सत्यमेव जयते

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
BHABHA ATOMIC RESEARCH CENTRE
VISAKHAPATNAM

BARC
भाभा परमाणु अनुसंधान केंद्र
BHABHA ATOMIC RESEARCH CENTRE

Computational Analysis Division

Ref: CAD/HEDM/WO/IND/22-23/09

Date: 01/08/2022

***Subject*: Notice inviting tender for;**

"Fabrication and supply of SS Rail, SS Posts, G10 Sheets, Acrylic cover plates, Teflon Connectors and SS height adjusters (all in-vacuum components)"

(See Annexure-I)

1. Quotations are invited for minor fabrication job as per details described below.
2. **Scope of work:** See details in Annexure-I.
3. **General guidelines for submitting tender**
   - You shall send your offer in a **sealed envelope** indicating delivery period, price inclusive of taxes and other relevant information by speed post to:

     Head,
     CAD, Computational Analysis Division
     Bhabha Atomic Research Centre
     Village: Maduturu (Sub: P.O.)
     Near Nagavaram Junction,
     Gajuwaka-Yellamanchilli Highway
     Atchutapuram, Visakhapatnam
     Andhra Pradesh- 531011
     (Kind Attention: Rahulnath P.P., SO/D,CAD, 0891-283-2149/ 8985875318)

   - Quotation shall reach us on/or before **18/08/2022 by Speed Post/Courier/ Only.**
   - On top left corner of the envelope please indicate
     Quotation for– **"Fabrication and supply of SS Rail, SS Posts, G10 Sheets(in-vacuum)"**And due date 18/08/2022
   - Overwriting, scratching etc. must be avoided in the quotation. Rewriting the whole figure shall carry out any alteration in the figure. The authorized person from the firm shall countersign such figure.
   - The delivery period mentioned in the quotation shall be strictly adhered to. If the contractor fails to supply and secure extension of delivery date before effecting delivery of the supply against the contract, acceptance of such item by the purchaser will in no way prejudice the right of the purchaser to levy liquidated damage nor will it be entitled to the contractor for payment of statutory levies that comes into force after the expiry of the delivery date.
   - Minimum Guarantee/**Warranty period** of the material and workmanship shall be **One Year**.
   - **Supplier shall mention clearly the PAN /TAN no. on quotation.**
   - **GST number shall be clearly mentioned on Quotation.**
   - All the charges and taxes shall be mentioned clearly.
     Please note that BARC being an R&D institution, GST rates are as follows
     - **For Intra-state Supply of Goods: @ 2.5% SGST + 2.5% CGST**
     - **For Inter-state Supply of Goods: @ 5.0% IGST**
     - **GST exemption certificate shall be issued to the supplier.**

     (This is as per Office Order No. BARC/GST/12/2017 dt. 27.12.2017)

- You may contact us for any clarification before **18/08/2022** (Shri. Rahulnath P.P., 0891-2832149,8985875318, rahulnath@barc.gov.in

4. **Rates:**
   As per Scope of Work.

5. **Place of Delivery/Work:**
   Address: *PEB-04,CAD, Bhabha Atomic Research Centre, Near Nagavaram Junction, Gajuwaka-Yellamanchilli Highway, Maduturu PO,Visakhapatnam, Andhra Pradesh- 531011.*

5. **PAYMENT TERMS:**
   a. Part payment/Advance or against delivery cannot be made.
   b. Payment will be made only after satisfactory completion of work and on production of (along with Delivery Challan):
      i. Bill/Invoice containing Location of supply, separate tax components along with PAN and GSTN numbers.
      ii. Advance Stamped Receipt.
      iii. Bank Account No, Bank and Branch name with IFSC code.
      iv. Undertaking stating that GST has been promptly deposited with the authorities
   c. It may be noted that:
      i. Income tax @2% will be deducted from your bill.
      ii. TDS (under GST) will be deducted as applicable from your bill of taxable goods and/or services, where the total value of such supply exceeds 2.50lakh.
      iii. Declaration confirming filing of Income Tax Return from immediate two preceding years, in accordance with Section 206 AB of the Income Tax Act 1961, has to be submitted in the prescribed proforma along with necessary acknowledgements in support of declaration. In case the aforesaid declaration is not submitted, TDS/TCS shall be deducted at higher rates as instructed under the provisions of Income Tax Act.

6. **CONFIDENTIALITY CLAUSE:**
   No, party shall disclose any information to any third party, concerning the matters under this contract generally. In particular, any information identified as "Proprietary" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.
   This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.
   "Restricted information "categories under section 18 of the Atomic Energy Act,1962 and "Official Secrets" under section 5 of the official secrets act, 1923.
   Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.
   Prohibition against use of BARC's name without permission for publicity purposes. The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public medial like press, radio, T.V. or Internet without the prior written approval of BARC.

(Rahulnath P.P.)
SO/D, CAD
Phone: 0891-2832149,
Email: rahulnath@barc.gov.in

Annexure-I

Scope of work

Fabrication and supply of SS Rail, SS Posts, G10 Sheets, Acrylic cover plates, Teflon Connectors and SS height adjusters (all in-vacuum components)

The following items are to be fabricated;

Sl. No.	Drawing No.	Item Description(Material)	Quantity
01	01	Base Platform(SS)	01 No.
02	02-04	SS Post(SS)	26Nos.
03	05	G10 Sheet(G10)	14 Nos.
04	06	Teflon Sheet(Teflon)	26 Nos.
05	07	Insulation post(Teflon)	26 Nos.
06	08	Nylon Block Bottom(Nylon)	06 Nos.
07	09	Nylon Block Top(Nylon)	06 Nos.
08	10-15	Height Adjuster(SS)	06 Set
09	16	Acrylic top sheet	01 No.

1. **Base platform (Drg. No.1)**
   a. Material: SS304.
   b. Dimensions: 1210 X 500 X 32mm
   c. M10 tapping has to be provided at desired locations as mentioned in the drawing.
   d. 5mm groove of width 80mm-02Nos. has to be provided at one side of the plate along the entire length of plate.
   e. **Flatness** has to be ensured within 0.1mm.
   f. **Surface finish** of top portion has to be ensured within 0.005mm.
   g. **Parallelity** has to be ensured between top and grooved surface within the range of 0.01mm.
   h. **Tolerance** as mentioned has to be maintained.
   i. All other dimensions are to be strictly adhered to.
   j. **Electropolishing** has to be done.
2. **SS Post (Drg. No.2,3 & 4)**
   a. Material: SS304.
   b. Dimensions: 205 X 45 X 40mm
   c. The component has 3 sections of dimensions 45(W)x50(H)mm, 30(W)x75(H)mm and 15(W)x80(H)mm respectively.
   d. Vertical slots(03Nos.) of width 10.2mm and length 25.20mm has to be made all 3 sections at distances of 25mm, 90mm and 155mm respectively.
   e. Base of SS post has to be made of rectangular plate of dimension 105x90x10mm.
   f. Slots of dimension 25x10.2mm-04Nos. are to be machined on the surface as shown in drg.No.03.
   g. SS Post and Base are to be welded as shown in drg.no.04.
   h. TIG welding has to be done.

a. **Perpendicularity** has to be maintained within 0.05mm.(Drg.No.04)
b. **Electropolishing** has to be done.

3. **G10 sheet (Drg. No.5)**
   a. Machinable G10-FR4(Green) sheet has to be used for this.
   b. Overall dimension: 265x180x25mm
   c. Center through hole of 65mm diameter has to be made.
   d. Horizontal slots(25.20x10.2mm)-06Nos. are to be machined on this plate as mentioned in the drawing.
4. **Teflon Post(Drg.No.06)**
   a. Material: Teflon
   b. Overall Dimension:200x60x20mm
   c. M6 Tapping has to be provided as shown in the drawing.
   d. Helical spring insert has to be provided for the tapping.
5. **Insulation post(Drg.No.07)**
   a. Material: Teflon
   b. Overall Dimension:Dia.20mm X 60mm
   c. M6 and M10 Tapping have to be provided as shown in the drawing.
   d. Helical spring insert has to be provided for both the tapping.
6. **Nylon Block_Bottom(Drg.No.08)**
   a. Material: Nylon
   b. Rectangular block with hemi-circle at the Edge.
   c. Overall dimension: 140x100x80mm.
   d. C-section of R35 has to be made at the edge.
   e. 4 Number of through holes of dimension 10.5mm has to be provided along the length as shown in drg.no.8.
7. **Nylon Block_Top(Drg.No.09)**
   a. Material: Nylon
   b. Rectangular block with hemi-circle at the Edge.
   c. Overall dimension: 140x100x80mm.
   d. C-section of R35 has to be made at the edge.
   e. 4 Number of through holes of dimension 10.5mm has to be provided along the length as shown in drg.no.8.
8. **Height Adjusters(Drg.No.10-14)**

It consists of 6 components. The details are given below;

Drg.No.	Item	Description
10	Base	a. Material: SS304 b. Overall dimension: 80x80x66mm c. Slot of 50x50x50mm from top surface. d. Positive Tolerance of 0.05mm has to be maintained for inner slot of 50x50mm. e. **Electropolishing** has to be done.

