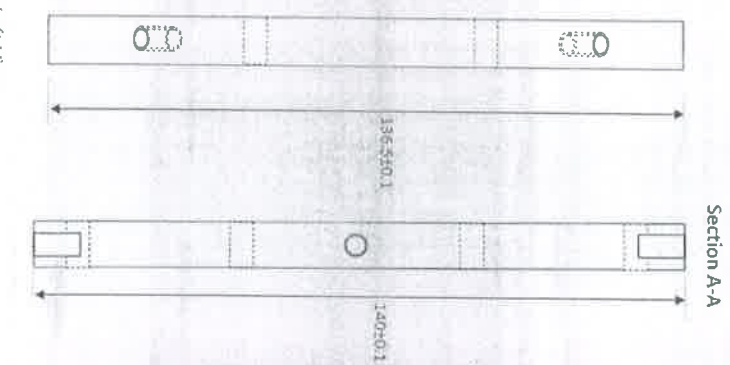
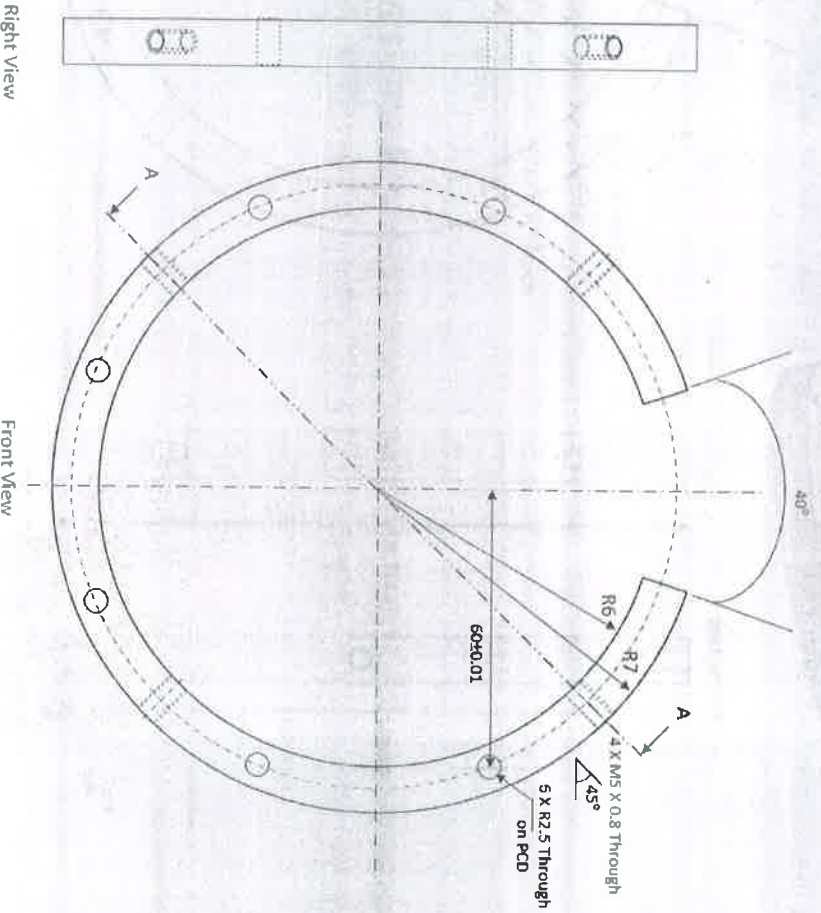
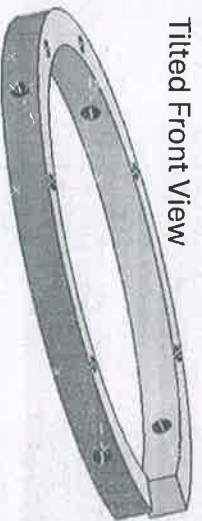
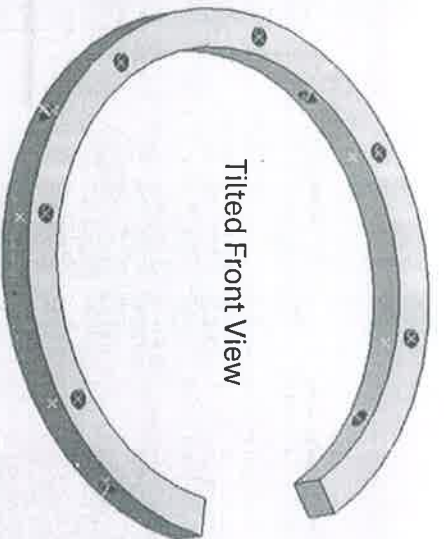
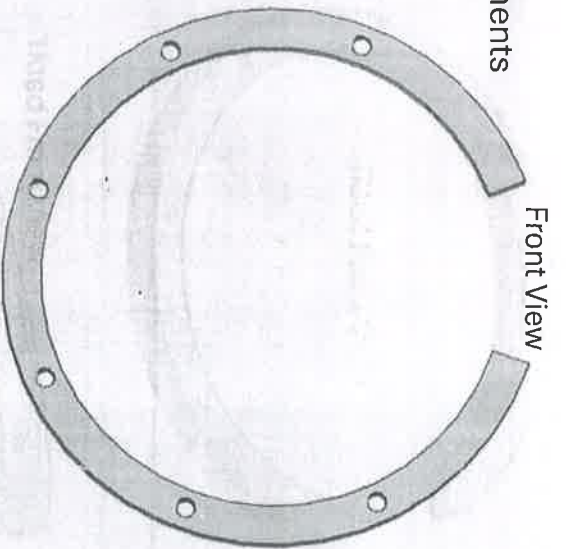
All dimensions in mm

Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: SS316L

Required 03 in numbers (03 X 01)  
01 required for each heating element plate  
03 Heating element plates



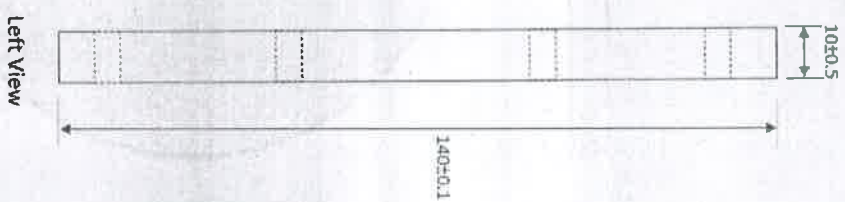
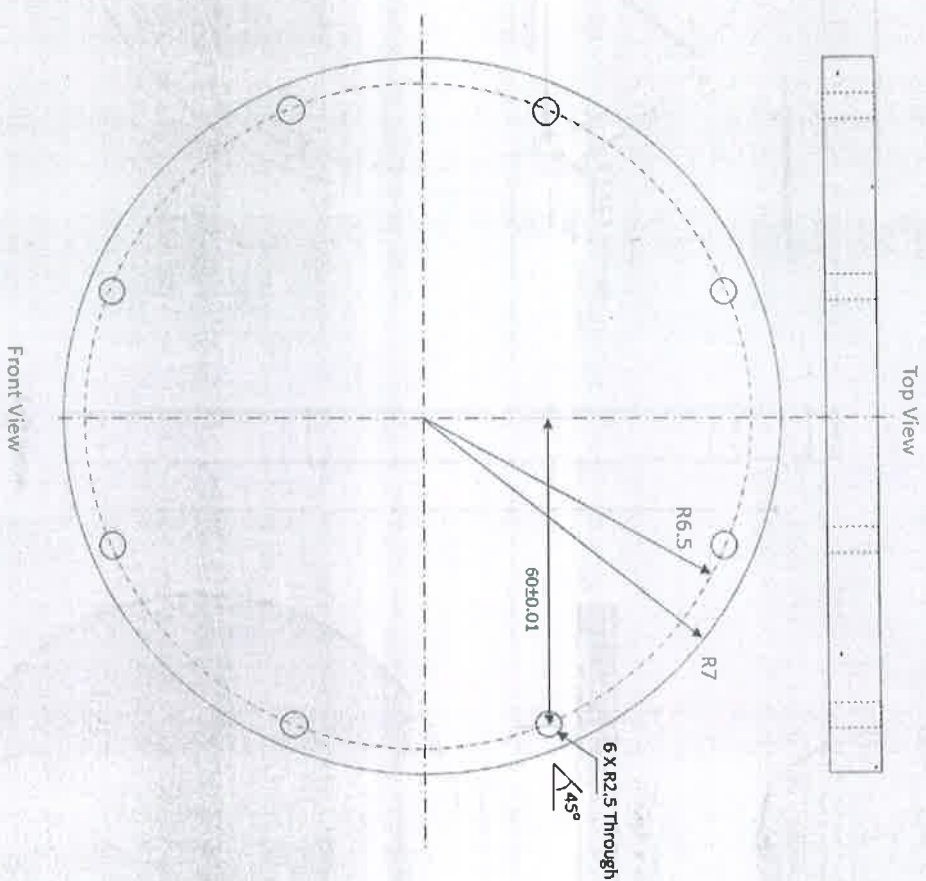
# **1: Refractory plate for thermal insulation - Top**

