



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



Computational Analysis Division

Ref: CAD/HEDM/WO/IND/22-23/15

Date: 07/09/2022

**SUBJECT: Notice inviting tender for "Fabrication, Machining, supply, & Installation of Mounting structures for electromagnets" (For details see Annexure-I)."**

**1. Scope of work: (See Annexure-I)".**

**2. 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,  
Computational Analysis Division  
Bhabha Atomic Research Centre  
Village: Madturu (Sub: P O )  
Anu Vihar Campus, Mekarasi Hill,  
Near Nagavaram Junction,  
Nagavaram-Atchutapuram Highway  
Visakhapatnam  
Andhra Pradesh- 531011

(Kind Attention: Pradeep K Maurya, SO/D,CAD, 0891-283-2148)

- Quotation shall reach us on/or before 20/09/2022 by **Speed Post/Courier Only**.
- On top left corner of the envelope please indicate

**Quotation for – " Fabrication, Machining, supply, & Installation of Mounting structures for electromagnets"**  
and due date 20/09/2022 .

- 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 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.
- You may contact us for any clarification before 20/09/2022 (Shri. Pradeep K Maurya, 0891-2832148,9100483817/7382224750, [pkmaurya@barc.gov.in](mailto:pkmaurya@barc.gov.in))

**3. Rates:**

As per BOQ (Bill of quantity) & Scope of Work.

**4. Place of Delivery/Work:**

PEB-04, CAD  
Bhabha Atomic Research Centre  
Near Nagavaram Junction,  
Nagavaram-Atchutapuram Highway  
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.

*pradeep kumar maurya*

(Pradeep K Maurya)  
SO/D, CAD

Phone: 0891-2832148,

Email: [pkmaurya@barc.gov.in](mailto:pkmaurya@barc.gov.in)

**SCOPE OF WORK**

Subject: Fabrication, Machining, supply, & Installation of Mounting structures for electromagnets

**Note to the vendor**

- a) **Pre-bid meeting is recommended:** Pre-bid meeting may be held with the indentor for understanding the type of work and availability of facilities for installation.
- b) All tools and machines required for installation has to be brought by the vendor.
- c) As per prevailing security regulations, the contractor is required to obtain **valid entry passes** from the security section for working inside BARC, for which related documents will be required to be submitted.
- d) Minimum Guarantee/Warranty period of the workmanship shall be **One Year** from the date of issue of completion certificate.
- e) The quality of workmanship shall conform to high engineering standards and strictly as per instructions of engineer in charge (EIC) of job.
- f) **Cost of each item** (as in BoQ), along with rate must be mentioned in the quotation.
- g) Installation and commissioning cost must be mentioned in the quotation.

**A. BoQ for above subject:**

S. No.	Item Description	Quantity
1.	MS Stand	03 Nos.
2.	Height Adjuster	14 set
3.	SS Platform Type I	02 Nos.
4.	SS Sliding Rail	02 Nos.
5.	Acrylic Breadboard sheet	06 Nos.
6.	Teflon Insulator Post Type I	50 Nos.
7.	SS Platform Type II	01 No.
8.	SS Post	16 Nos.
9.	Teflon Insulator post Type II	50Nos.
10.	Coaxial Cable termination	04 Nos.
11.	Level Adjuster	02 Nos.
12.	<b>SS Nut Bolts</b>	As mentioned in the details
13.	Installation & Commissioning	Installation of all items is in the supplier's scope.

**B. Detail of scope of work.****1) Item(1): Machining, fabrication, supply , & Installation of MS Stand Type I**

Drq. No	Title	Main features	Quantity(Nos.)
01	MS Stand	1. Material: MS 2. Framing: Using C-Channels of size 75X75X40X5mm 3. Fabrication : Through Welding	03 Nos.
<b>Note:</b> <ul style="list-style-type: none"> <li>• All the dimensions must be strictly ensured.</li> <li>• A base plate of 125x125x15mm is to be welded to the legs(6Nos.).</li> <li>• Through holes are to be provided on channels wherever necessary to fasten platforms.</li> </ul> <b>Tolerances:</b> <ul style="list-style-type: none"> <li>• Proper Surface levelling must be insured.</li> </ul>			<b>NA</b>

**2) Item(2): Machining, fabrication, Supply and installation of Height adjuster**

Drq. No.	Title	Main Features	Quantity
02-07	Height adjuster	1. Material: MS 2. Size: 80mmX155mm±25mm	14 set
<b>Note:</b>			

<ul style="list-style-type: none"> <li>• Fabrication should be done as per drawing no. 02-07.</li> <li>• Proper fitting &amp; working must be insured.</li> <li>• Handle/Handle bars are to be provided wherever necessary</li> <li>• Joints can be made by welding or by bolting.</li> <li>• Bearings should be provided as mentioned in the drawing. Type of bearing should be strictly adhered to.</li> </ul> <p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Fitting jobs required for mounting on MS Stand at site is in the suppliers scope.</li> </ul>	
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3) **Item(3): Machining, fabrication, Supply and installation of SS Platform\_Type I**

Dr. No.	Title	Main features	Quantity(Nos.)
08	SS Platform_Type_I	1. Material: SS304 2. Overall Size: 1300mmX500mm	02 No.
<p><b>Tolerances:</b></p> <ul style="list-style-type: none"> <li>• Surface finish must be within 20microns.</li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Fabrication can be done in parts. Each part is to be attached by TIG welding.</li> <li>• Perpendicularity must be maintained within 0.1mm.</li> </ul> <p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Drilling and bolting with MS Frames is in the supplier's scope.</li> </ul>			02 set

4) **Item(3): Machining, fabrication, Supply and installation of SS Sliding Rail**

Dr. No	Title	Main features	Quantity(Nos.)
09	SS Sliding Rail	1. Material: SS304 2. Size:1300mmX220mm 3. M10 tapping	02 No.
<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Fabrication has to be done in single piece only.</li> </ul> <p><b>Tolerances:</b></p> <ul style="list-style-type: none"> <li>• Surface finish must be within <i>20microns</i>.</li> <li>• <i>No welding</i>.</li> <li>• Perpendicularity must be maintained within <i>0.1mm</i>.</li> </ul> <p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Bolting with SS Platform is in the supplier's scope.</li> </ul>			02 set

5) **Item(4): Machining, fabrication, Supply and installation of Acrylic Breadboard Sheet**

Dr. No.	Title	Main Features	Quantity
10	Acrylic Breadboard sheet	1. Material: Acrylic 2. Size: 1300mm(length)X22.5mm 3. M6X25mm Tapping	06 Nos.
<p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Fitting jobs required for mounting on SS Platform at site is in the suppliers scope.</li> </ul>			

6) **Item(5): Machining, fabrication, Supply and installation of Teflon Insulator Post\_Type I**

Dr. No.	Title	Main Features	Quantity
11	Teflon Insulator Post_Type_I	1. Material: Teflon 2. Size: 100mm(length)X25mm dia. 3. M8X25mm Tapping with spring insert.	50 Nos.
<p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Fitting jobs required for mounting on SS Platform at site is in the suppliers scope.</li> </ul>			

7) **Item(7): Machining, fabrication, Supply and installation of SS Platform\_Type II**

Drq. No.	Title	Main features	Quantity(Nos.)
12	SS Platform_Type II	1. Material: SS304 2. Overall Size: Dia. 1300mmX500mmX22.5mm 3. M10 tapping and through Holes-40mm	01 No.
<b>Tolerances:</b> <ul style="list-style-type: none"> <li>Surface finish must be within 20microns.</li> </ul> <b>Installation work:</b> <ul style="list-style-type: none"> <li>Drilling and bolting with MS Frames will be is in the supplier's scope.</li> </ul>			01 No.