11	Middle	a. Material: SS304 b. Overall dimension: Dia.90mm X 16mm thickness. c. Slot of Dia.70mm X 14mm from one surface. d. Dia.50mm through slot. e. **Electropolishing** has to be done.
12	Screw	a. Material: SS304 b. This is having a base of 50X50mm and thickness 15mm. c. Square thread has to be formed above this over a length of 66mm. d. 8mm pitch square thread has to be formed leaving a space of 6mm free at the top. e. Negative tolerance of -0.05mm has to be given to 50x50mm cross-section base. f. **Electropolishing** has to be done.
13	Nut	a. Material: SS304 b. Compatible square thread-8mm pitch has to be made on this material over the entire length. c. Holes(06Nos.) of 10.1mm diameter and depth 5mm has to be made on the circumferential periphery of the component. d. **Electropolishing** has to be done.
14	Top	a. Material: SS304 b. Compatible square thread-8mm pitch has to be made on this material over the entire length. c. Negative tolerance of -0.05mm has to be given to 80x80mm cross-section top. d. 4 Holes are to be provided on the plate. This has to match with the corresponding holes provided on Base platform(Drg.No.1). e. **Electropolishing** has to be done.
No drawing	Thrust bearing	a. Thrust ball bearing preferably of the make SKF-51110 has to me provided between middle and base. b. The bearing should have a load capacity of minimum 500kg. c. Bearing may be attached to middle section by welding joint.
15	Assembly	a. The assembly consists of 6 components including bearing. b. 6 quantities of adjusters are to be fabricated.

9. **Acrylic top sheet(Drg.No.16)**
   a. Material: Acrylic
   b. Overall dimension: 1380x1006x38mm has to be machined.

c. Corners have to be rounded off.
d. All surfaces of this sheet have to be machined.

Note to the vendor:

a. All components are to be used in vacuum environment in the pressure range of 10-6mBar.
b. **Electropolishing** has to be done on all SS components.
c. All dimensions are to be strictly adhered to.
d. Tolerance, straightness, parallelity, perperdicularity etc has to be maintained.
e. TIG welding has to be done wherever applicable.
f. The quality of workmanship shall conform to high engineering standards and strictly as per instructions of engineer in charge (EIC) of job.

GENERAL REQUIREMENTS:

a) The vendors are encouraged to hold prior discussions with the indentor for any clarifications.
b) Finished products should be delivered to the address given below.

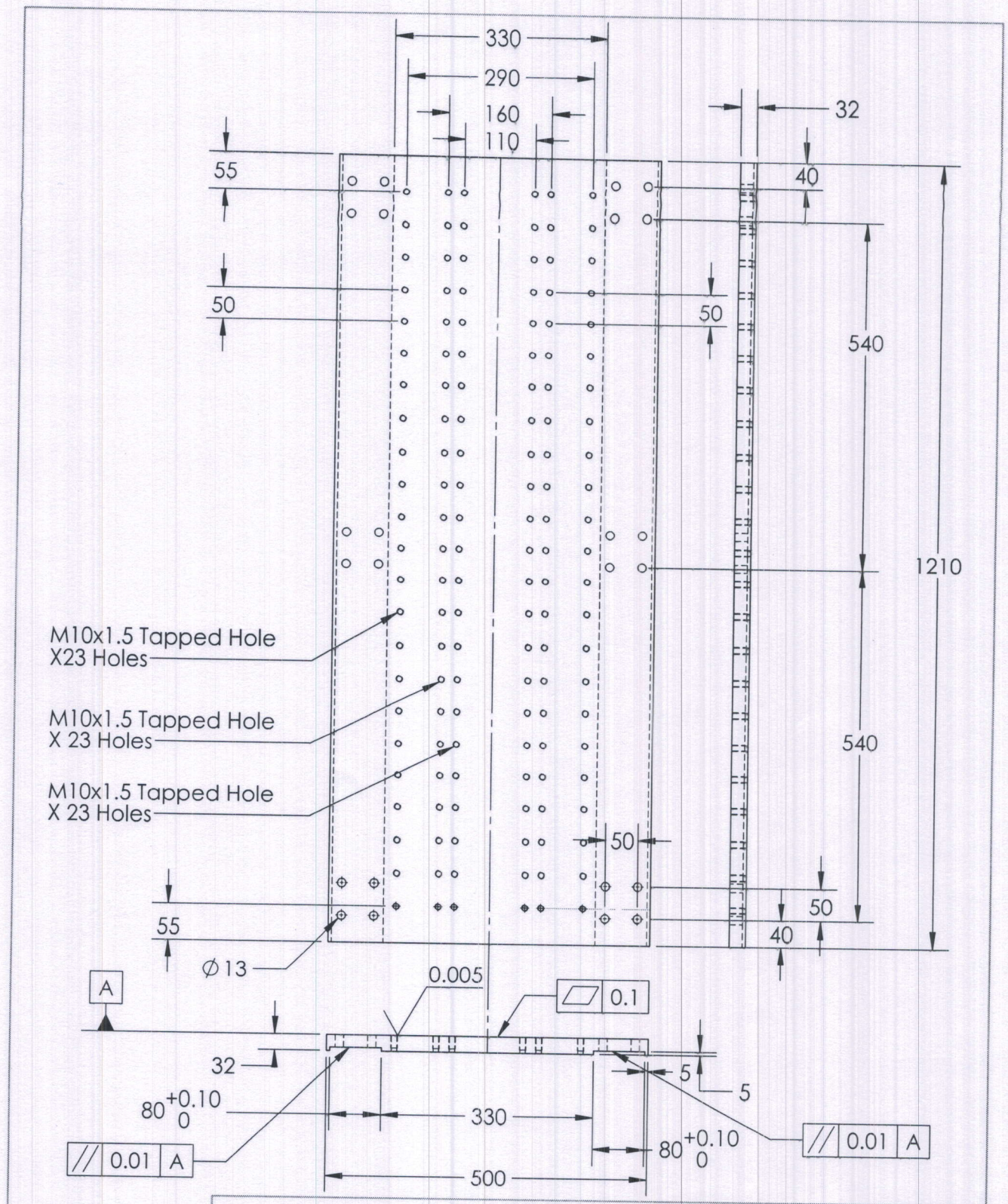
Address:

"Stores Officer, Bhabha Atomic Research Center, Near Nagavaram Junction, Nagavaram-Atchutapuram Highway, Visakhapatnam, Andhra Pradesh- 531011"

c) The cost of transportation/delivery if any should be mentioned in the quotation.
d) No part payment will be done for any part delivery.
e) It is mandatory to mention prices of each item separately.
f) Single order will be placed for all the above items and no partial work is permitted.
g) Minimum Guarantee/**Warranty period** of the raw material and workmanship shall be **One Year.**
h) **Contact Persons:**

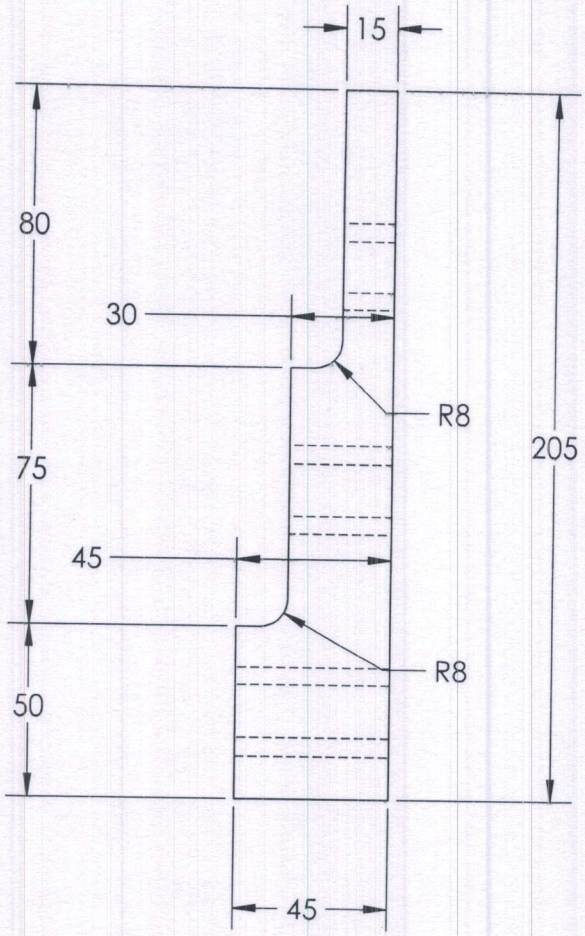
a) **Shri. Rahulnath P.P.,** Computational Analysis Division, BARC
Contact details: rahulnath@barc.gov.in
Phone: 0891-283-2149, 8985875318