All dimensions in mm

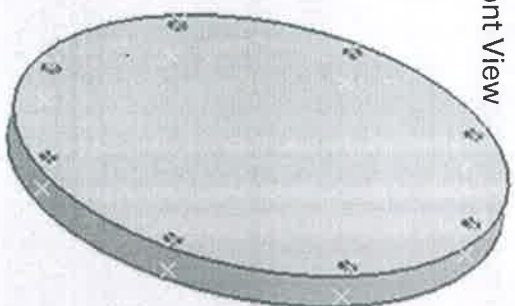
Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $Ra = 0.05$

Material: High density alumina refractory



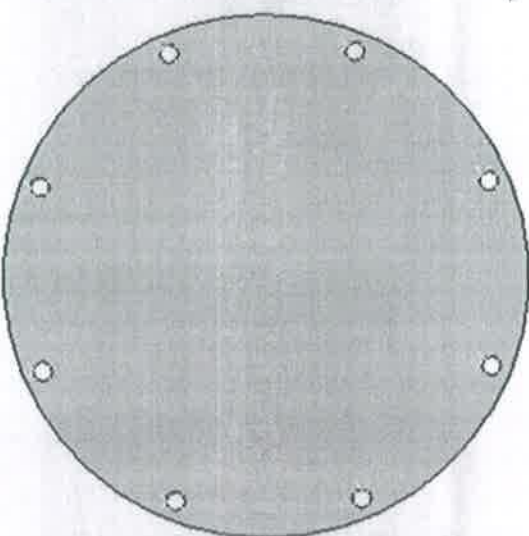
## **Tilted Front View**



## **Top View**



## **Front View**



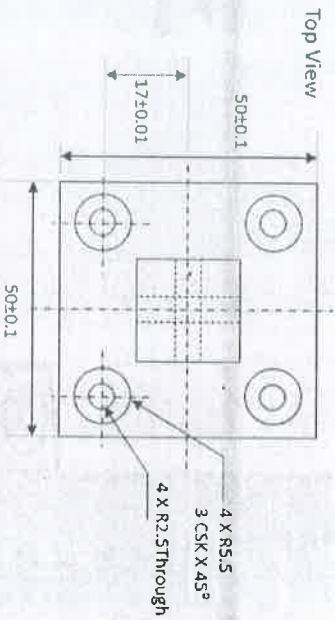
## J: Support for the thermocouple

All dimensions in mm

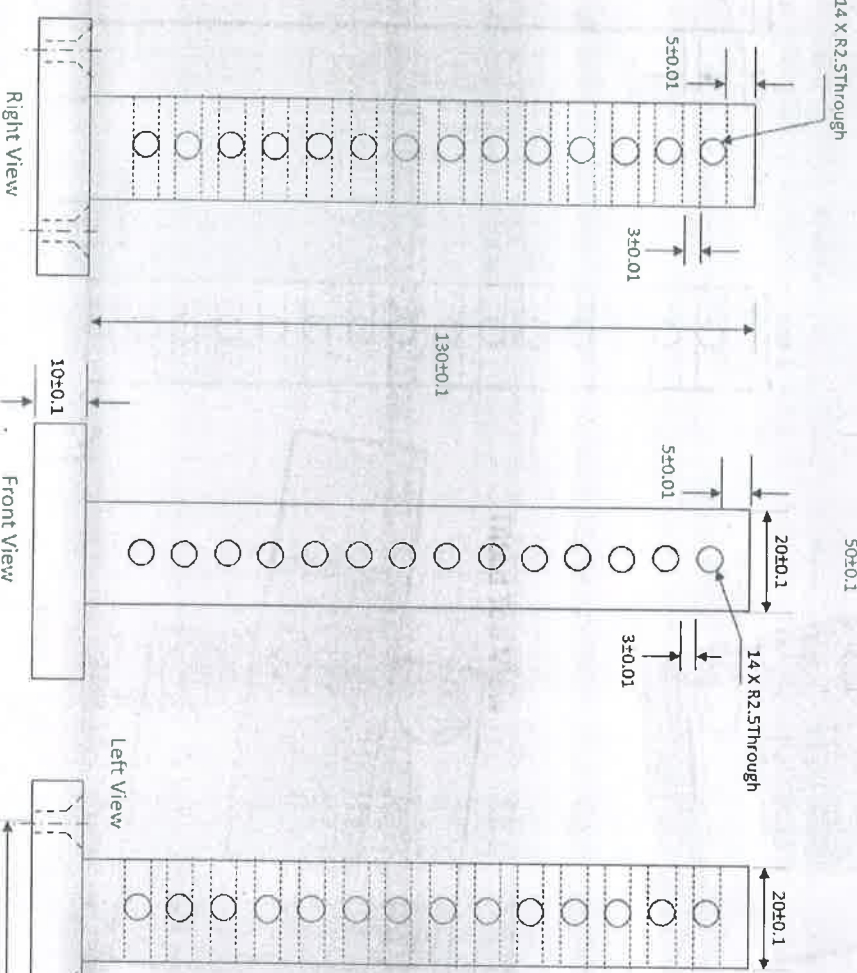
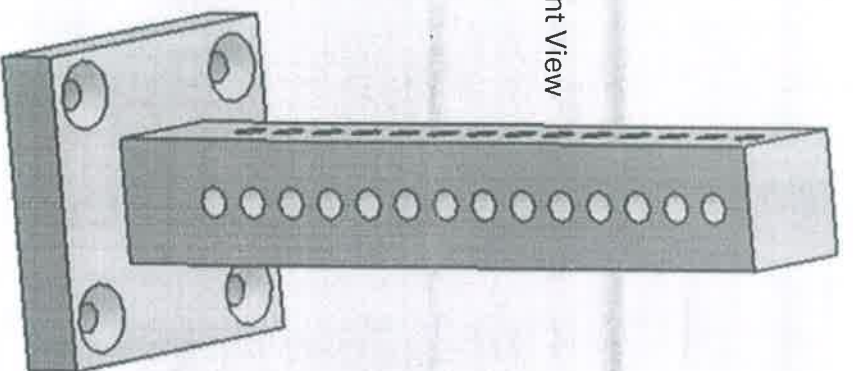
Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness  $R_a = 0.05$