8) **Item(8): Machining, fabrication, Supply and installation of SS Posts**

Drq. No.	Title	Main Features	Quantity
13	SS Post	1. Material: SS304 2. Size: 75mmX50mmX280mm 3. Vertical grooves.	16Nos.
<b>Note:</b> <ul style="list-style-type: none"> <li>Fabrication can be done in 2 parts. Each part attached by TIG welding.</li> </ul> <b>Tolerance</b> <ul style="list-style-type: none"> <li>Perpendicularity must be maintained within 0.05mm.</li> </ul>			16Set

9) **Item(9): Machining, fabrication, Supply and installation of Teflon Insulator Post\_Type II**

Drq. No.	Title	Main Features	Quantity
14	Teflon Insulator Post_Type II	1. Material: Teflon 2. Size: 125mm(length )X25mm dia. 3. M8X25mm Tapping with spring insert	50Nos.
<b>Installation work:</b> <ul style="list-style-type: none"> <li>Fitting jobs required for mounting on SS Platform at site is in the suppliers scope.</li> </ul>			

10) **Item(10): Machining, fabrication, Supply and installation of coaxial termination**

Drq. No	Title	Main features	Quantity(Nos.)
15	Coaxial cable_Acrylic Base	1. Material: Acrylic 2. Size: 100x500x50mm 3. Circular slot	04
16	Coaxial cable_SS flange-1	1. Material: SS 304 2. Size: Dia. 80x10mm 3. 8.5mm through holes	04
16	Coaxial cable_SS flange-2	1. Material: SS 304 2. Size: Dia. 80x10mm 3. M8 tapping	04
<b>Supply: Cable gland (Specification--PG29 cable gland)</b>			04
<b>Installation work:</b> i. The SS flanges should sit within close clearance inside the circular slot in acrylic base. ii. The PG29 cable gland must be threaded to acrylic base. iii. Cutting, drilling, fitting jobs required for mounting on acrylic sheet at site is in the suppliers scope			04 Set

11) **Item(11): Machining, fabrication, Supply and installation of level adjuster**

Drq. No.	Title	Main Features	Quantity
17-25	Level adjuster	1. Material: MS 2. Size: 700mmX134mm	02 set
<b>Note:</b> <ul style="list-style-type: none"> <li>Fabrication should be done as per drawing no. 17-25</li> </ul>			

<ul style="list-style-type: none"> <li>• Proper fitting &amp; working must be insured.</li> <li>• Handle/Handle bars are to be provided wherever necessary</li> <li>• Joints can be made by welding or by bolting.</li> <li>• Bearings should be provided as mentioned in the drawing. Type of bearing should be strictly adhered to.</li> <li>• Bearing at the bottom of 'Base Rail' has to be provided separately.</li> </ul> <p><b>Installation work:</b></p> <ul style="list-style-type: none"> <li>• Fitting jobs required for mounting on MS Stand at site is in the suppliers scope.</li> </ul>	
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### 12) Supply of SS Nut Bolts

S. No.	Item	Size	Material	Quantity (nos.)
1.	M06 Nut(1), Bolt(1), Spring washer (1), plain washer (2), (Allen head)	25mm	SS	50Set.
2.	M10 Nut(1), Bolt(1), Spring washer (1), plain washer (2), (Hex head)	40mm	SS	50Set.
3.	M10 Nut(1), Bolt(1), Spring washer (1), plain washer (2), (Hex head)	125mm	SS	50Set.
<b>Installation:</b>				
<ul style="list-style-type: none"> <li>• Fastening (Bolts, Nut, washers etc) is in the supplier scope.</li> </ul>				

### 13) Installation & Commissioning

S. no.	Installation work
01	Installation work for each item is mentioned above for each item. Assembly of individual item may be done either at purchaser's site or at supplier's site.
02	Fitting Work (fitting and supply of fasteners) includes; <ul style="list-style-type: none"> <li>1. Drilling, cutting, fitting, fastening etc.</li> <li>2. All work must be carried under the <b>instruction of Engineer</b> in charge of site.</li> <li>3. All <b>safety measures</b> (provision of safety shoes, gloves, goggles etc. to the fitter) must be ensured by the supplier.</li> </ul>

### General requirements:

**h)** Finished products should be delivered to the address given below address.

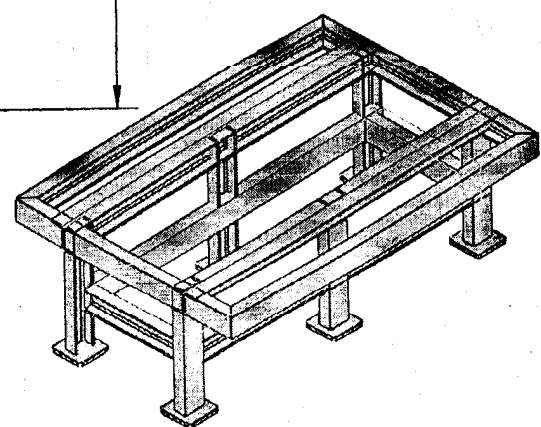
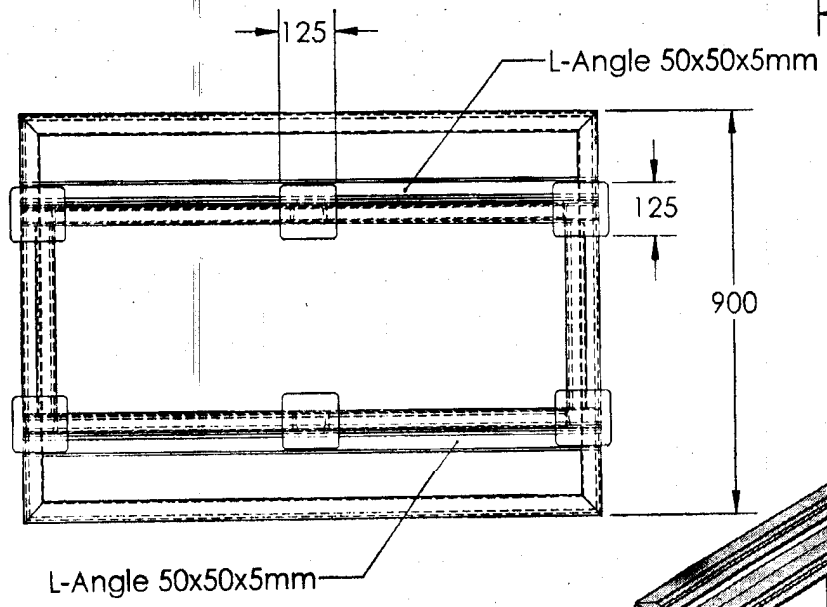
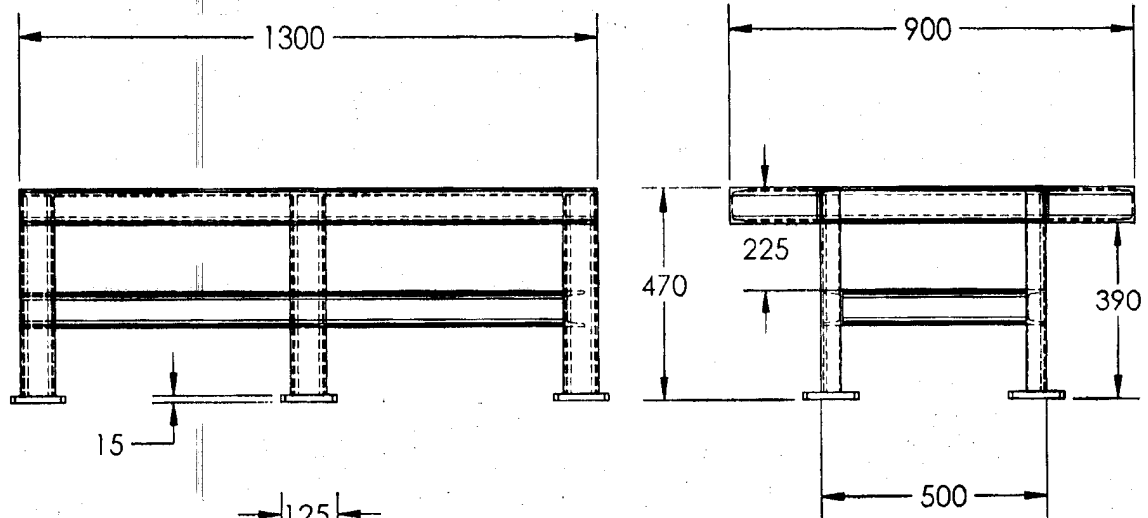
*Stores Officer,  
Bhabha Atomic Research Center,  
Near Nagavaram Junction, ,  
Nagavaram-Atchutapuram Highway  
Visakhapatnam,  
Andhra Pradesh- 531011  
Phone: 0891-283-1011*

**i) Contact Persons:**

Shri. Pradeep K Maurya  
SO/D, Computational Analysis Division, BARC-Vizag  
Contact details: [pkmaurya@barc.gov.in](mailto:pkmaurya@barc.gov.in)  
Phone: 0891-283-2148, 9100483817