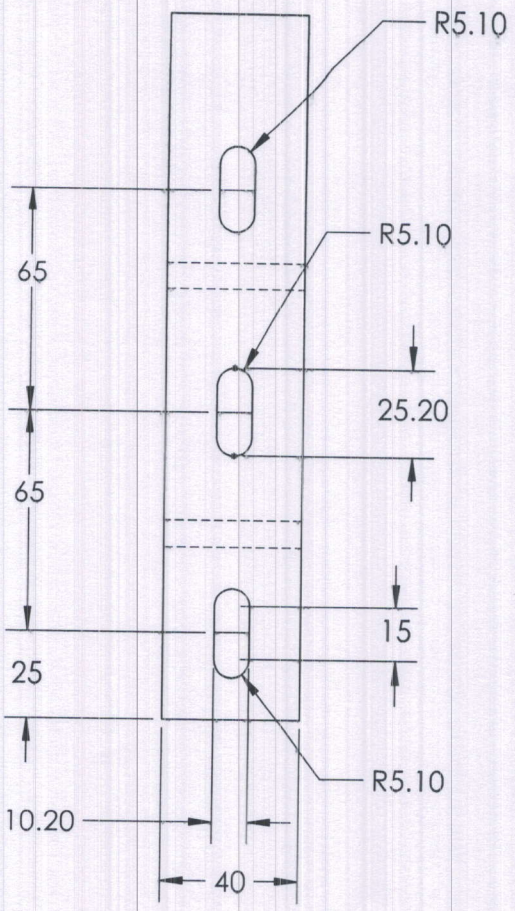
(Rahulnath P.P.)
SO/D, CAD

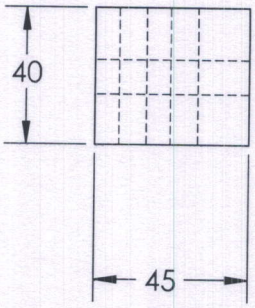


Base Platform

DRG. No.:01	All dimensions are in mm	
Quantity:01Nos.	SCALE:1:10	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath

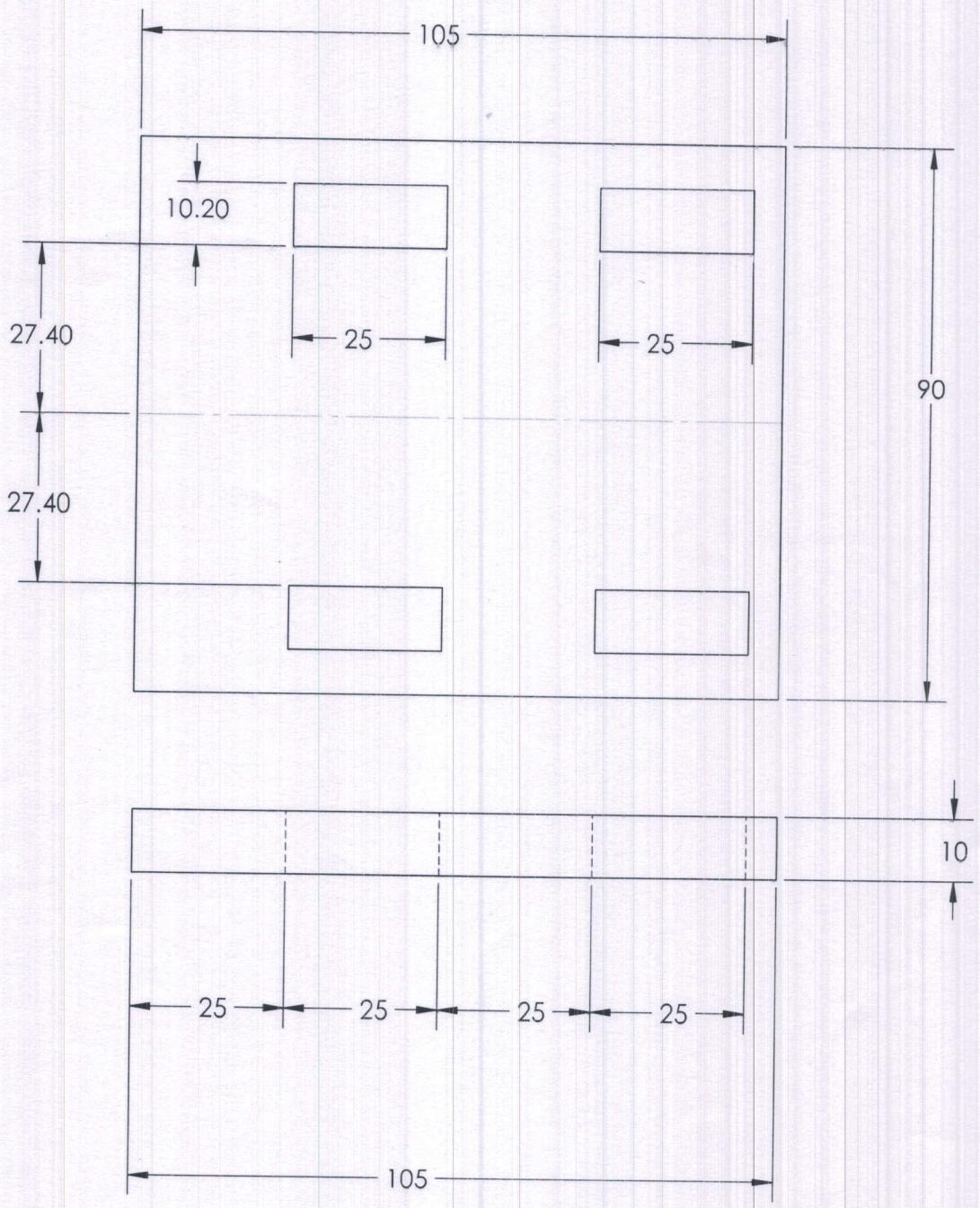






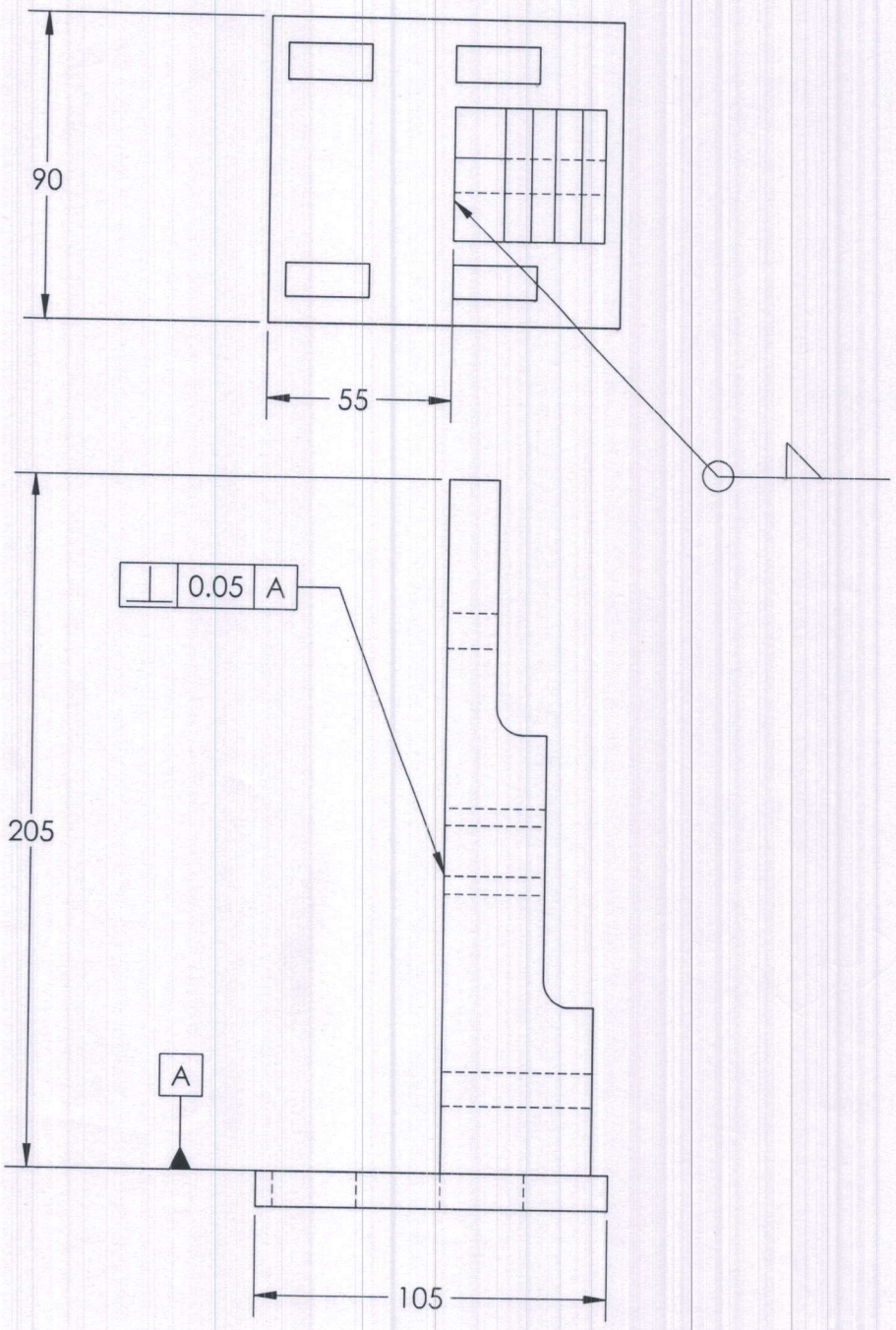
SS Post

DRG. No.:02	All dimensions are in mm	
Quantity:26Nos.	SCALE:1:2	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