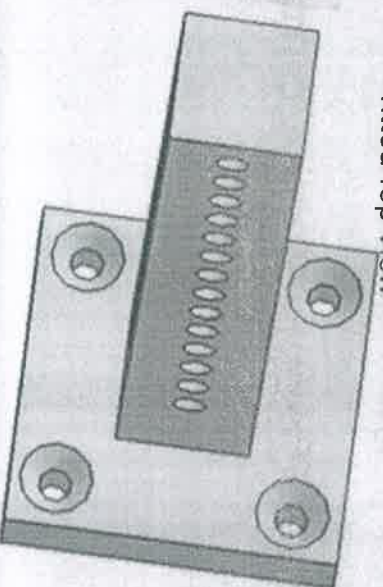
Material: SS316L



Tilted Front View



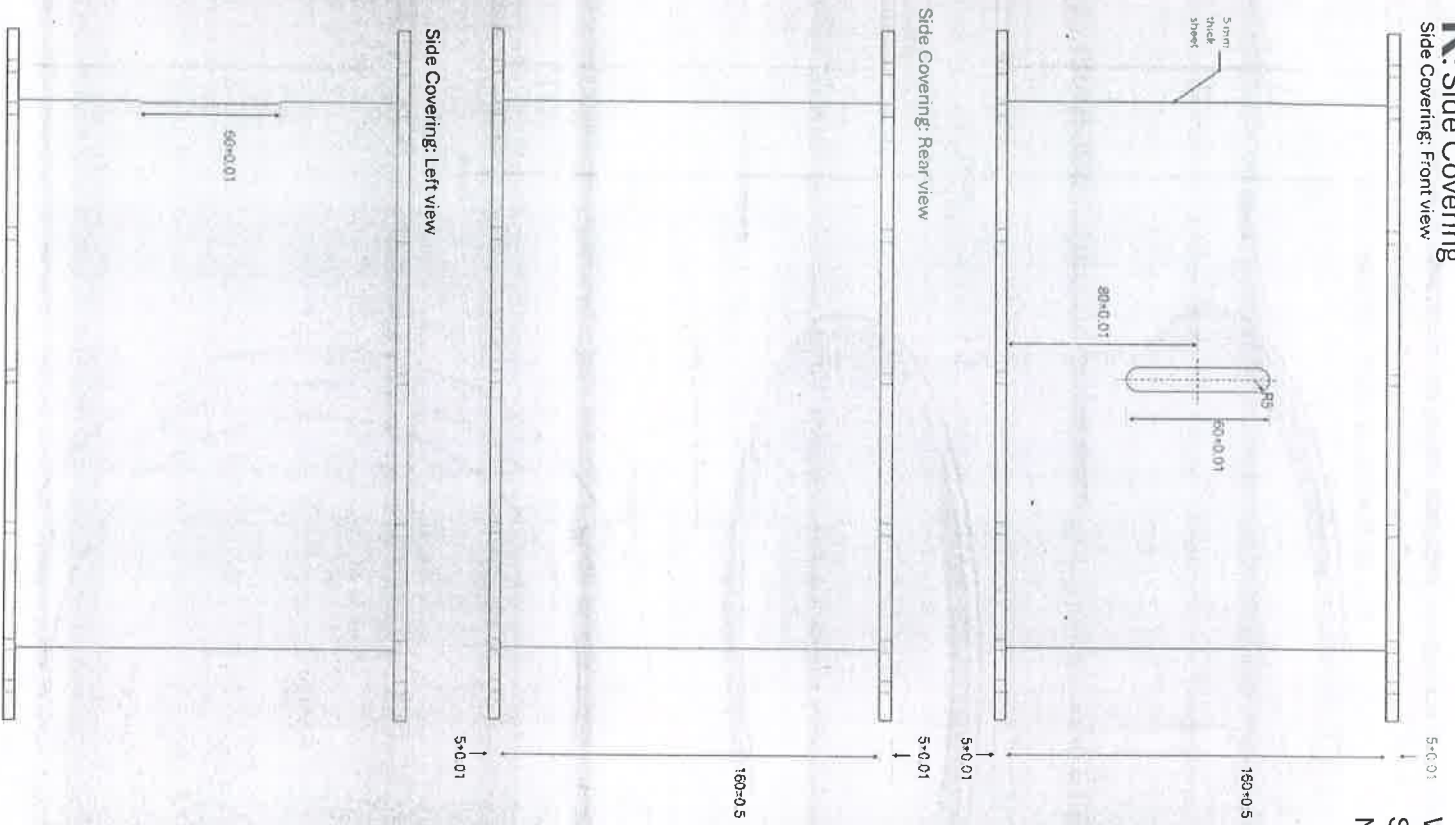
Tilted Top View





Side Covering: Front view

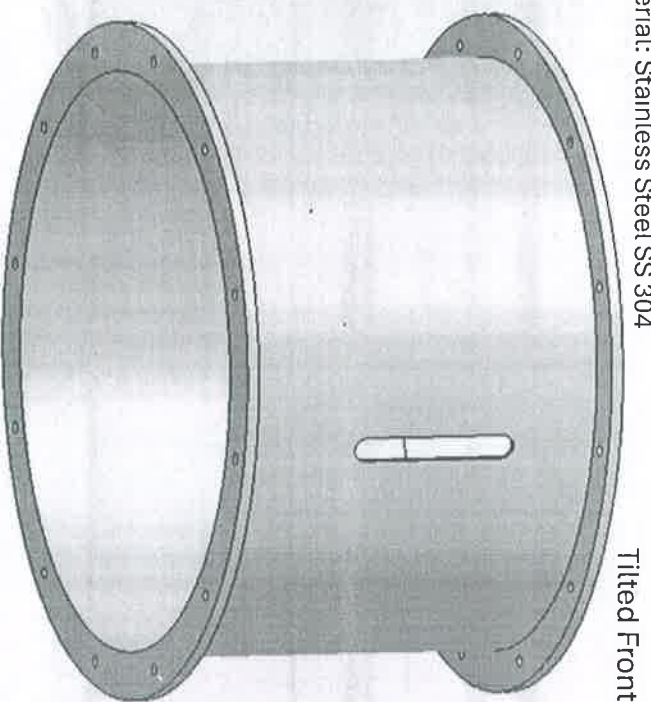
Side Covering: Front view



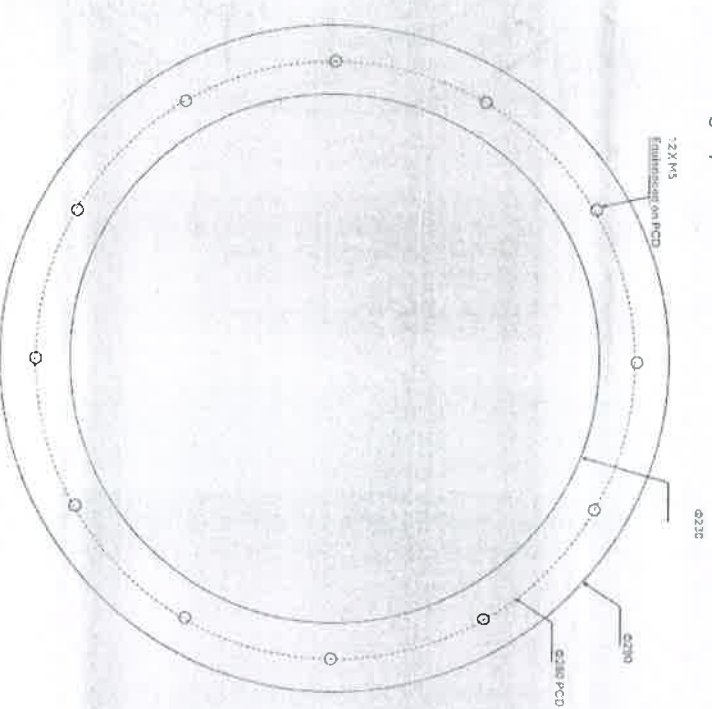
Wherever not given, the open tolerance is of  $\pm 0.1$  mm