*Pradeep Kumar Maurya*

(Pradeep K Maurya)  
SO/D, CAD  
Indentor

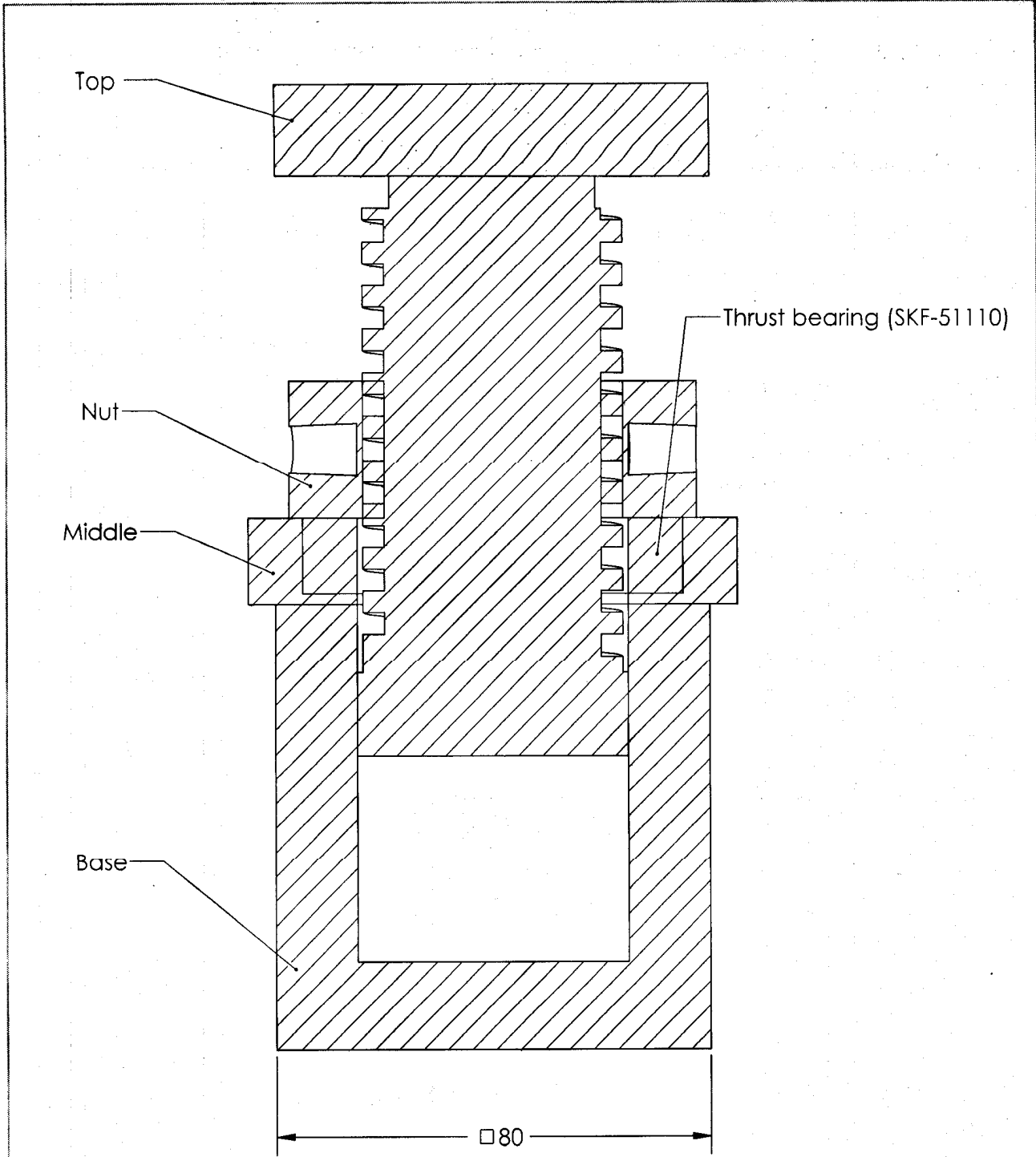


All Joints are welded  
 Channel Size: 75x75x40x5mm

All dimensions are in mm

### MS Stand

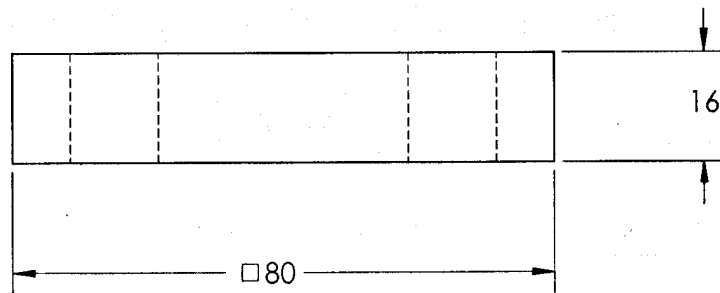
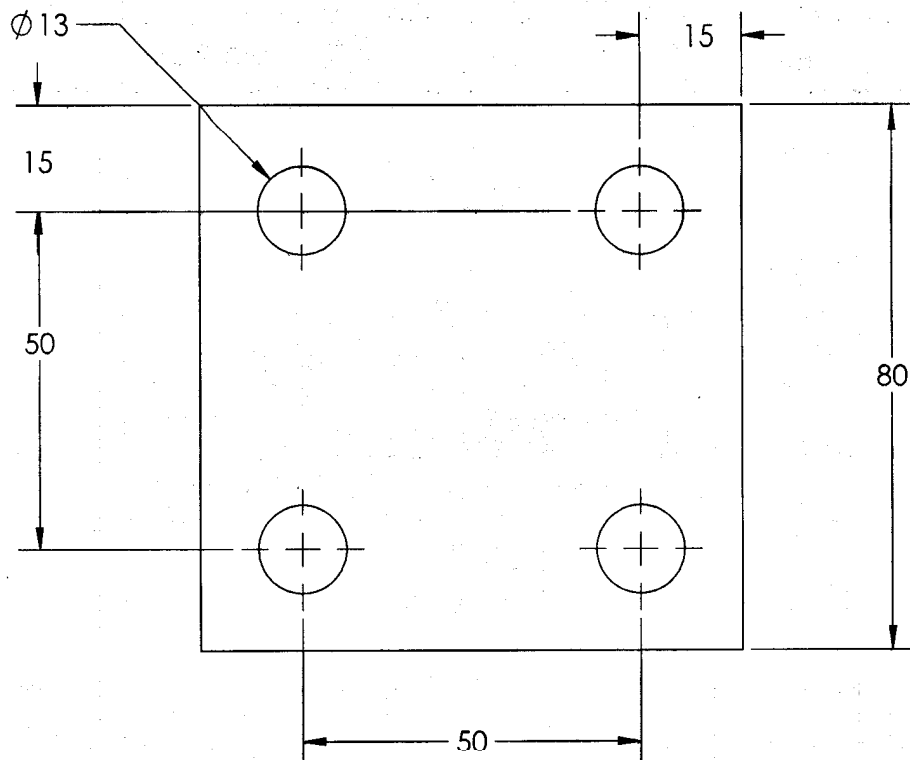
DRG. No.: 01	SCALE: 1:15	
Quantity: 03 Nos.	Material: MS	
DATE: 22/03/2022	NAME & Sign.: Rahulnath	



All dimensions are in mm

<h1>Sectional_NewHeightAdjuster</h1>		
DRG. No.: 02	SCALE:1:1	
Quantity: 14 Set	Material:MS	
DATE:28/03/2022	NAME & Sign.:Rahulnath	





All dimensions are in mm

## Top\_NewHeightAdjuster

DRG. No.: 03

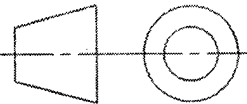
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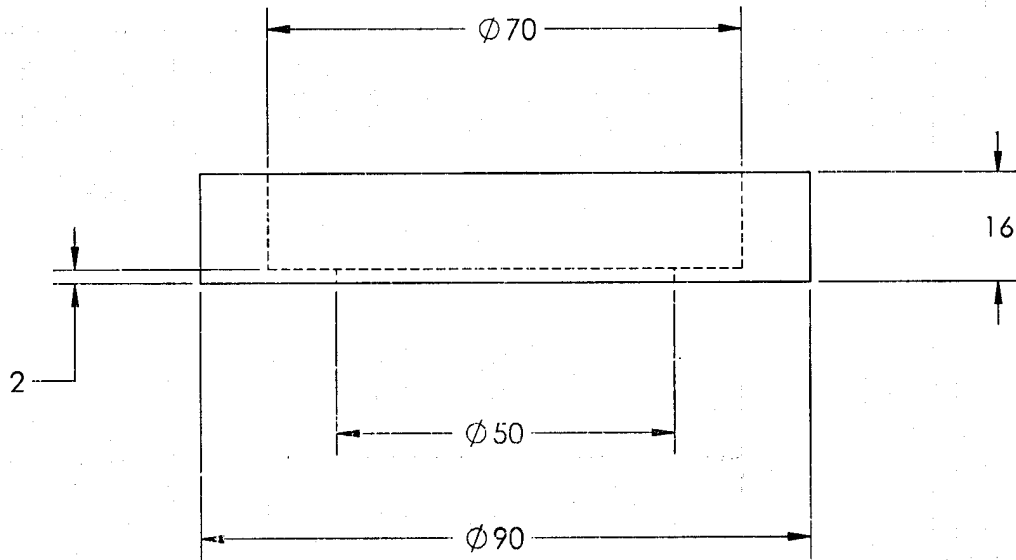
Quantity: 14 Nos.