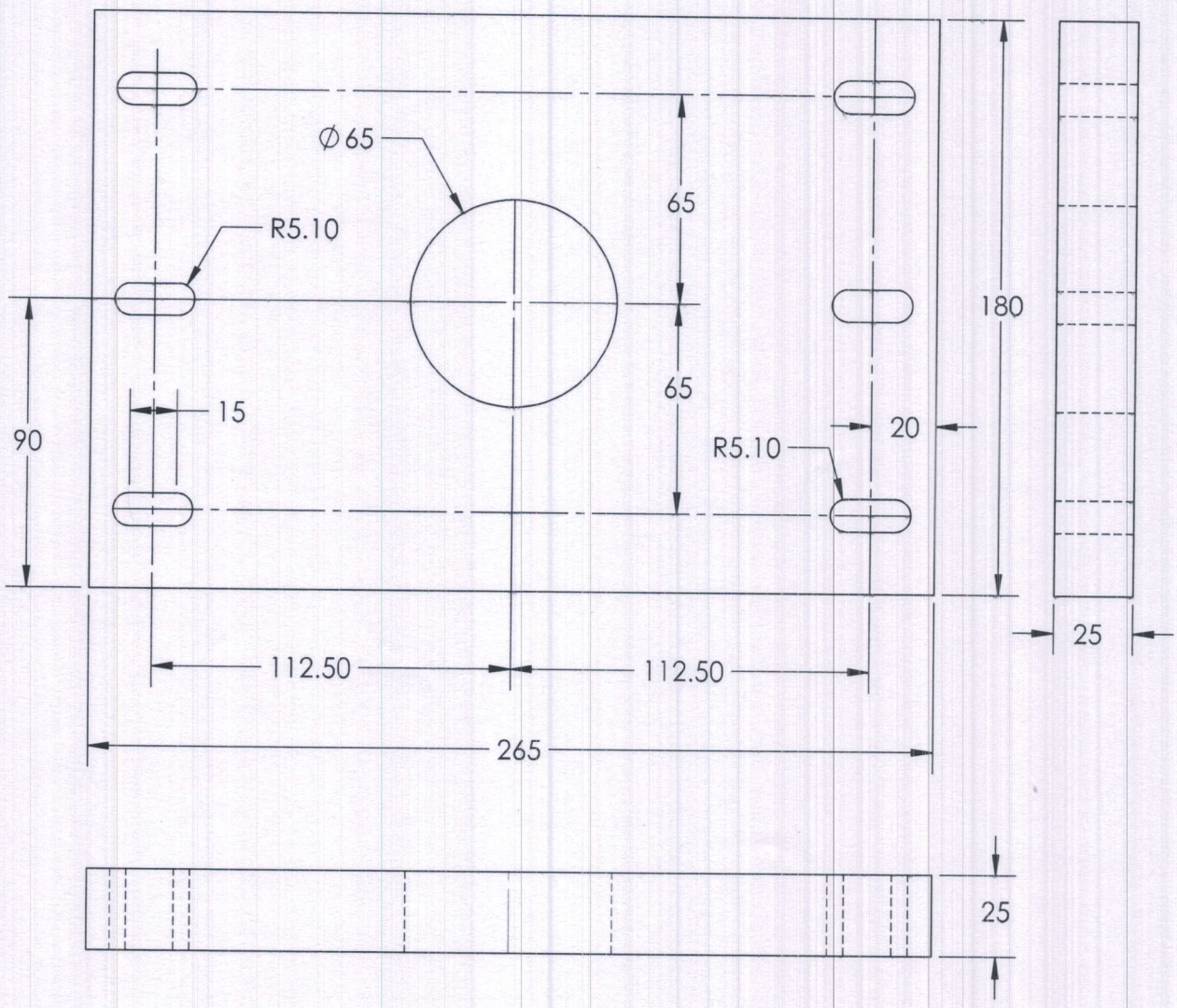
Base_SS Post

DRG. No.:03	All dimensions are in mm	
Quantity:26Nos.	SCALE:1:1	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



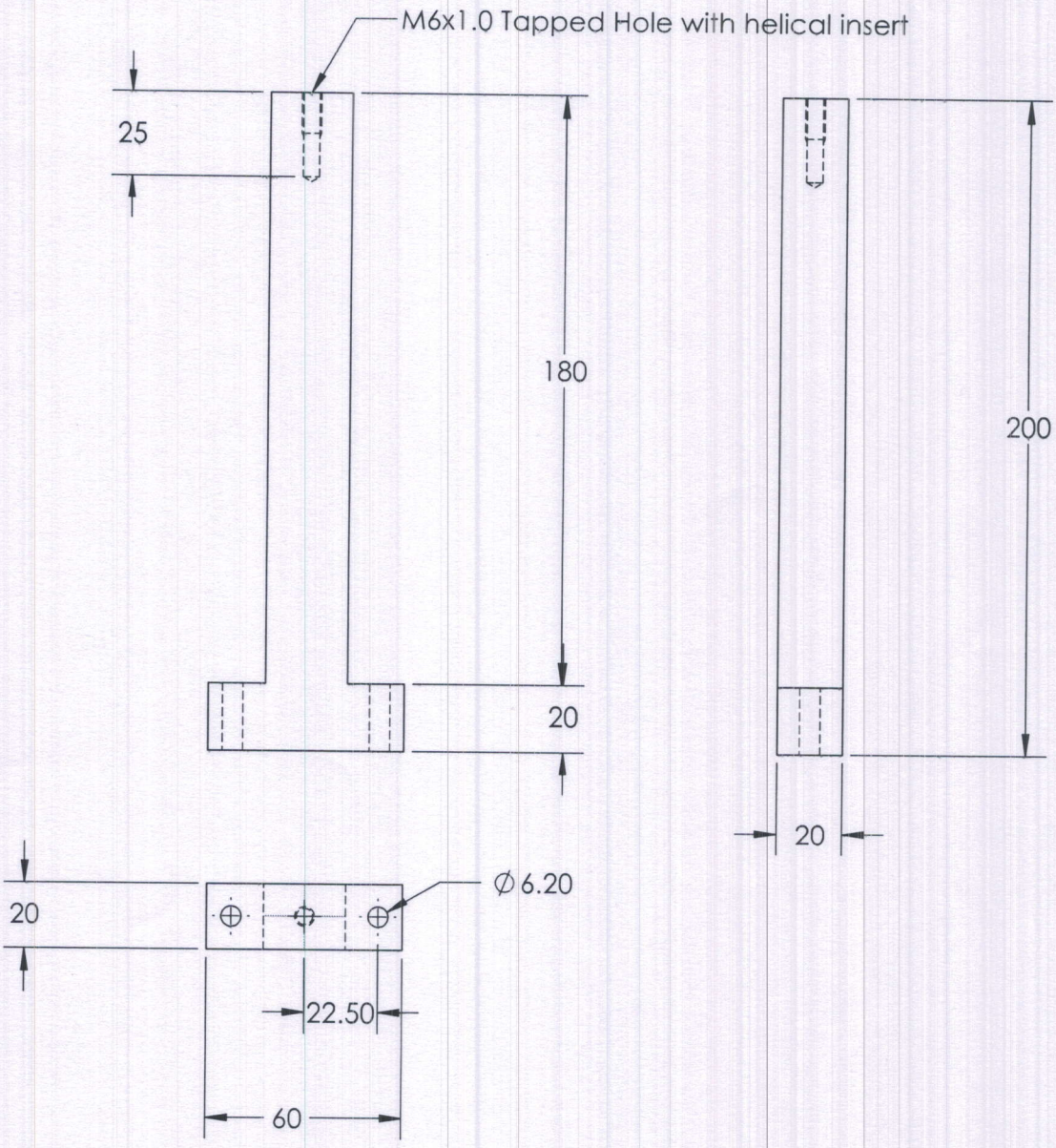
Assembly_SS Post

DRG. No.:04	All dimensions are in mm	
Quantity:26Nos.	SCALE:1:1	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