Surface Roughness Ra = 0.05

Material: Stainless Steel SS 304



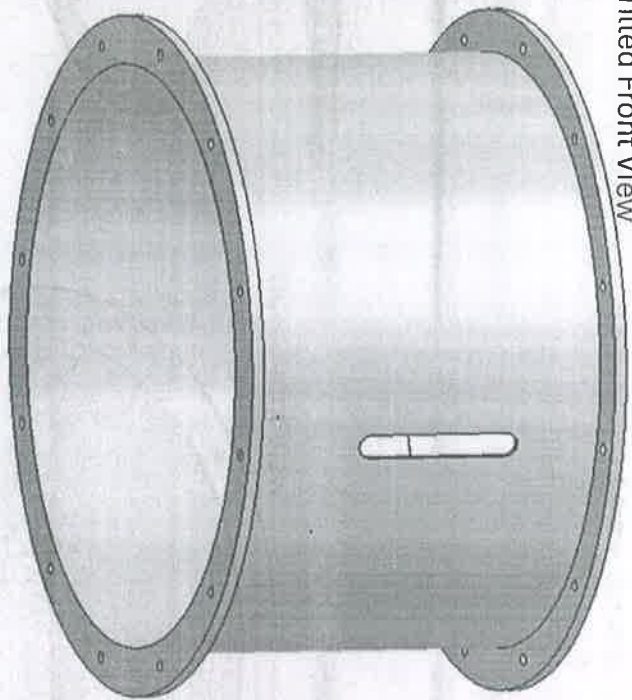
Tilted Front View



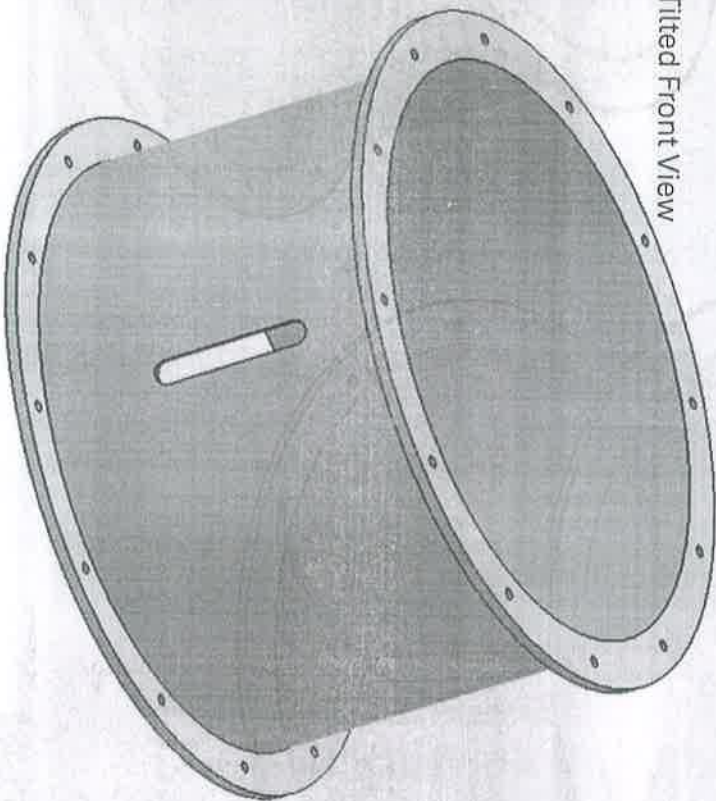
Side Covering: Top view

## Side Covering

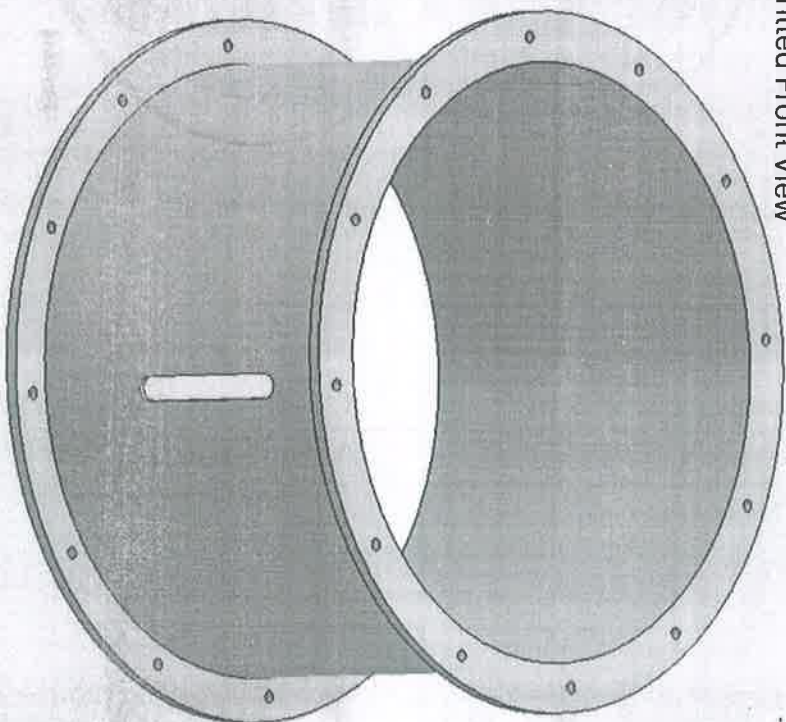
Tilted Front View



Tilted Front View



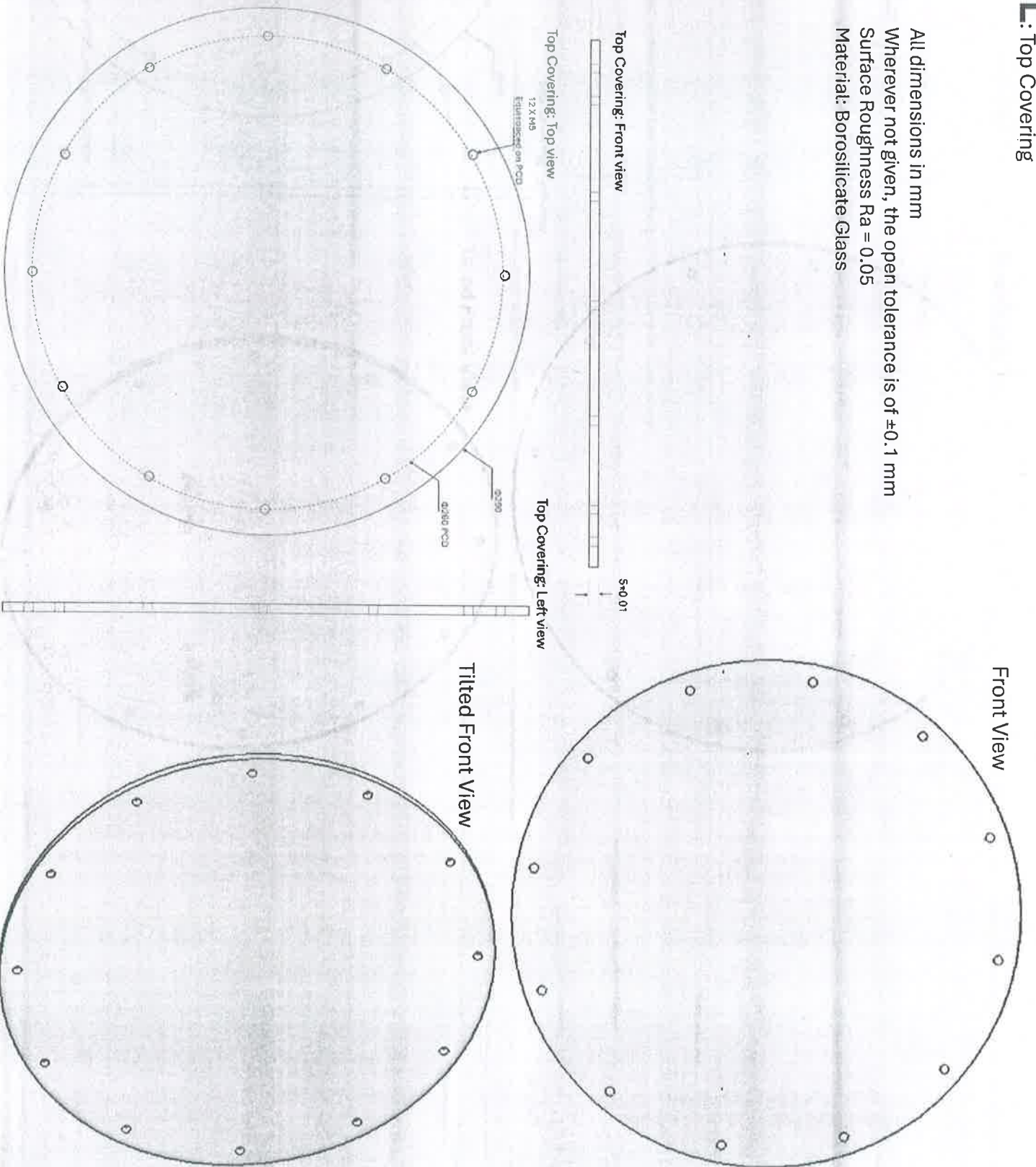
Tilted Front View



All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm  
Surface Roughness  $R_a = 0.05$   
Material: Stainless Steel SS 304

# L: Top Covering

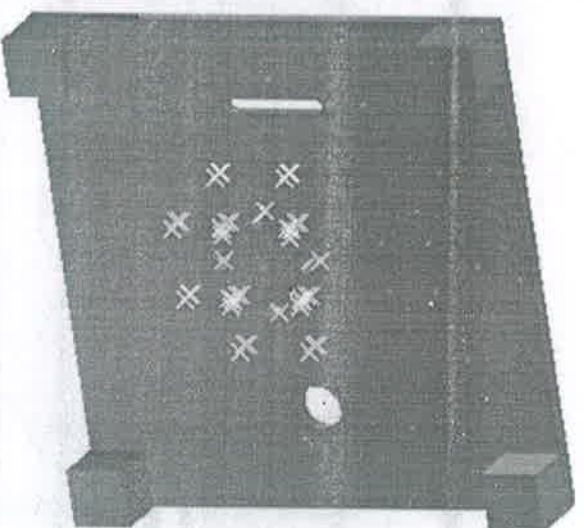
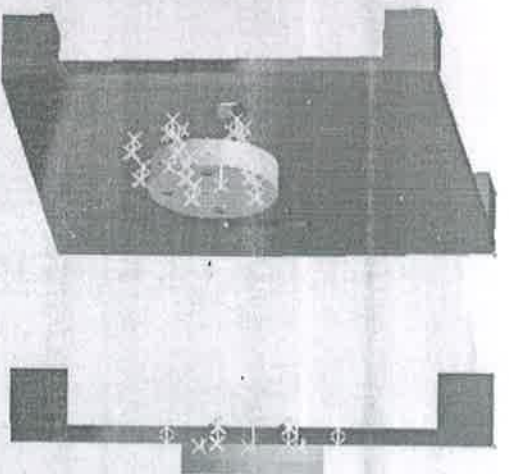
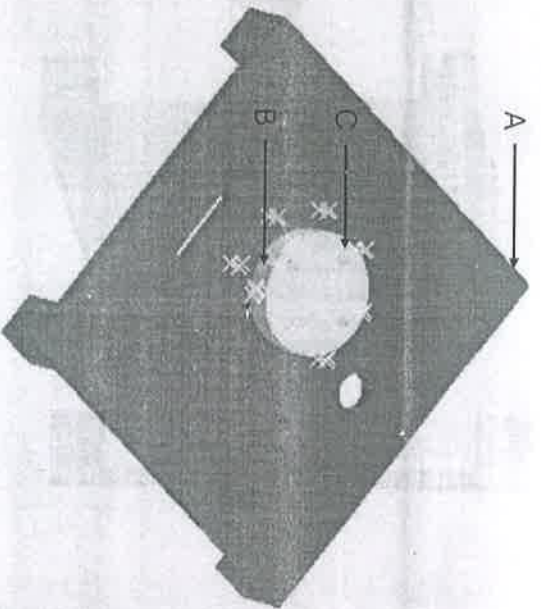
All dimensions in mm  
Wherever not given, the open tolerance is of  $\pm 0.1$  mm  
Surface Roughness  $R_a = 0.05$   
Material: Borosilicate Glass