Material:MS

DATE:28/03/2022

NAME & Sign.:Rahulnath





All dimensions are in mm

## Middle\_NewHeightAdjuster

DRG. No.: 04

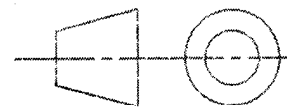
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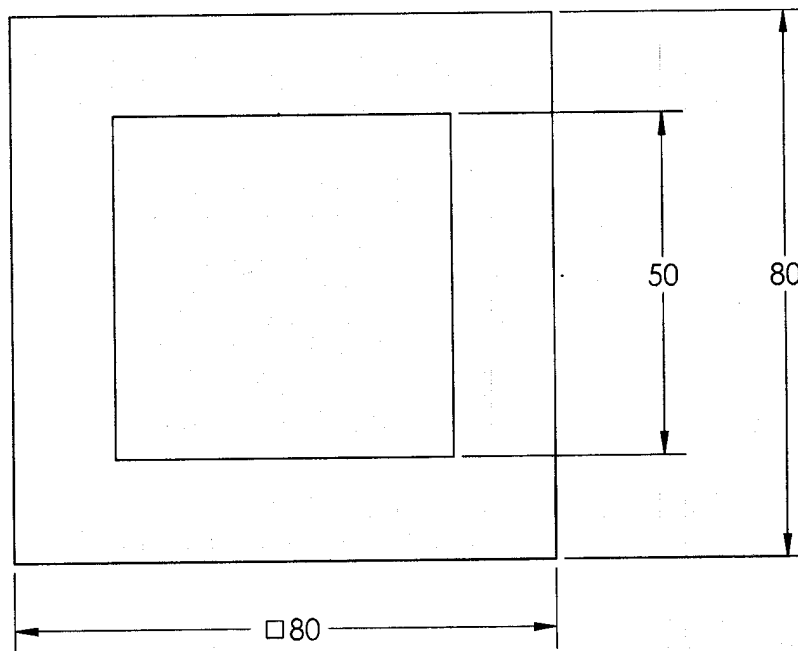
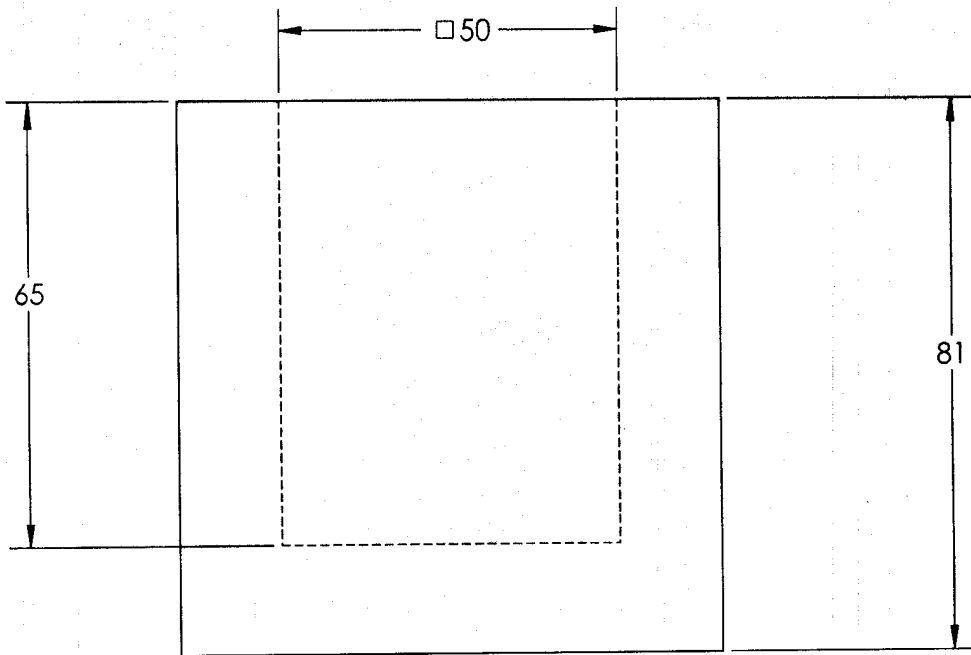
Quantity: 14 Nos.

Material:MS

DATE:28/03/2022

NAME & Sign.:Rahulnath





All dimensions are in mm

## Base\_NewHeightAdjuster

DRG. No.: 05

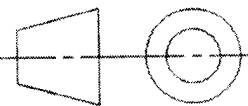
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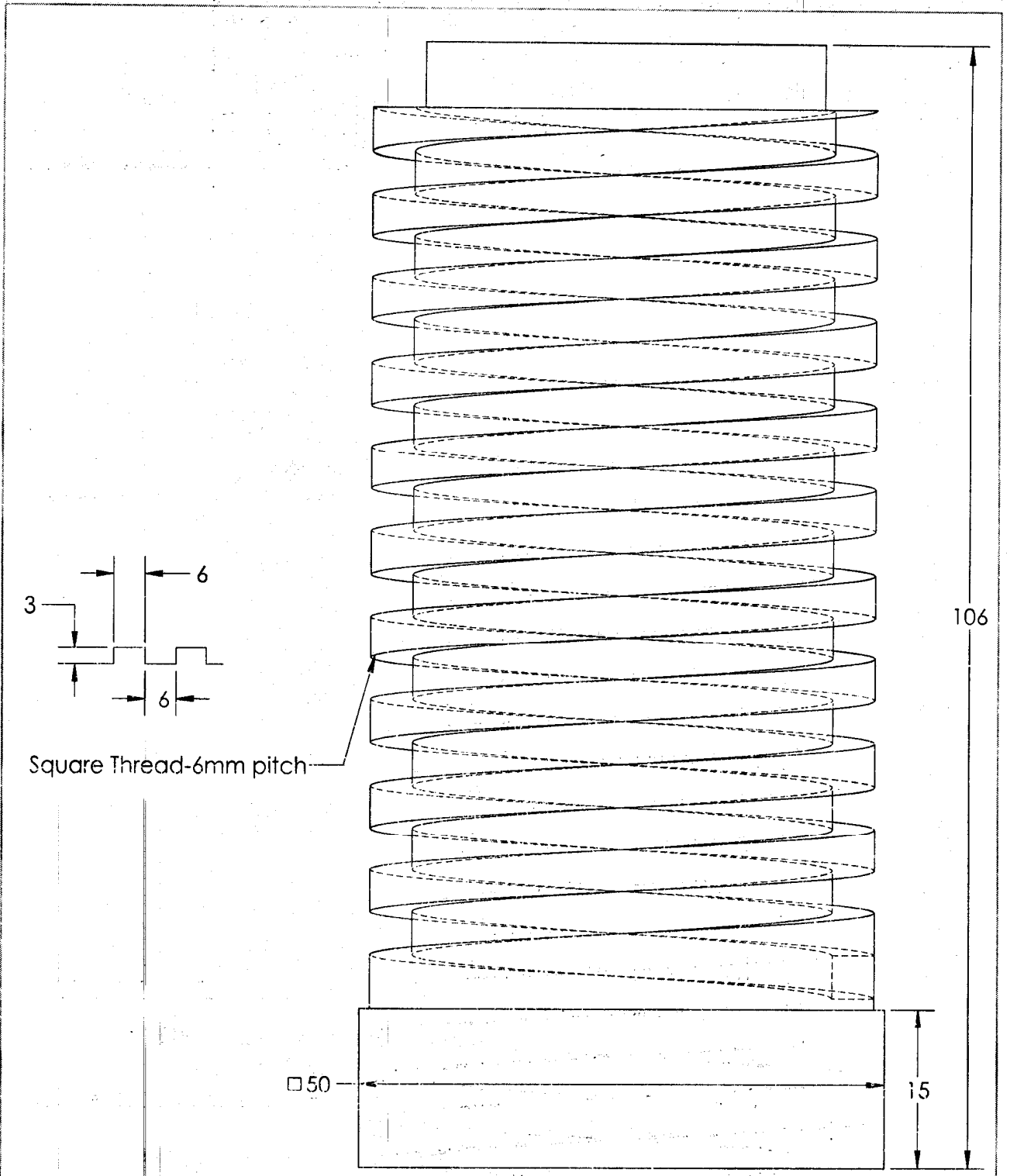
Quantity: 14 Nos.