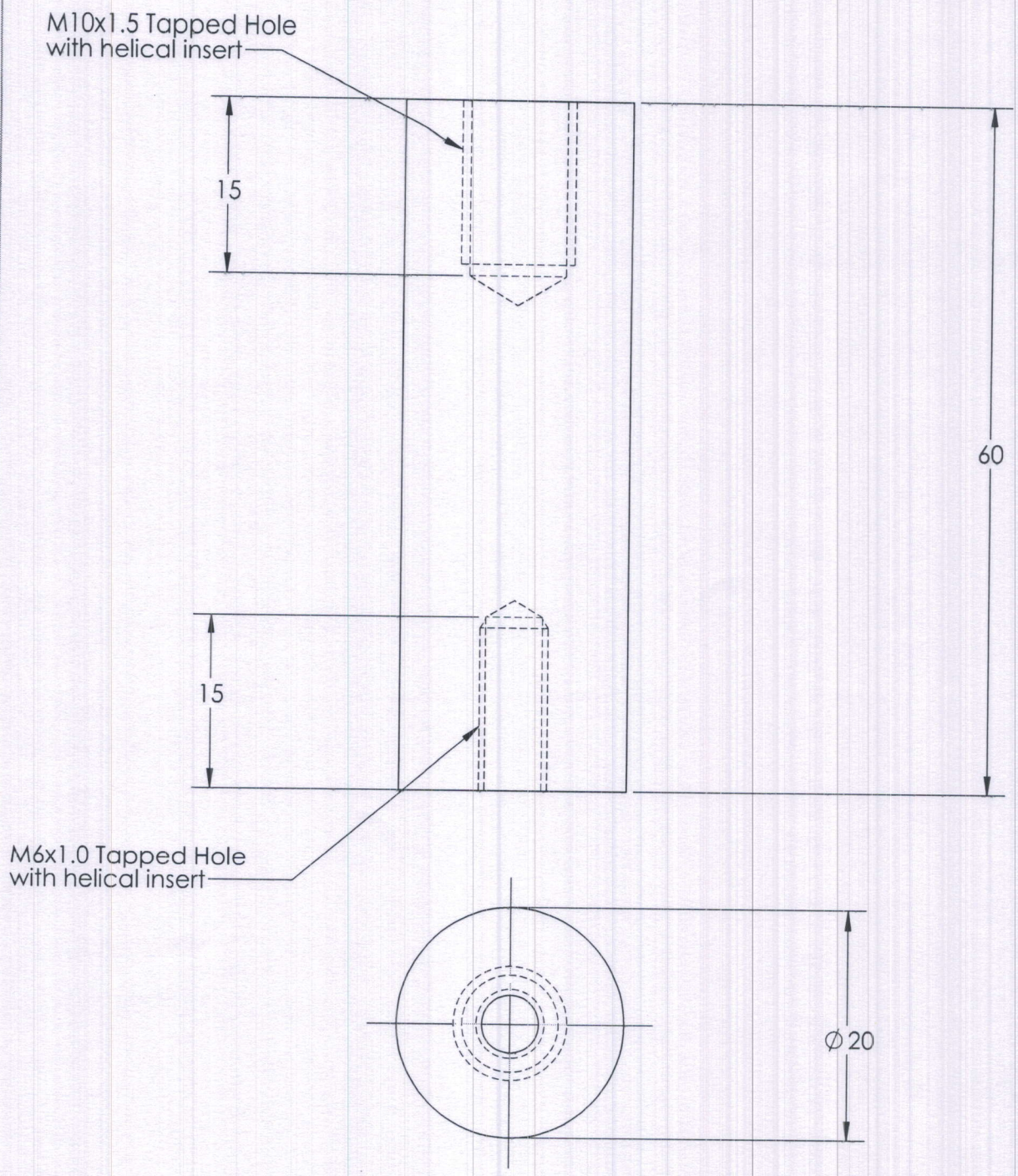
G10 Sheet

DRG. No.:05	All dimensions are in mm	
Quantity:14Nos.	SCALE:1:2	Material:G10
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



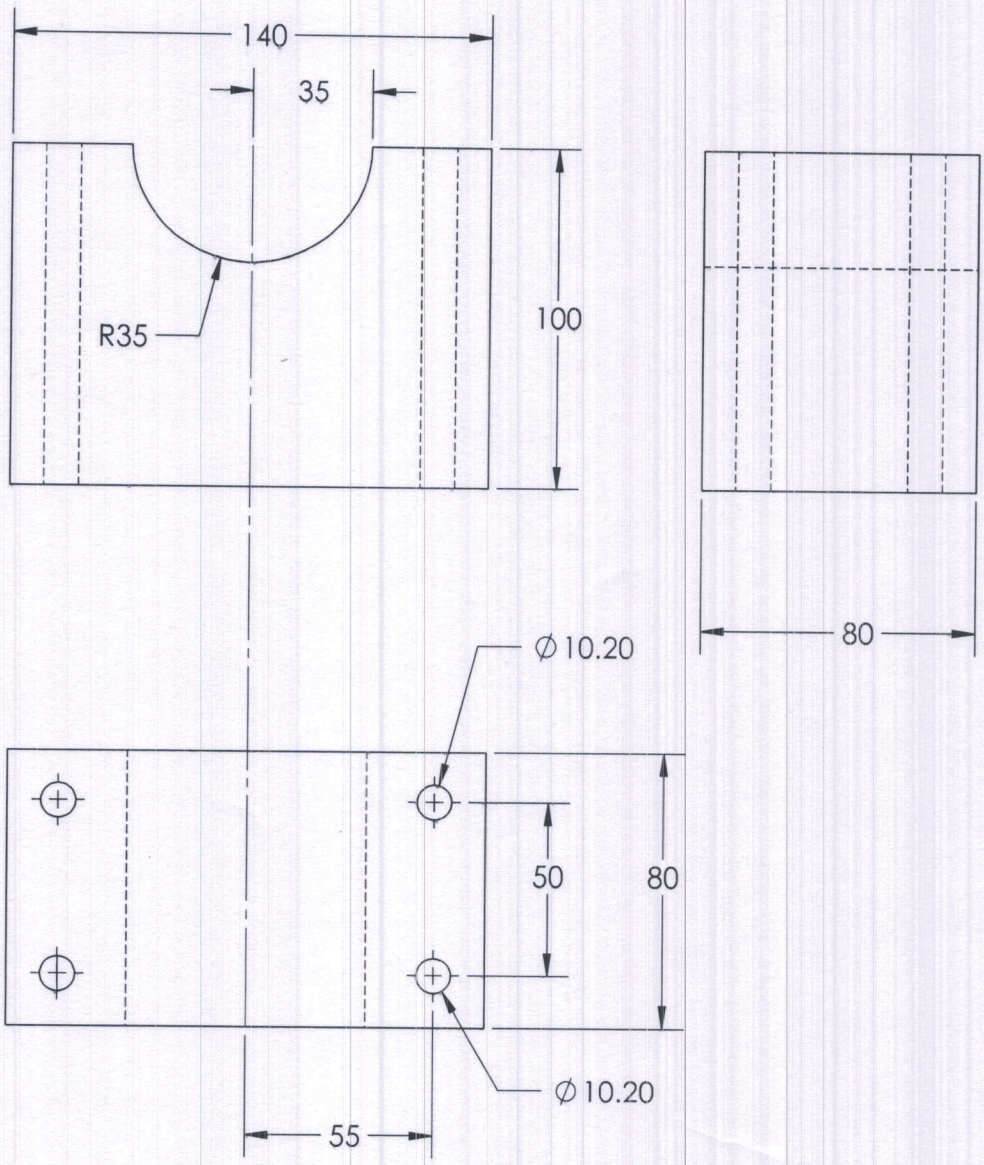
Teflon Post

DRG. No.:06	All dimensions are in mm	
Quantity:26Nos.	SCALE:1:2	Material:Teflon
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