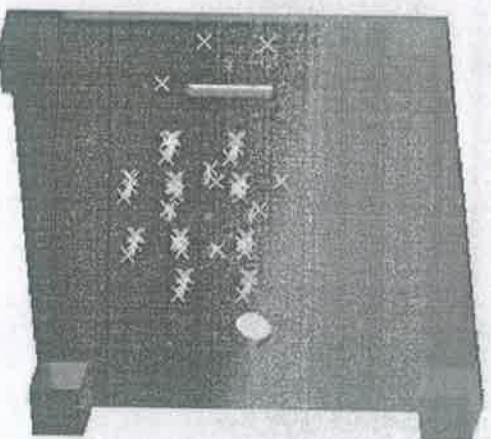
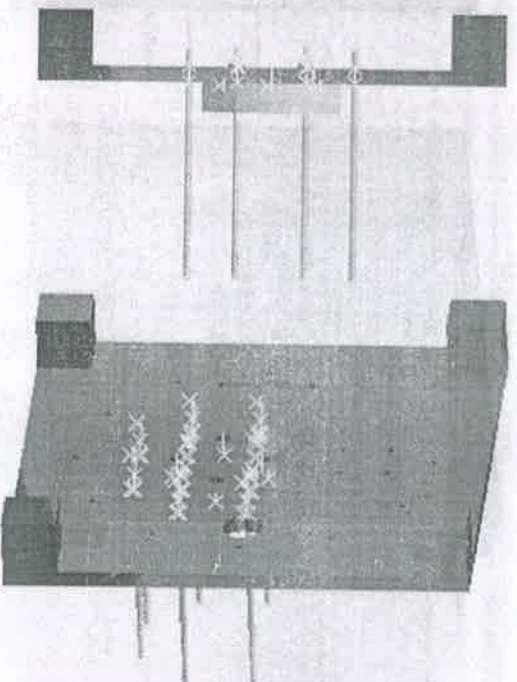
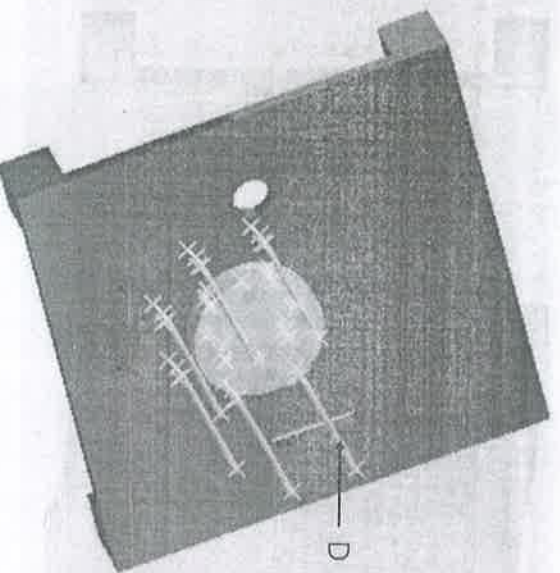


## Assembly Drawings

Assembly 1: A-B-C

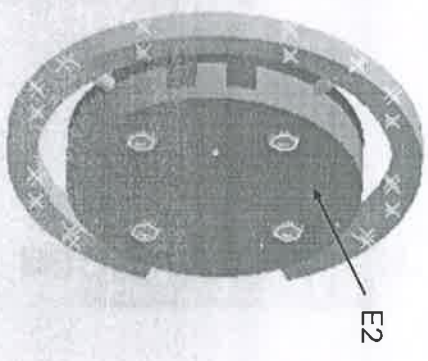
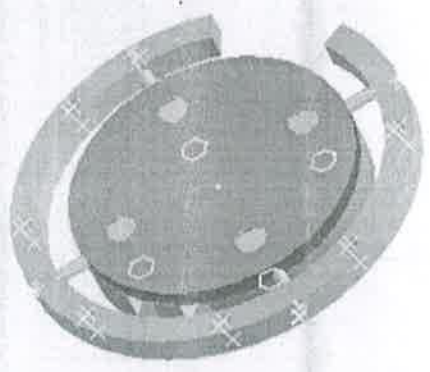
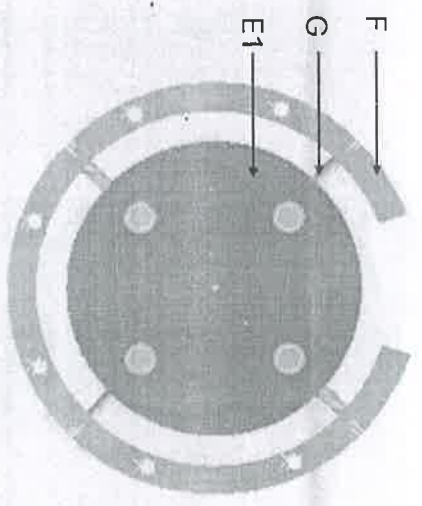


Assembly 2: Assembly 1-D



# Assembly Drawings

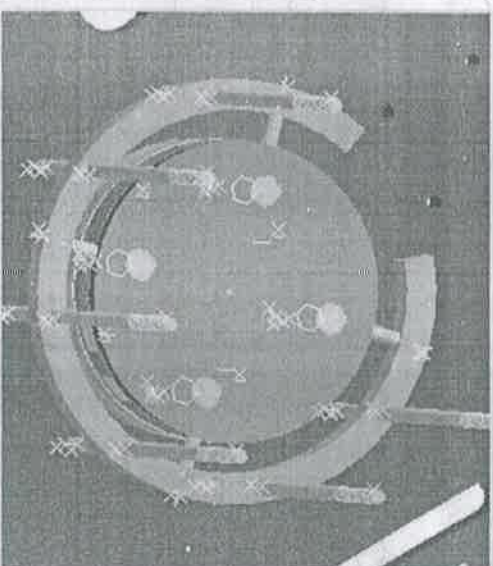
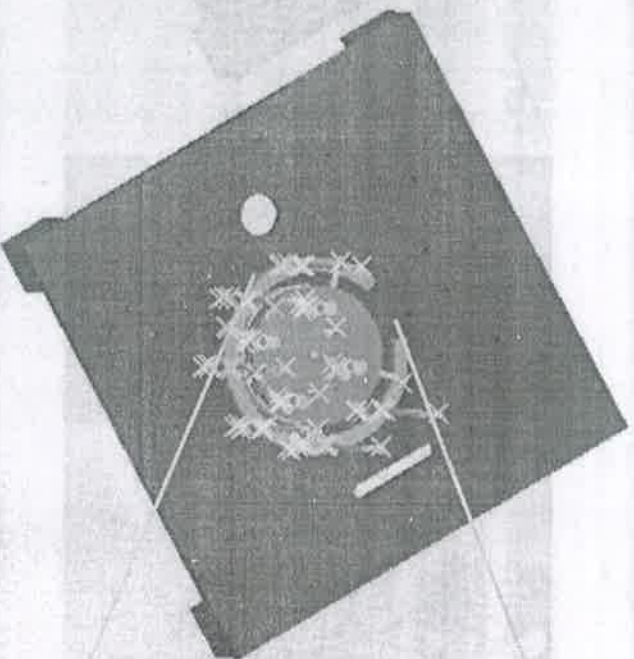
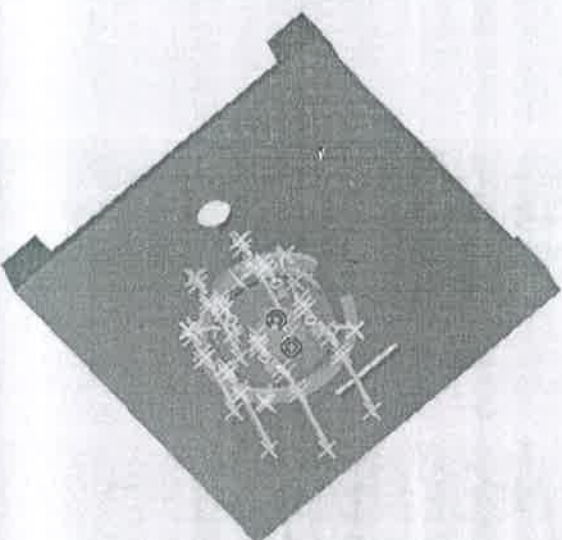
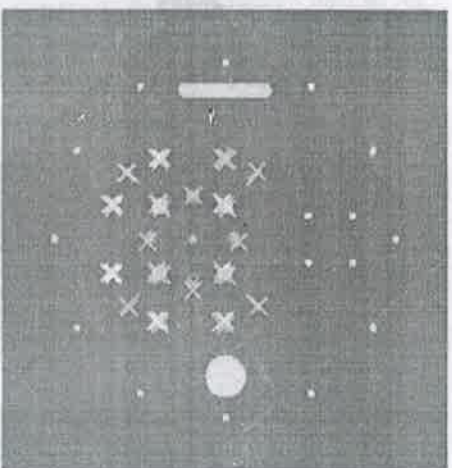
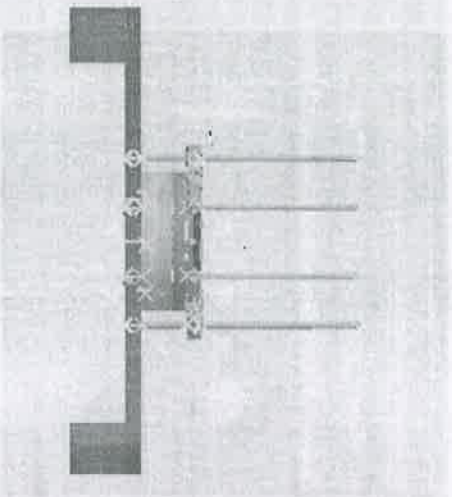
Sub Assembly 3: E1-E2-F-G