Material:MS

DATE:28/03/2022

NAME & Sign.:Rahulnath





All dimensions are in mm

## Screw\_NewHeightAdjuster

DRG. No.: 06

SCALE:2:1

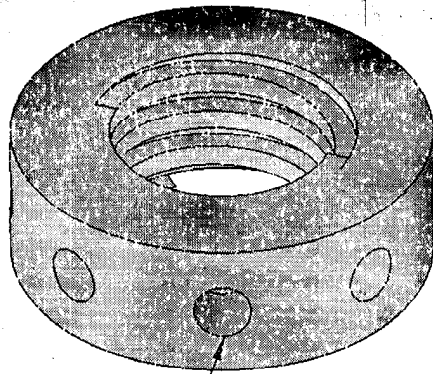
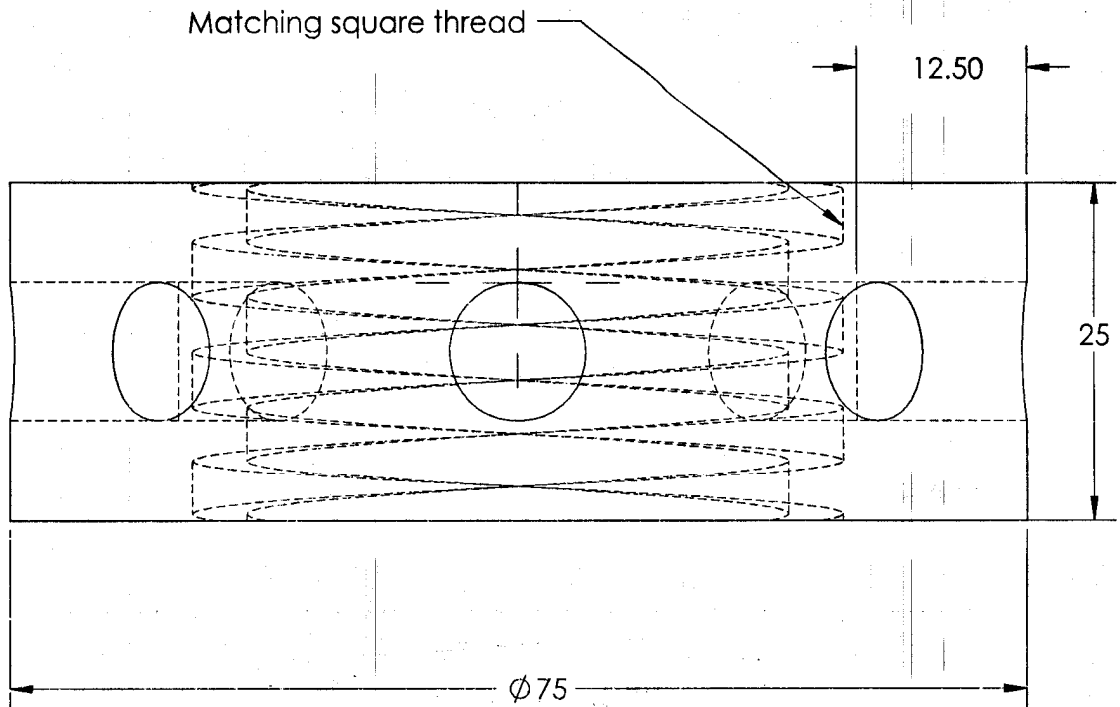
Quantity: 14 Nos.

Material:MS

DATE:28/03/2022

NAME & Sign.:Rahu/nath



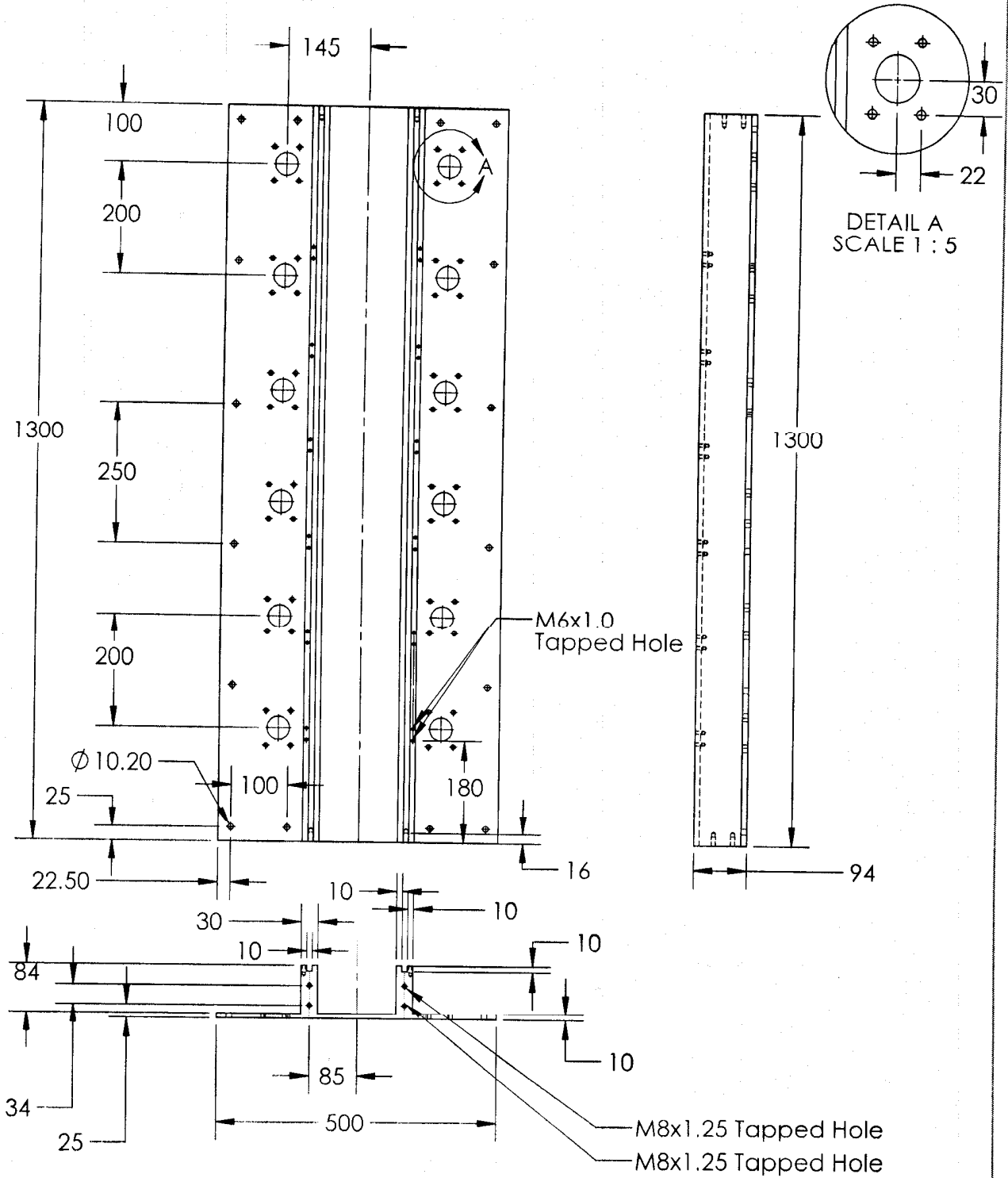


Hole -10.1mmX 8Nos.

All dimensions are in mm

## Nut\_NewHeightAdjuster

DRG. No.: 07	SCALE:2:1	
Quantity: 14 Nos.	Material:MS	
DATE:28/03/2022	NAME & Sign.:Rahulnath	



All dimensions are in mm

## SS Platform\_Type-I

DRG. No.: 08

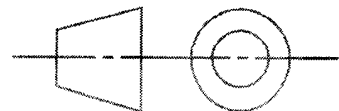
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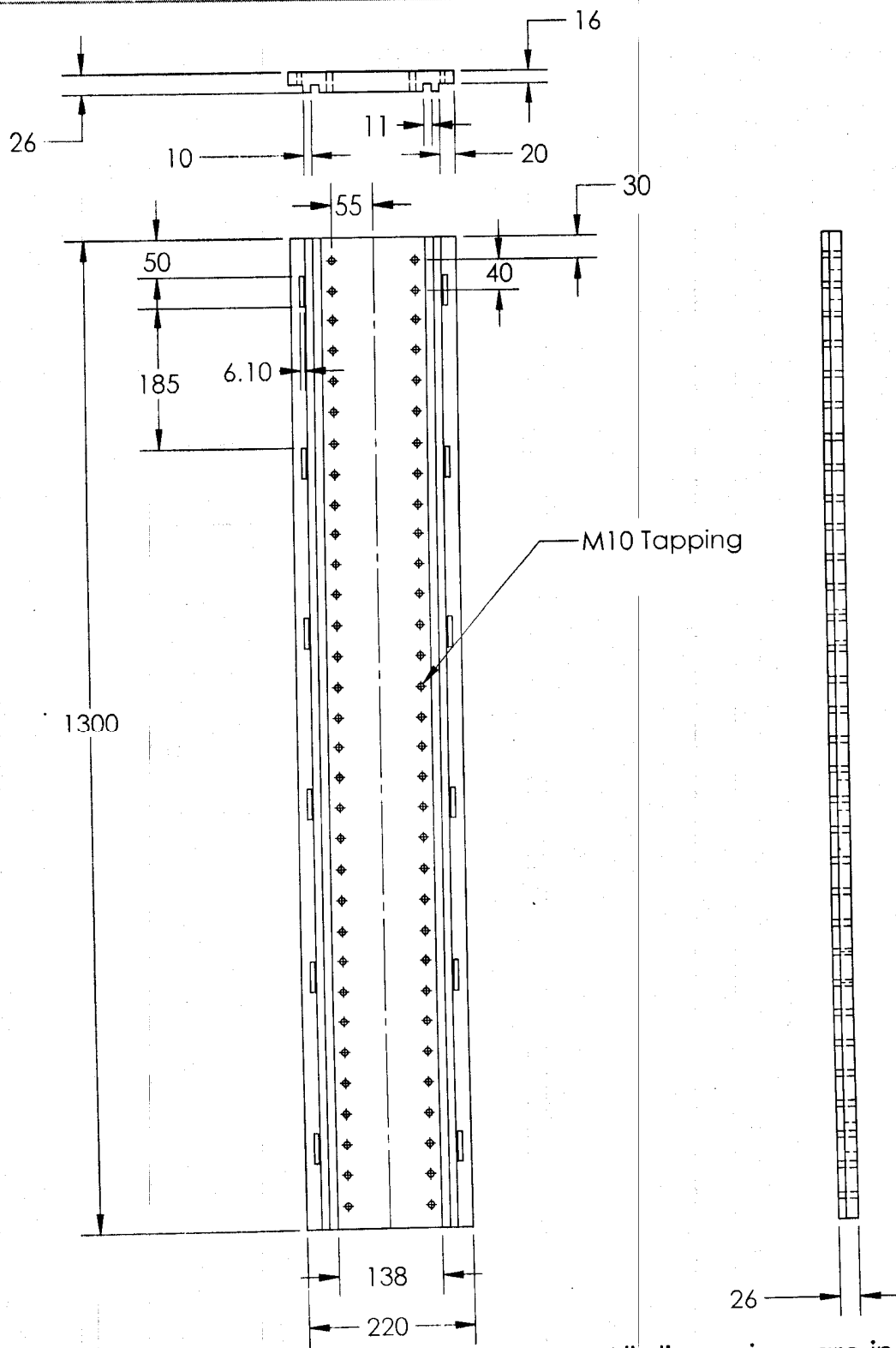
Quantity: 02 Nos.