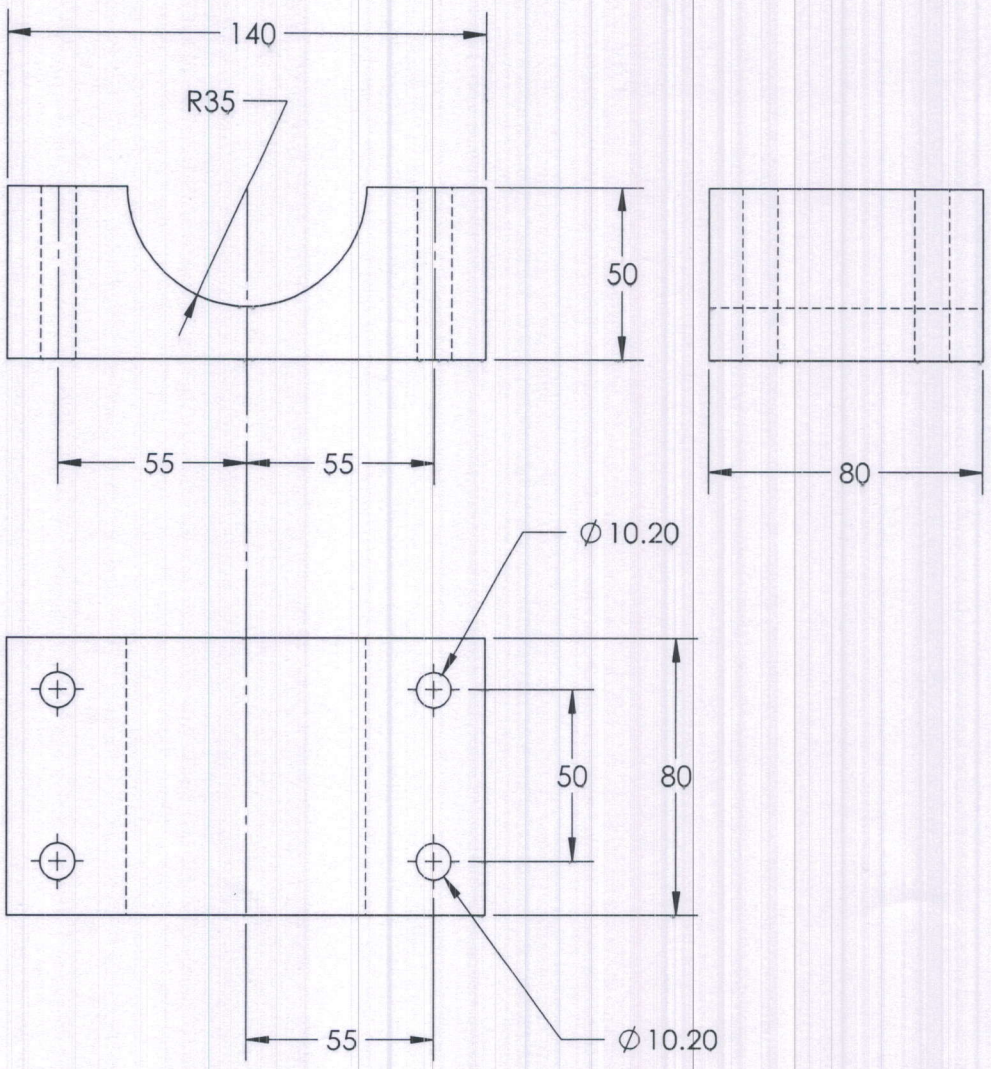
Insulation Post

DRG. No.:07	All dimensions are in mm	
Quantity:26Nos.	SCALE:2:1	Material:Teflon
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



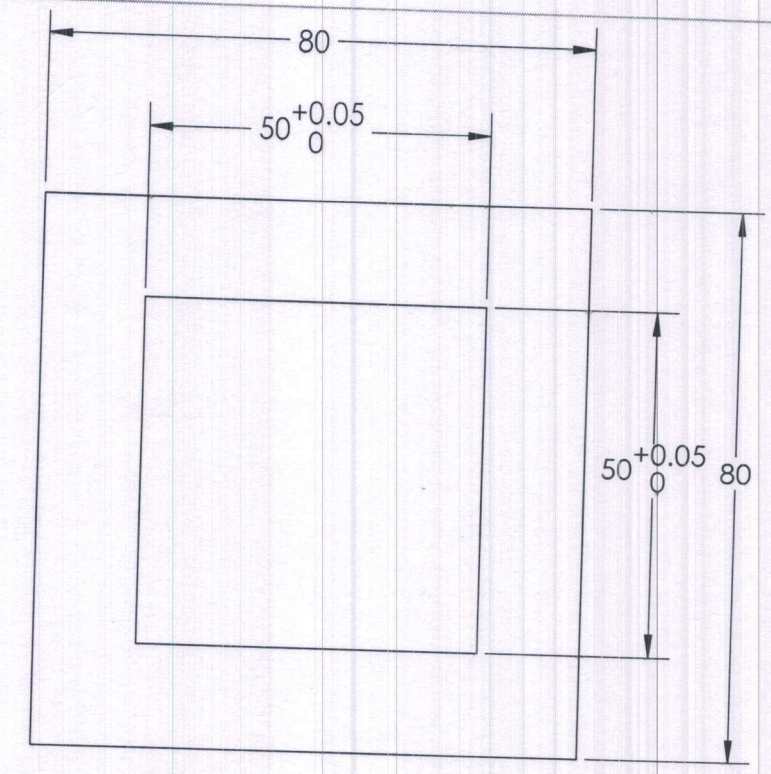
Nylon Block_Bottom

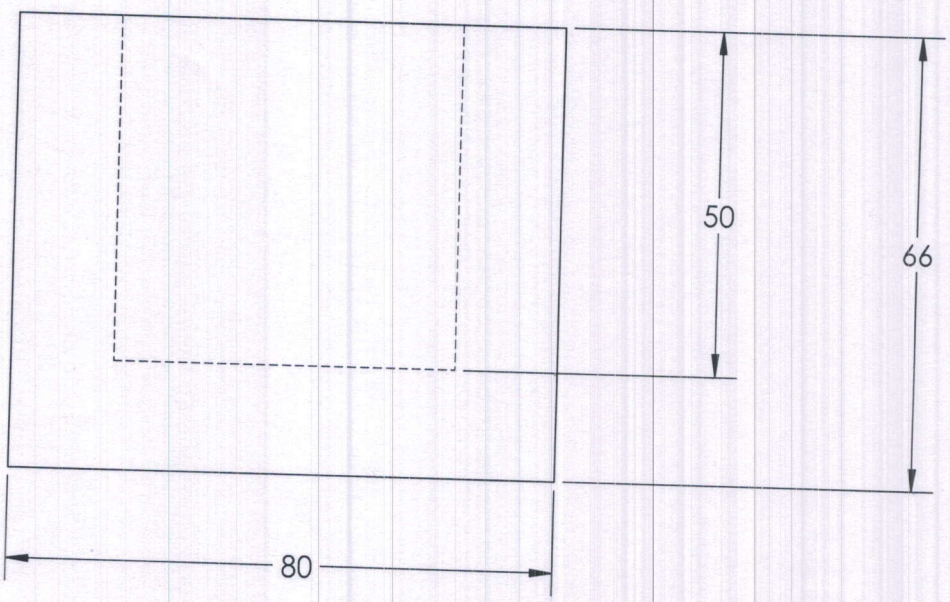
DRG. No.:08	All dimensions are in mm	
Quantity:06Nos.	SCALE:1:1	Material:Nylon
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



Nylon Block_Top

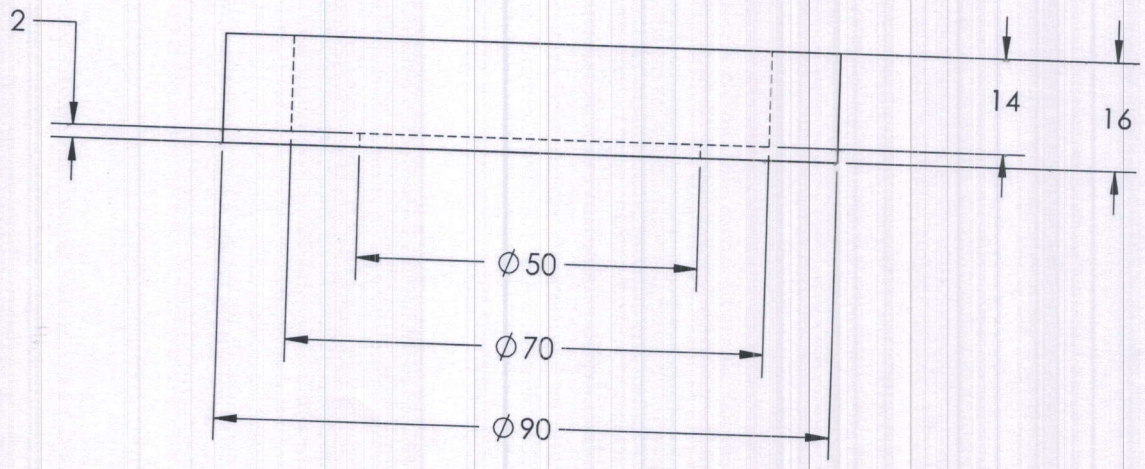
DRG. No.:09	All dimensions are in mm	
Quantity:06Nos.	SCALE:1:2	Material:Nylon
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath