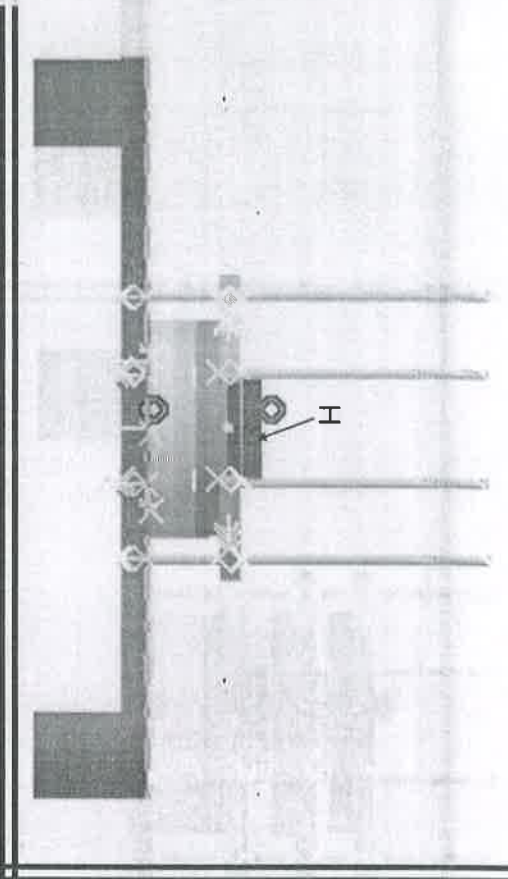
# Assembly Drawings

Sub Assembly 4: Sub Assembly 2 - Sub Assembly 3

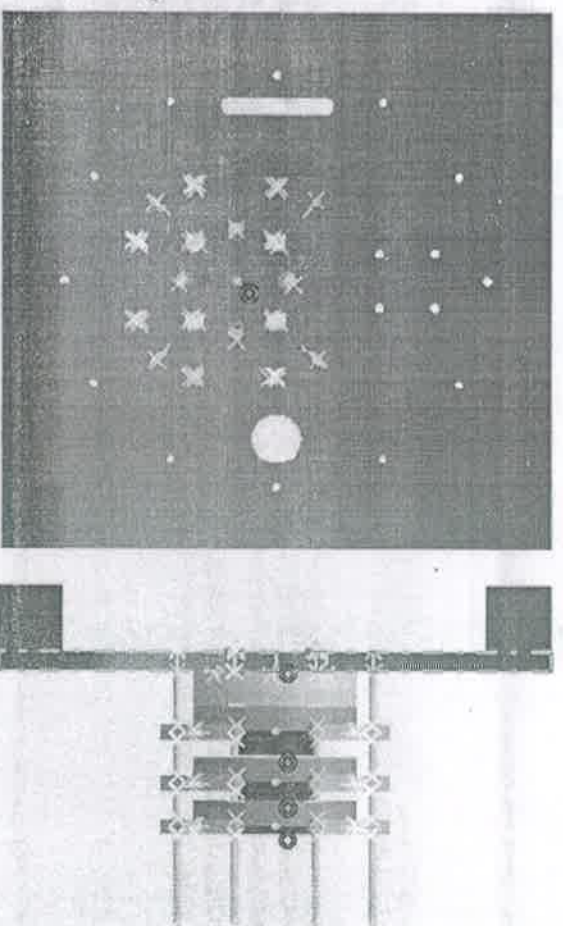
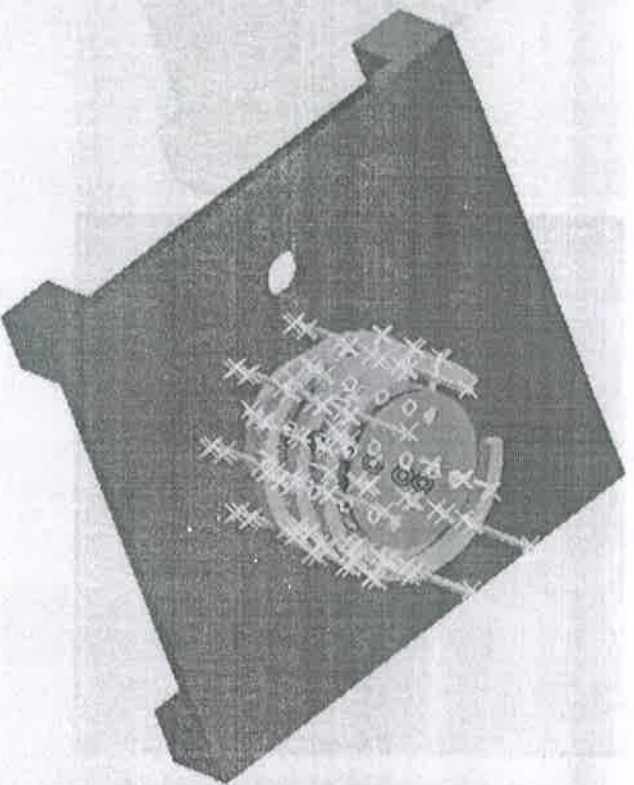
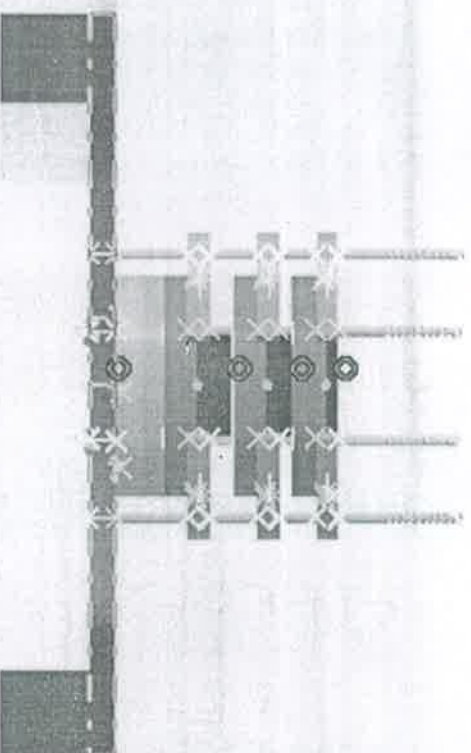


## Assembly Drawings

Sub Assembly 5: Sub Assembly 4 - H



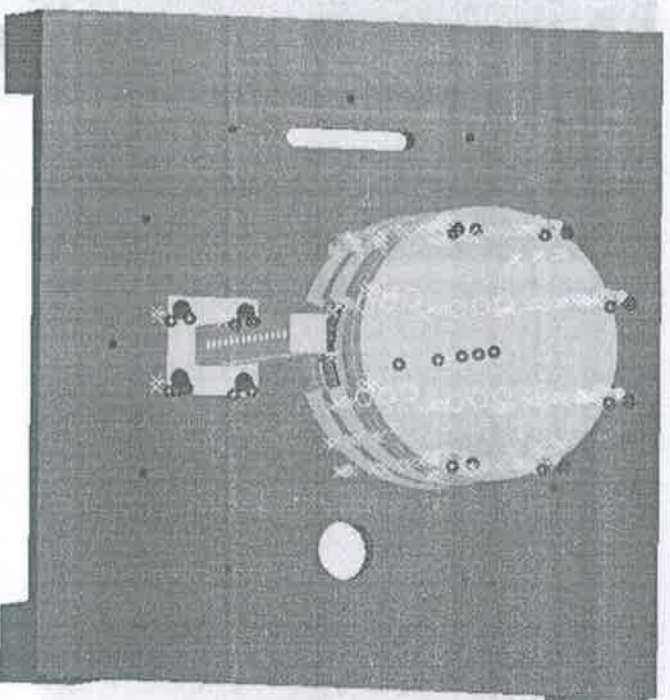
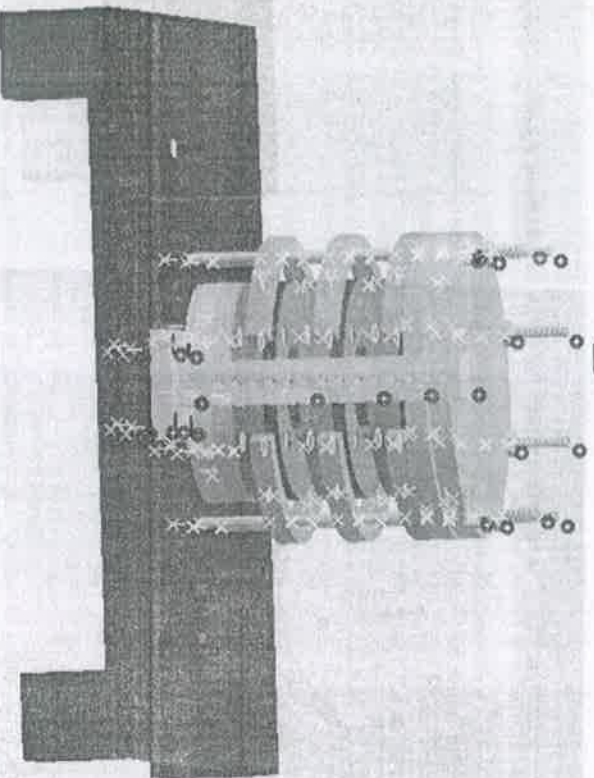
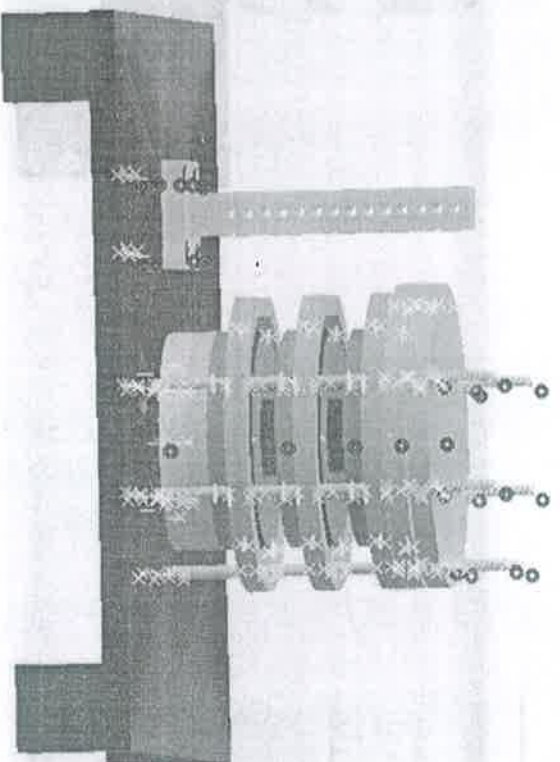
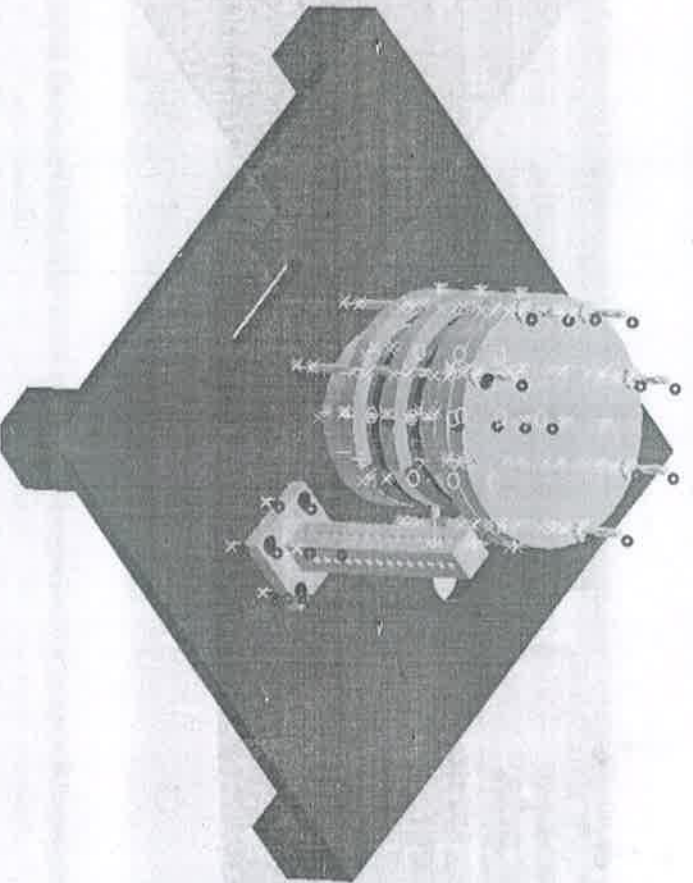
Sub Assembly 6: Sub Assembly 5 - Sub Assembly 3 - H  
- Sub Assembly 3