Material:SS304

DATE:22/03/2022

NAME & Sign.:Rahulnath

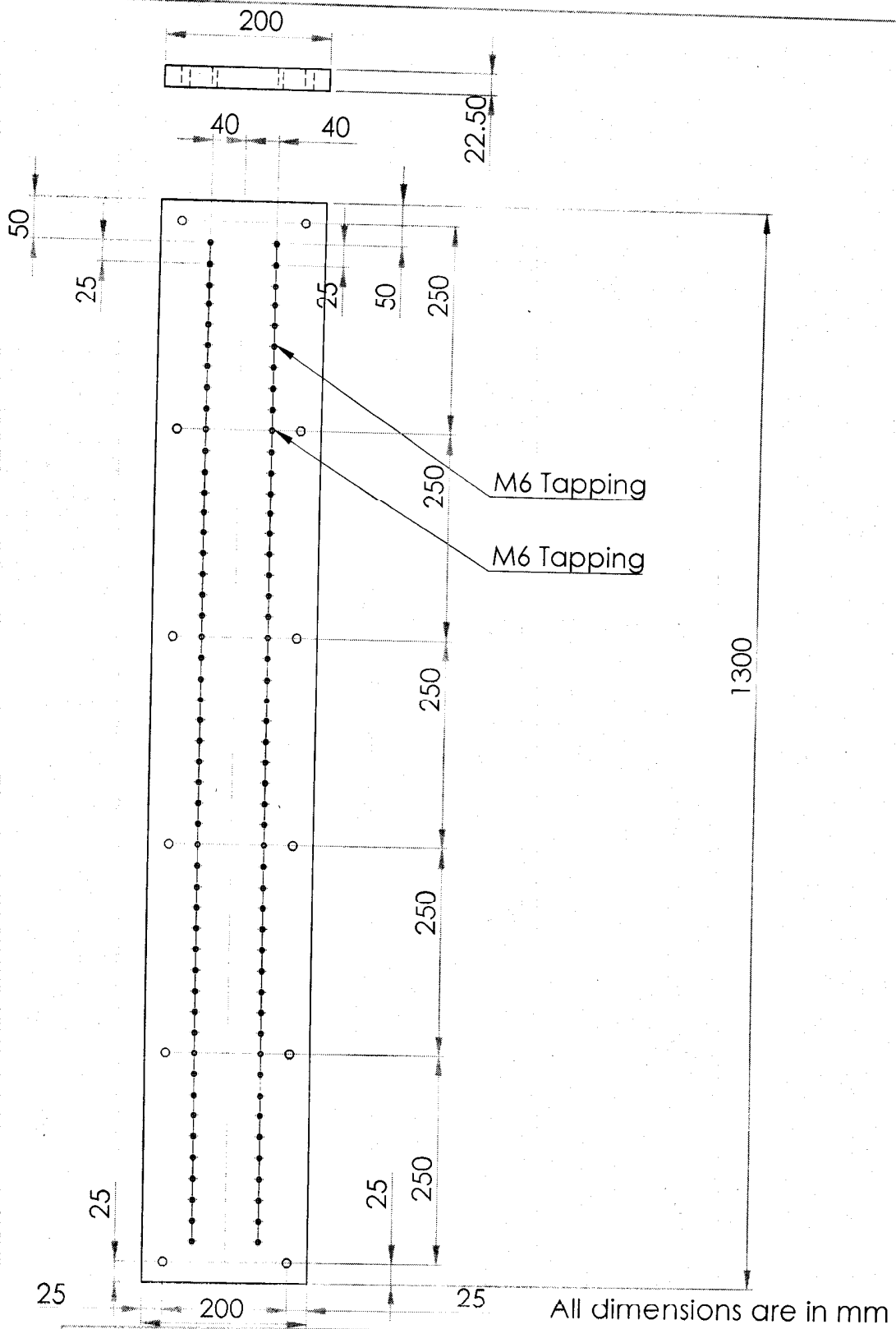




All dimensions are in mm

# SS Sliding Rail

DRG. No.: 09	SCALE: 1:1	
Quantity: 02 Nos.	Material: SS	
DATE: 22/03/2022	NAME & Sign.: Rahulnath	



## Acrylic BreadboardSheet

DRG. No.: 10

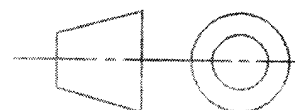
SCALE: 1:7

Quantity: 16 Nos.