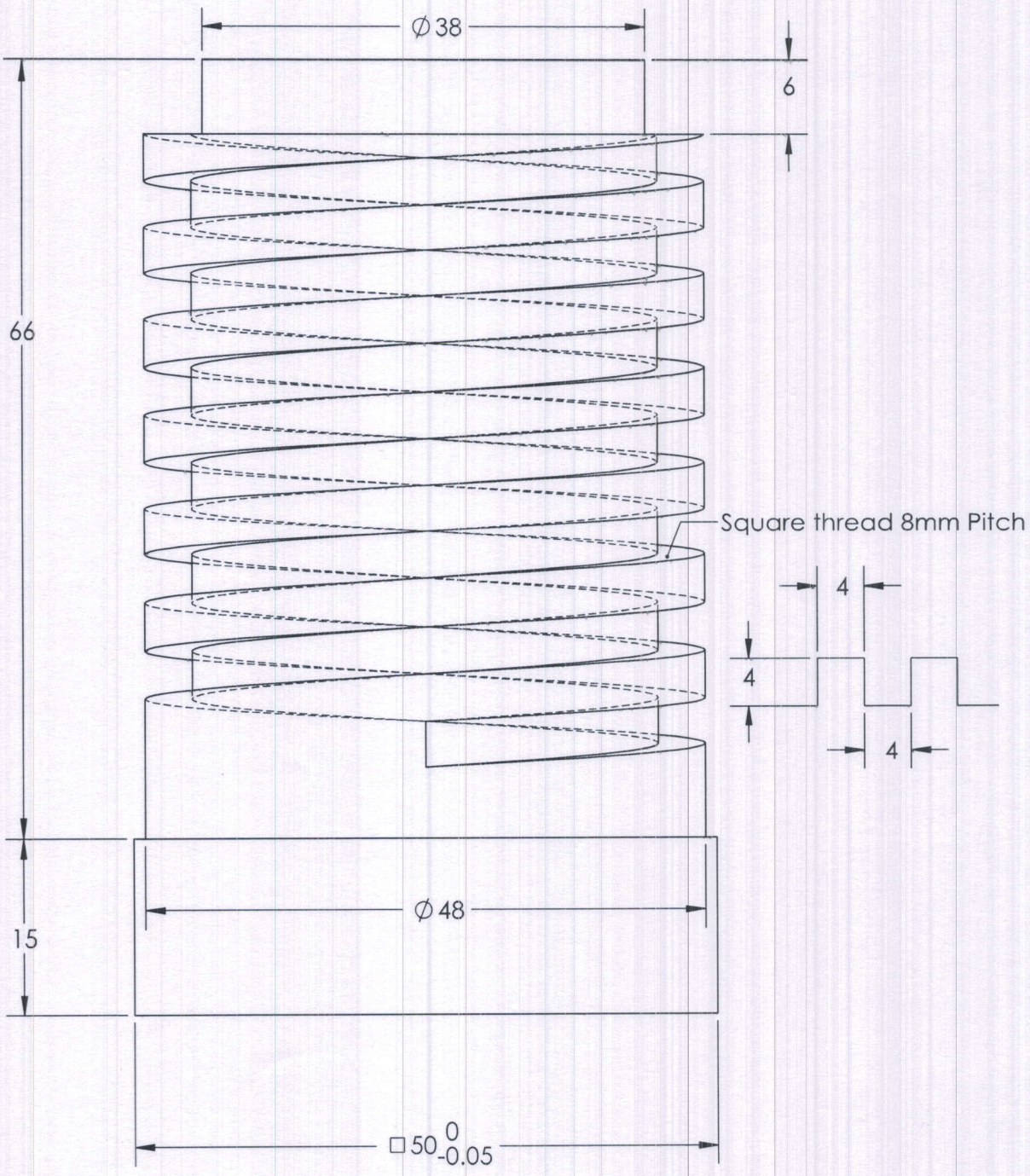
Base-Height adjuster

DRG. No.:10	All dimensions are in mm	
Quantity:01x6Nos.	SCALE:1:1	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



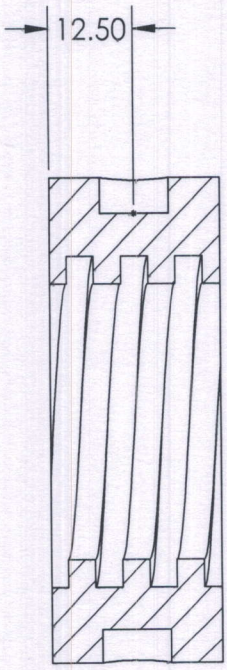
Middle-Height adjuster

DRG. No.:11	All dimensions are in mm	
Quantity:01x6Nos.	SCALE:1:1	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath

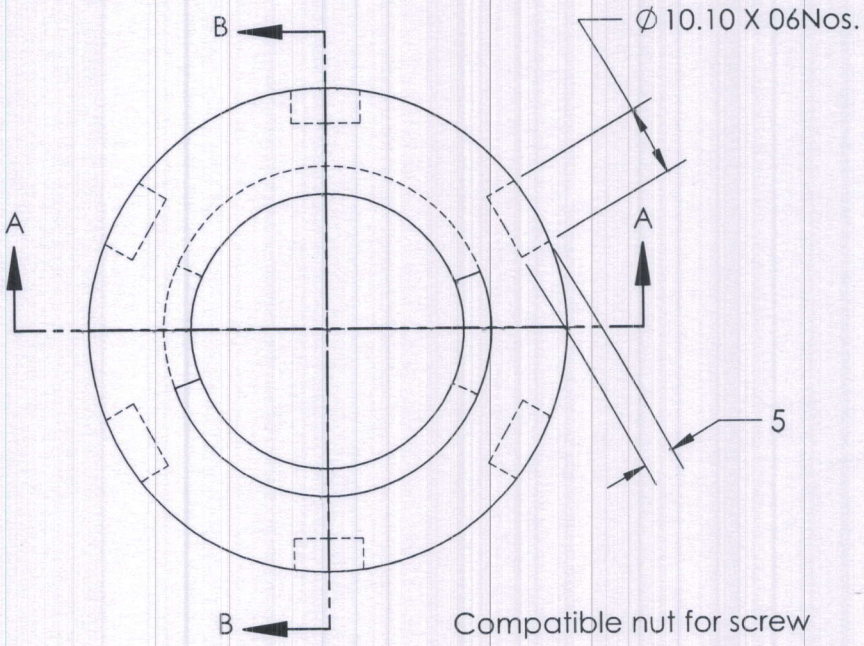


Screw-Height adjuster

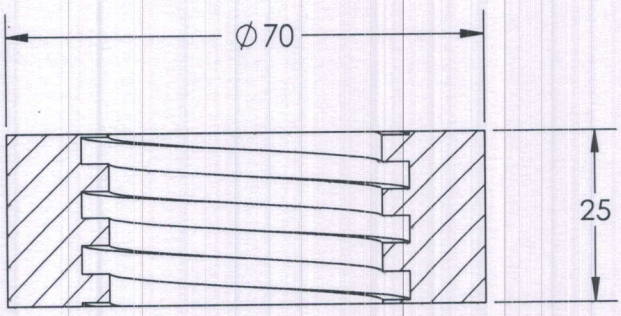
DRG. No.:12	All dimensions are in mm	
Quantity:01x6Nos.	SCALE:1:1	Material:SS304
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



SECTION B-B
SCALE 1 : 1

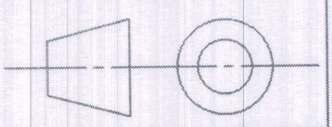


Compatible nut for screw



SECTION A-A
SCALE 1 : 1

Nut-Height adjuster

DRG. No.:13	All dimensions are in mm		
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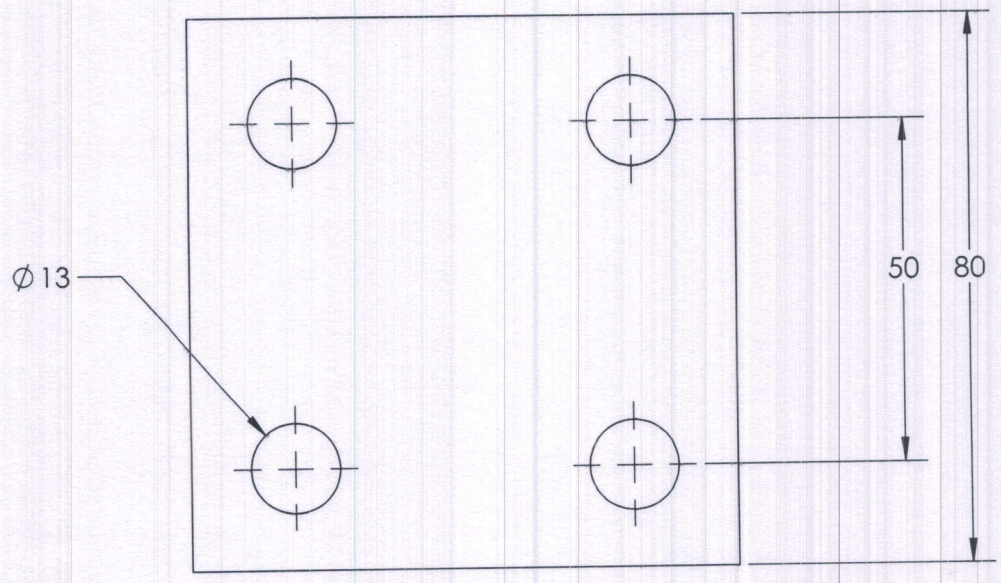
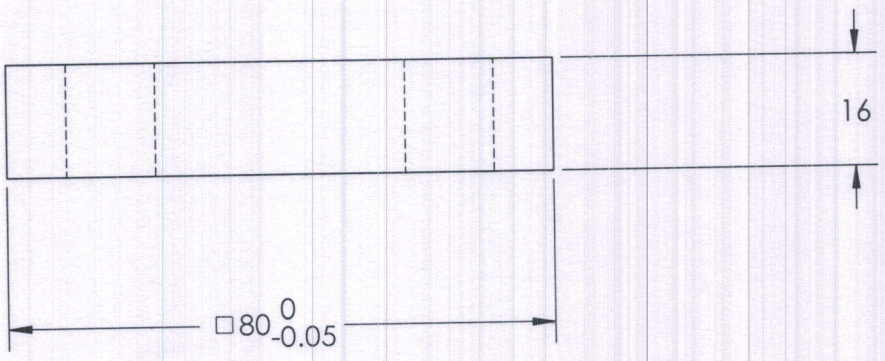
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath	