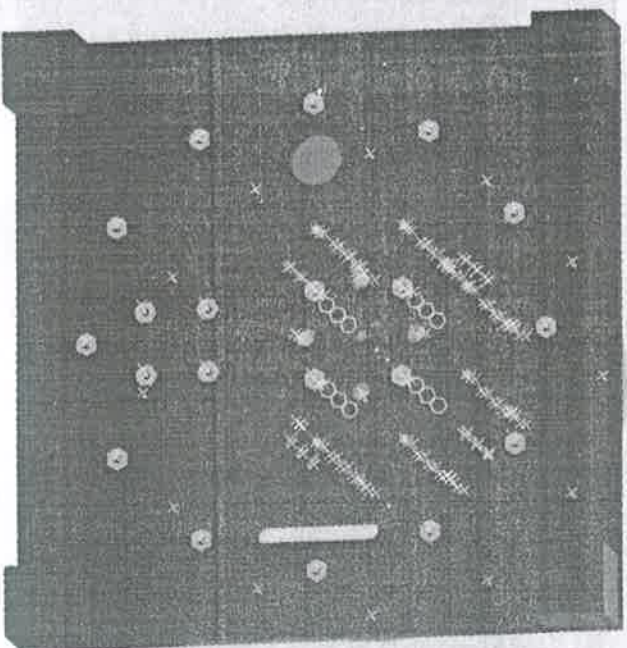
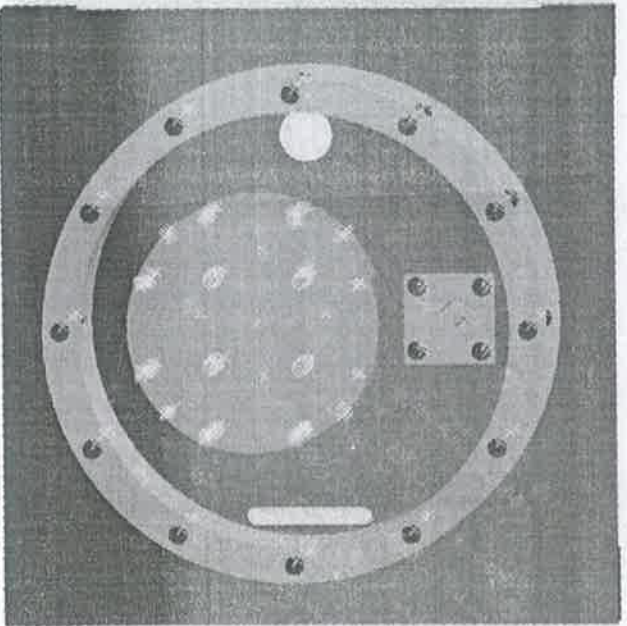
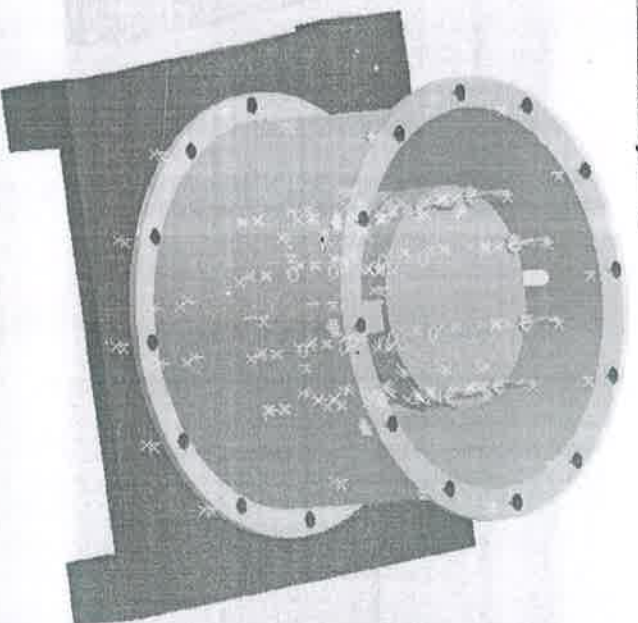
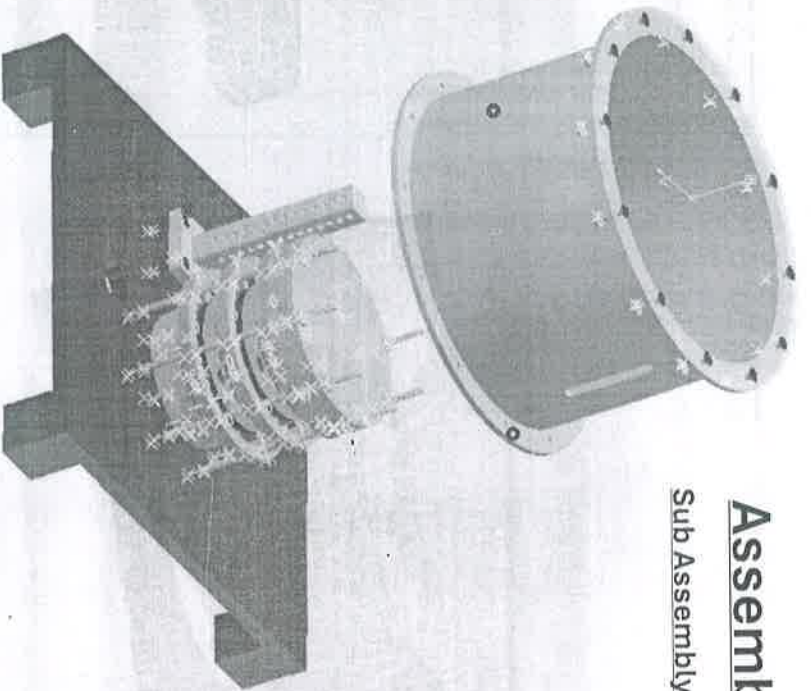
# Assembly Drawings