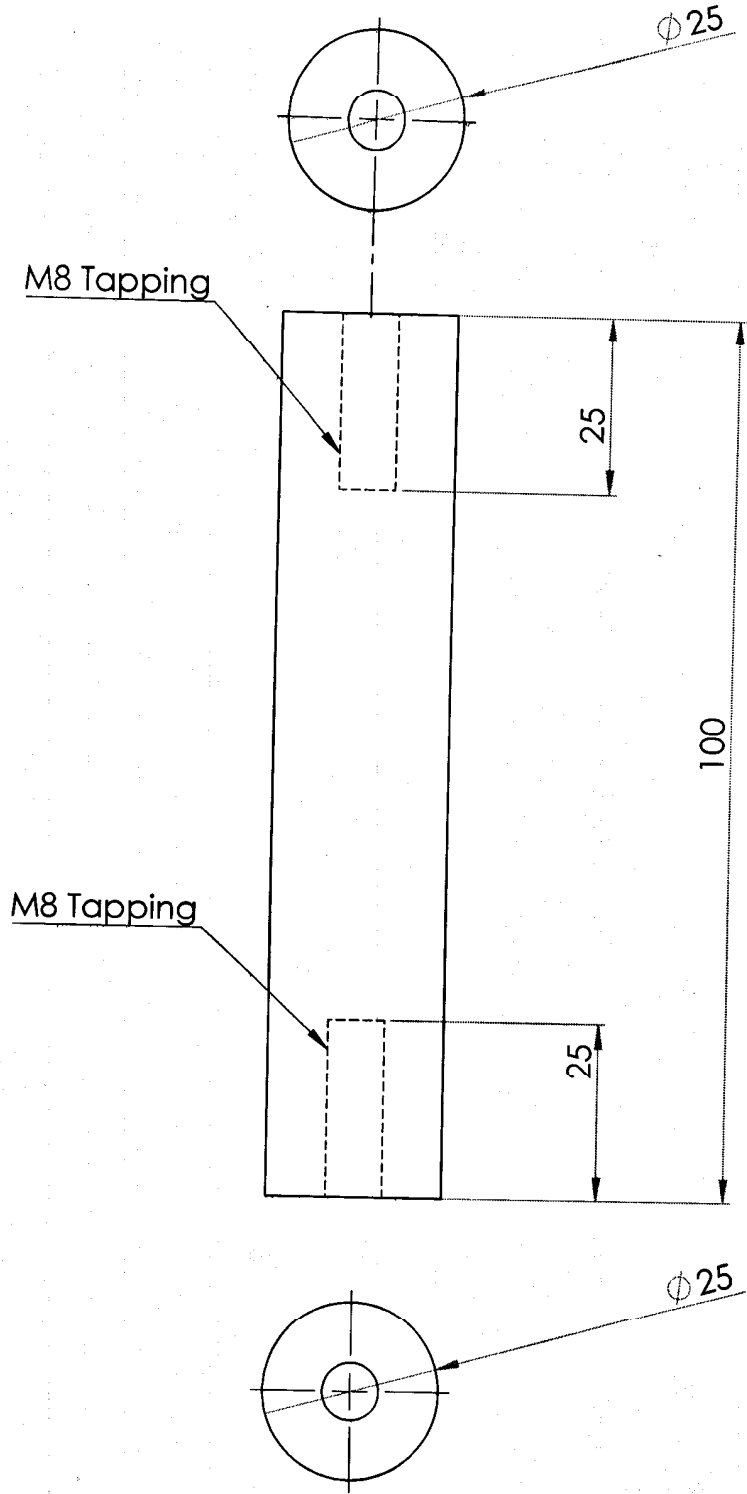
Material: Acrylic

DATE: 22/03/2022

NAME & Sign.: Pradeep K Maurya

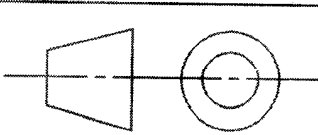


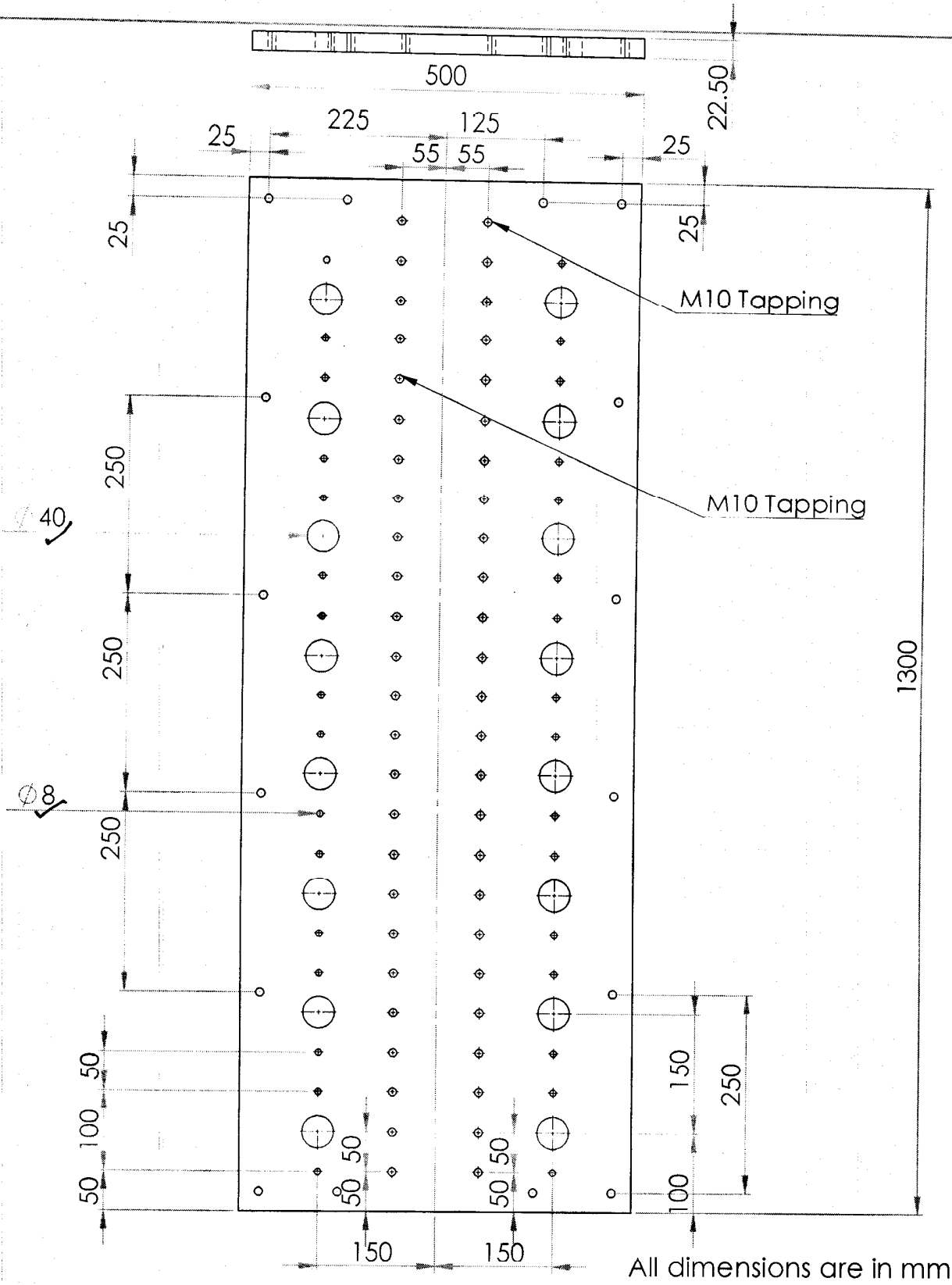





All dimensions are in mm

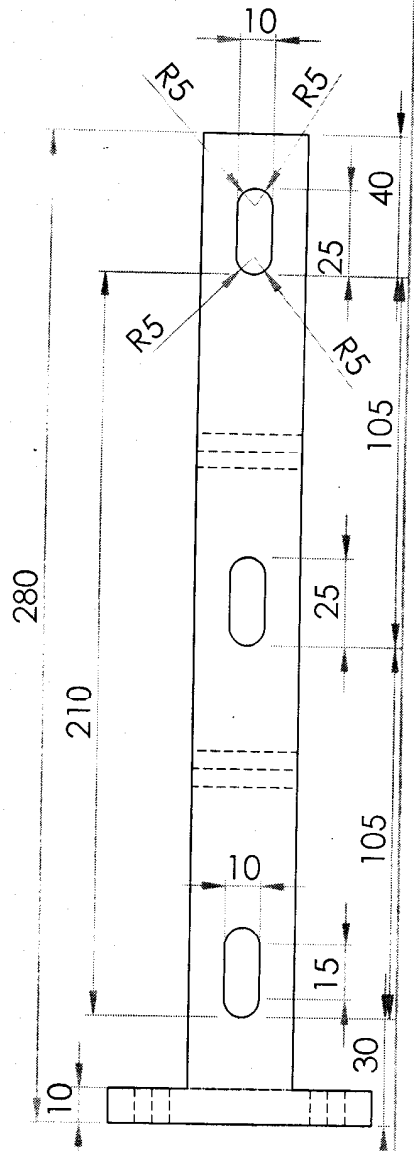
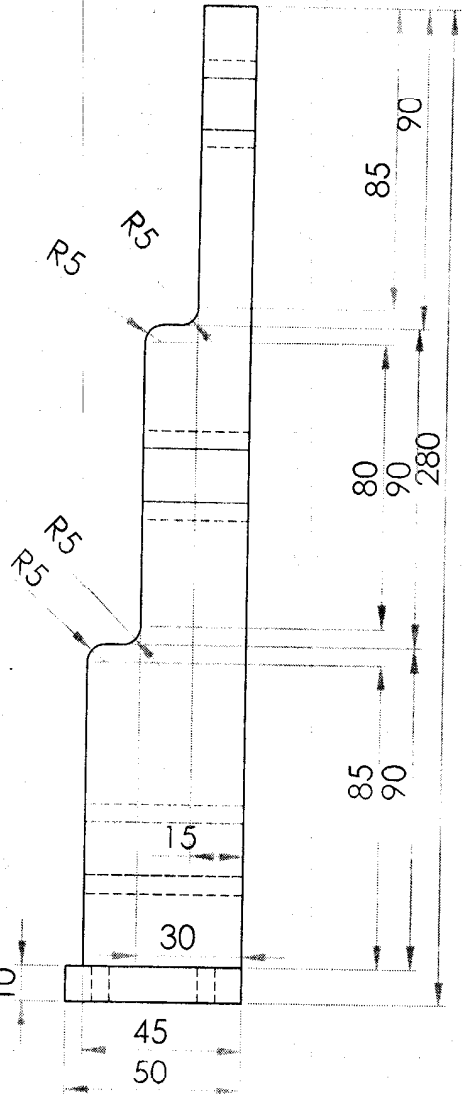
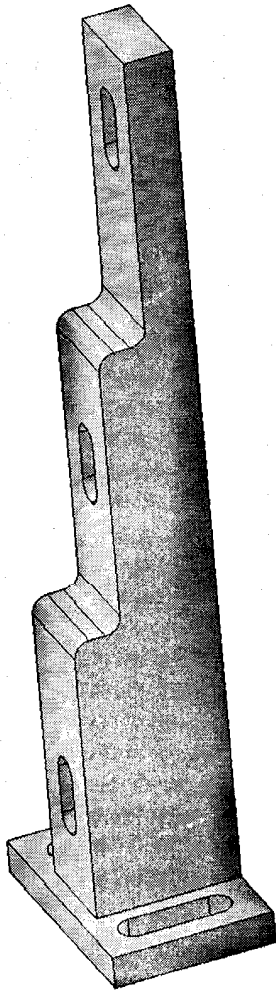
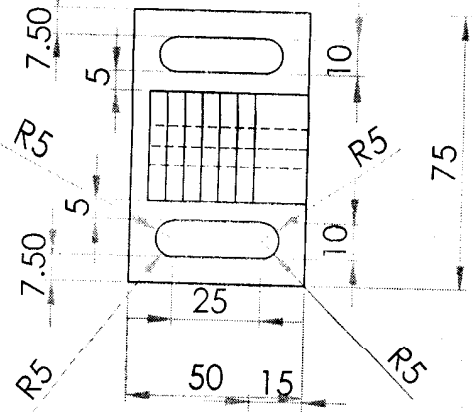
## Insulator Post\_Type\_I