Top-Height adjuster

DRG. No.:14	All dimensions are in mm	
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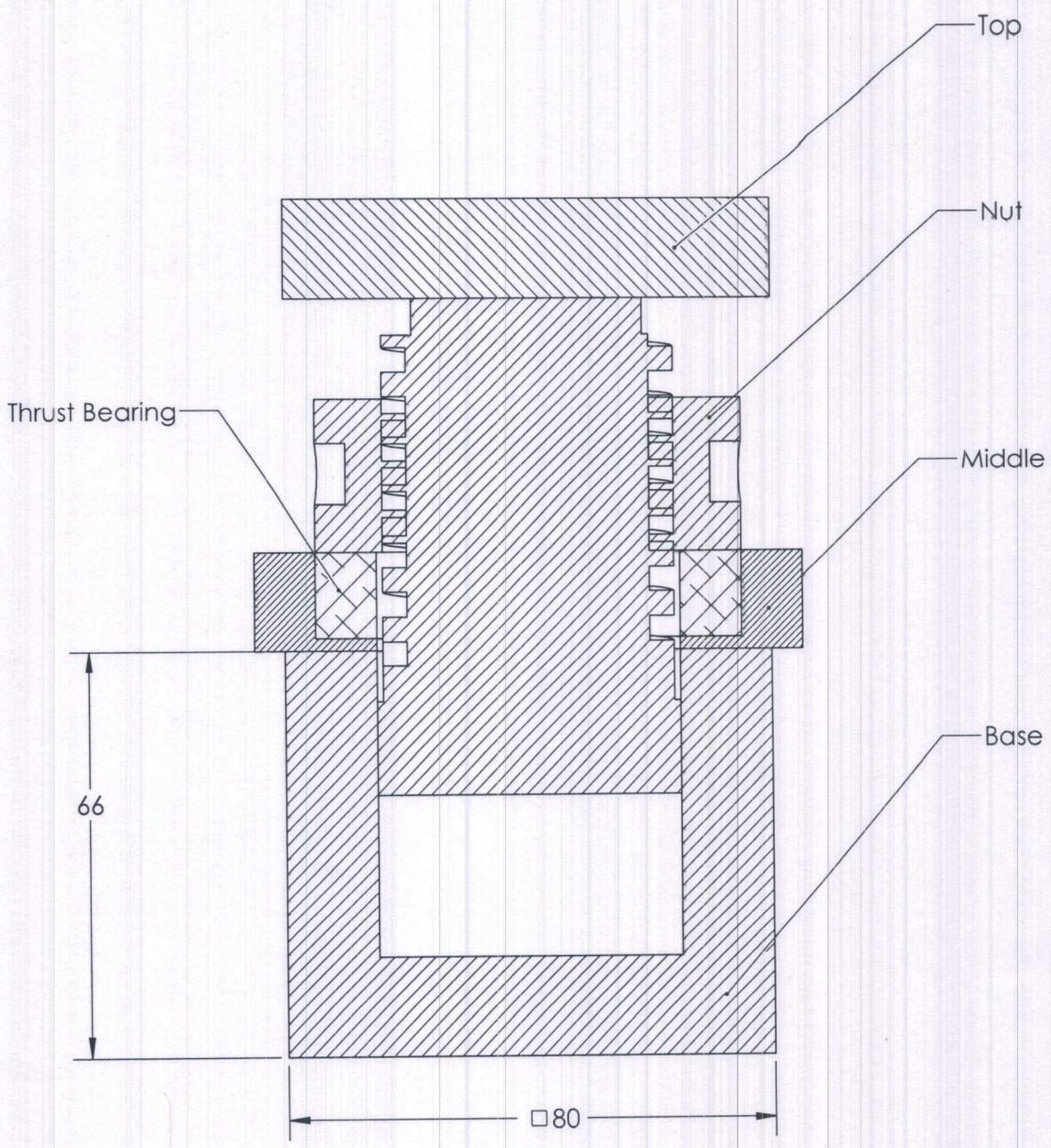
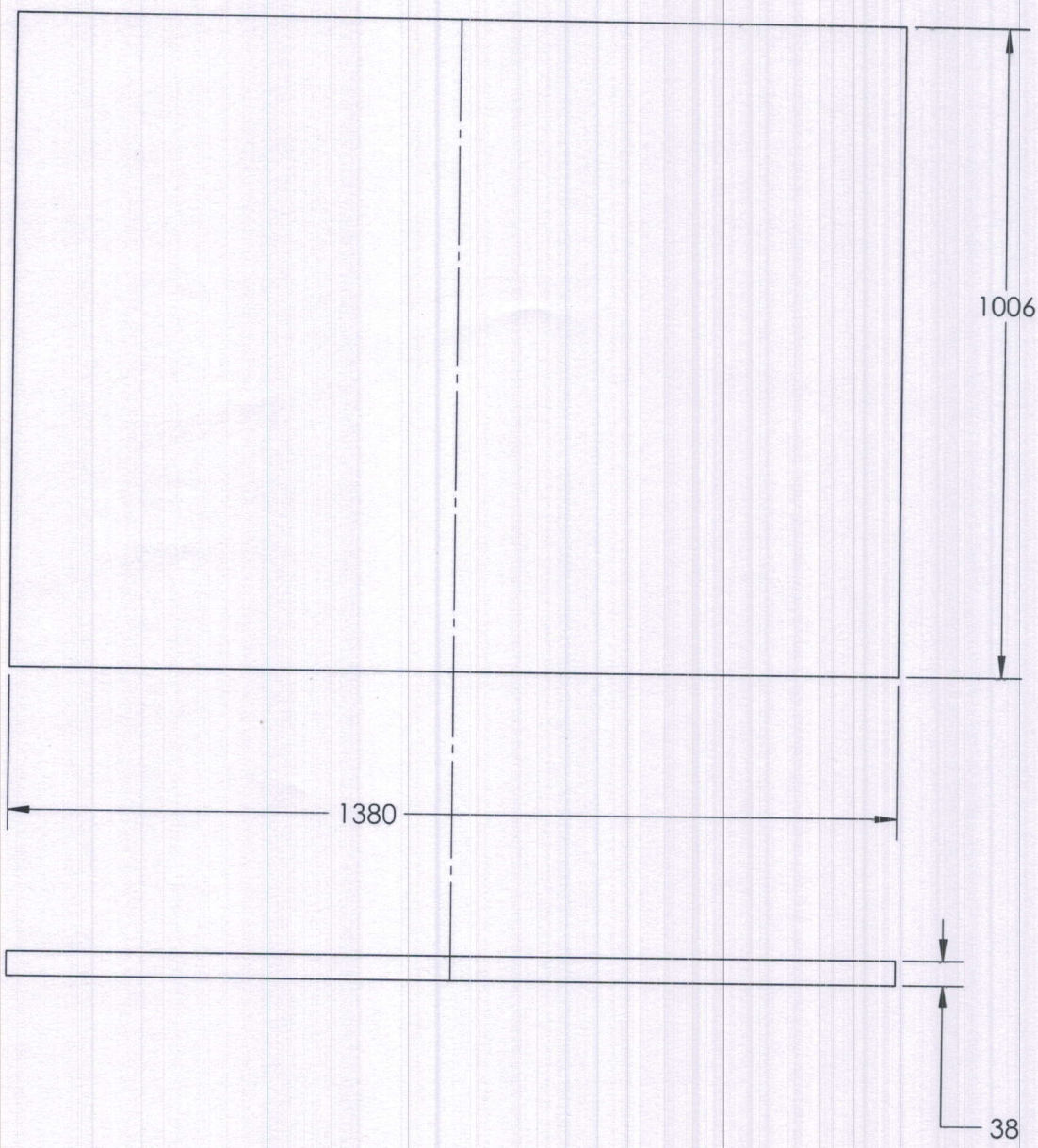
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath



Assembly-Height adjuster

DRG. No.:15	All dimensions are in mm		
Quantity:01x6Nos.	SCALE:1:1	Material:SS304	
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath	



Acrylic Top Cover

DRG. No.:16	All dimensions are in mm		
Quantity:01Nos.	SCALE:1:1	Material:SS304	
DATE:04/07/2022	MF:22-23/09	NAME & Sign.:Rahulnath	