Sub Assembly 7: Sub Assembly 6 - I - I - J



# Assembly Drawings

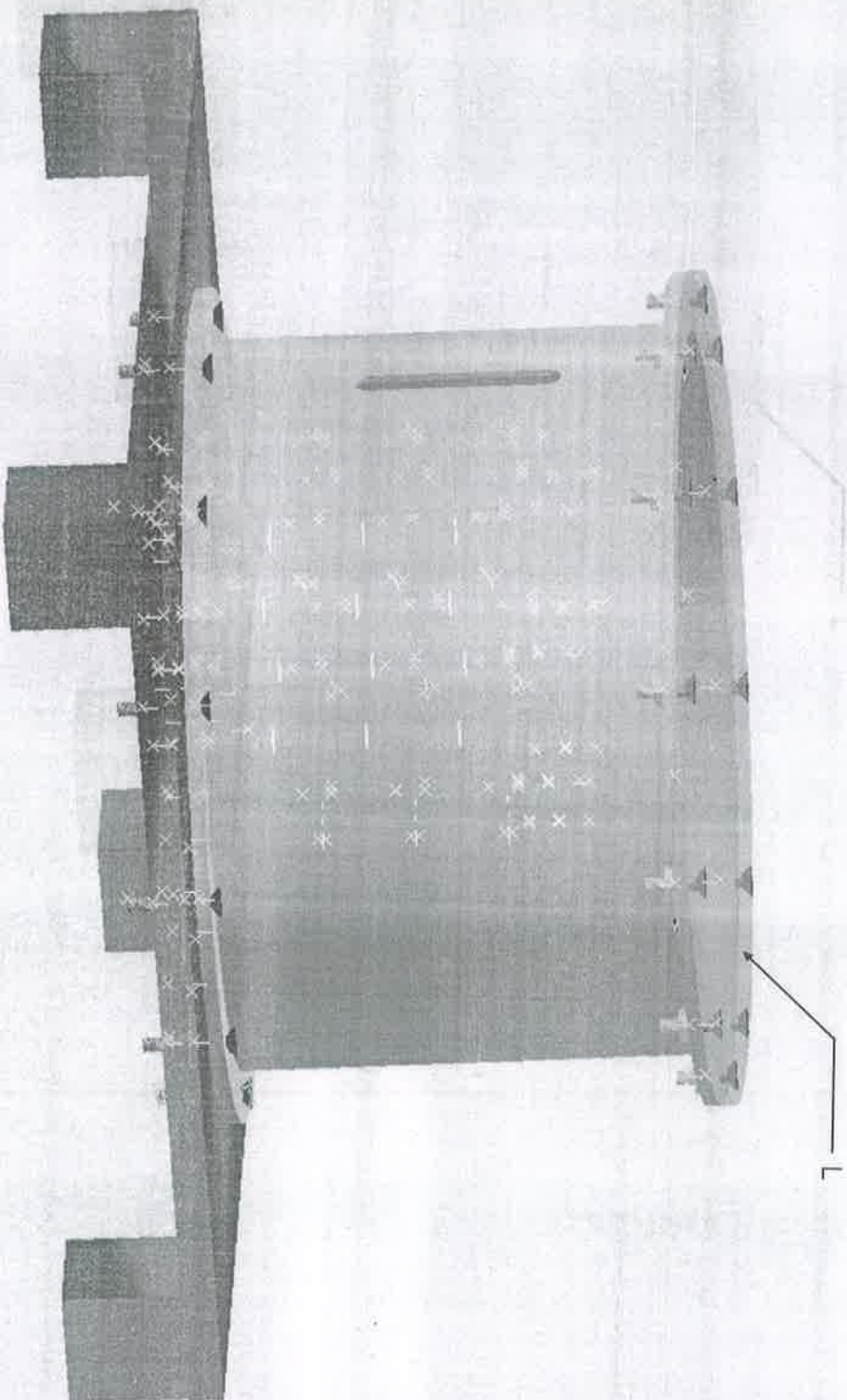
Sub Assembly 8: Sub Assembly 7 - K





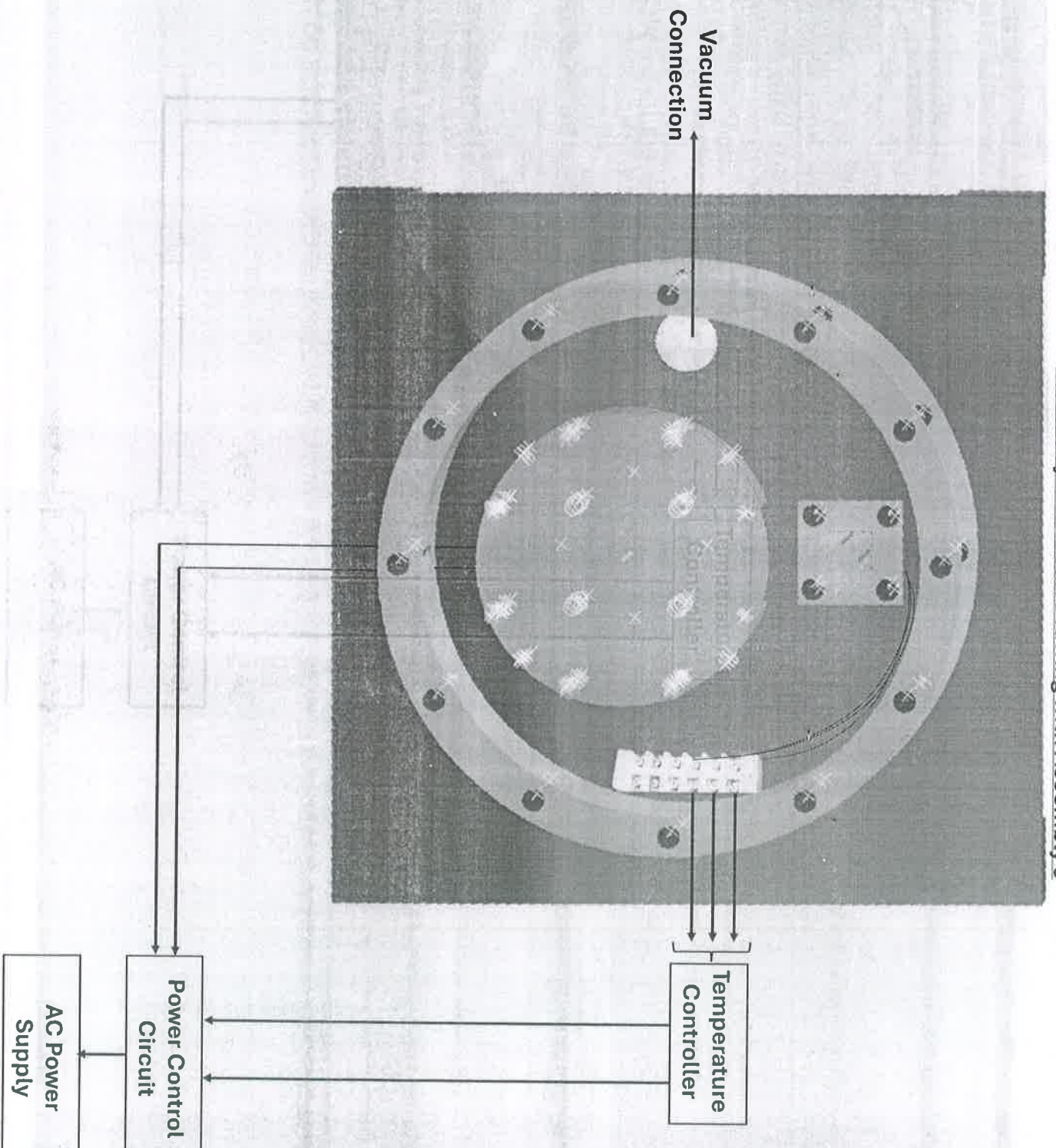
# Assembly Drawings

Assembly 9: Sub Assembly 8 - L



# Assembly Drawings

Assembly 10: Circuit Drawing with Assembly 9





# Bill of Materials

Sr. No.	Part Name	Material	Quantity
1	Main plate for assembly	Stainless Steel SS 304	1
2	Base metal plate for support	Stainless Steel SS 316L	1
3	Refractory plate for thermal insulation - Bottom	High density alumina refractory	1
4	Supporting rod mounted on main plate for heating elements	ASTM A194 Grade 7 or AISI 4140/4142	6
5	Supporting rod mounted on main plate	ASTM A194 Grade 7 or AISI 4140/4142	12
6	Sample	Material under test - demo	2
7	Heating element plate 1A	Fastcool - 55	3
8	Heating element plate 1B	Fastcool - 55	3
9	Support for the heating elements	Stainless Steel SS 316L	3
10	Refractory plate for thermal insulation - Top	High density alumina refractory	2
11	Support for the thermocouple	Stainless Steel SS 316L	1
12	Side Covering	Stainless Steel SS 304	1
13	Top Covering	Borosilicate Glass	1
14	Cross Countersunk Flat Head Screw bolt, M5 X 28	Stainless Steel 304 Grade, DIN965	24
15	Cross Countersunk Flat Head Screw bolt, M5 X 20	Stainless Steel 304 Grade, DIN965	12
16	Cross Countersunk Flat Head Screw bolt, M5 X 16	Stainless Steel 304 Grade, DIN965	12
17	M5 split washer	Stainless Steel 304 Grade, DIN965	54
18	M5 hex nut	Stainless Steel 304 Grade, DIN965	54
19	M5 washer	Stainless Steel 304 Grade, DIN965	54
20	Blind for Vacuum outlet	Company grade	1
21	Heating Coil for heating the 100mm plate	Kanthal	2
22	Thermocouples $\Phi$ 4mm x Length 60mm with refractory cover at the contact tip side	K-type	5
23	5 Way 15 A Wires Ceramic Connector	Ceramic or porcelain	2