DRG. No.: 11	SCALE: 1:1	
Quantity: 50 Nos.	Material: Teflon	
DATE: 22/03/2022	NAME & Sign.: Pradeep K Maurya	



## SS Platform \_Type\_II

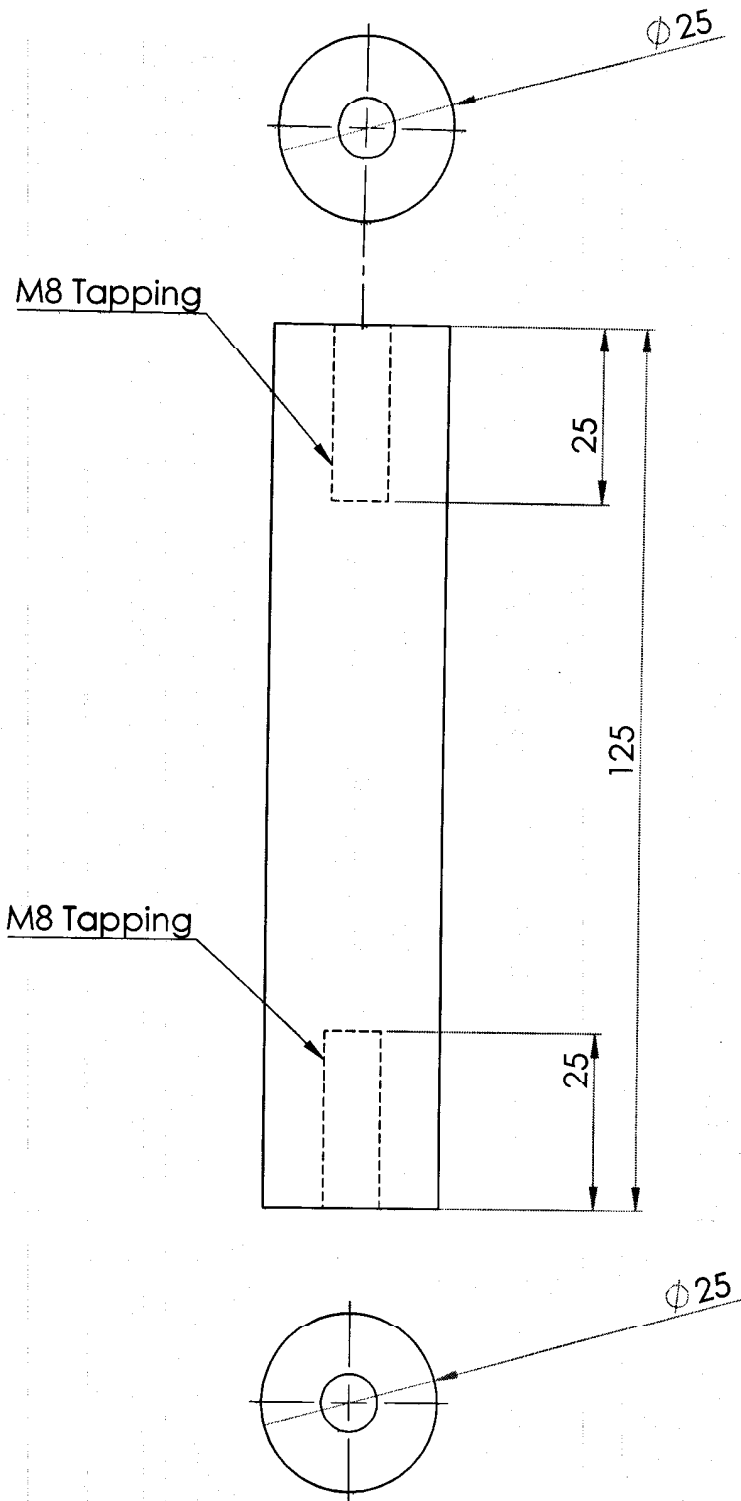
DRG. No.: <b>12</b>	SCALE: 1:7	
Quantity: <b>01 No.</b>	Material: SS-304	
DATE: 22/03/2022	NAME & Sign.: Pradeep K Maurya	



All dimensions are in mm

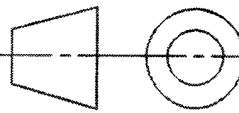
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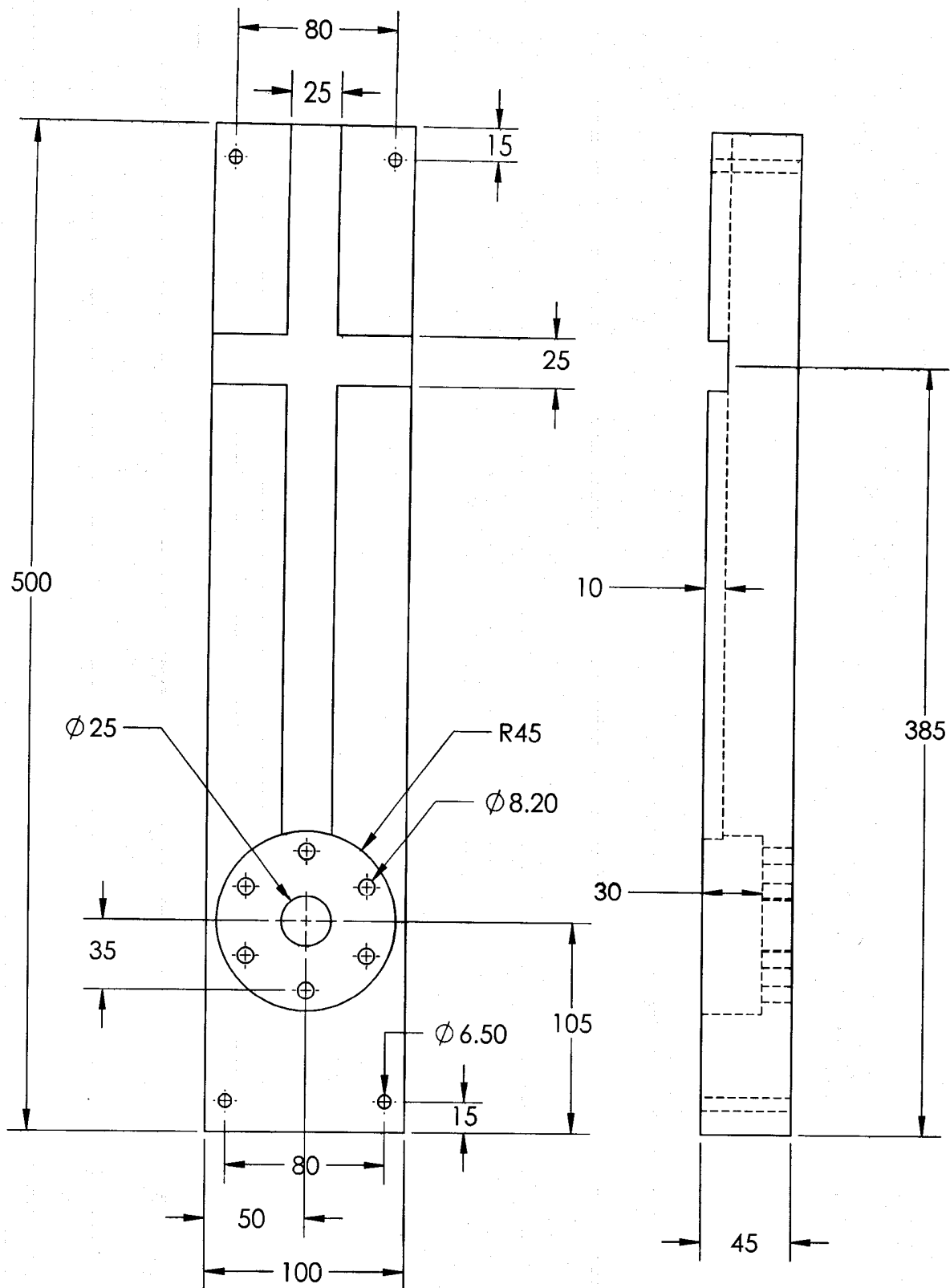
DRG. No.: 13	SCALE:1:2	
Quantity: 16 Nos.	Material: SS-304	
DATE: 22/03/2022	NAME & Sign.: Pradeep K Maurya	



All dimensions are in mm

## Insulator Post\_Type\_II

DRG. No.: 14	SCALE:1:1	
Quantity: 50 Nos.	Material: Teflon	
DATE: 22/03/2022	NAME & Sign.: Pradeep K Maurya	



All dimensions are in mm

## AcrylicSupport

DRG. No.: 15

SCALE:1:3

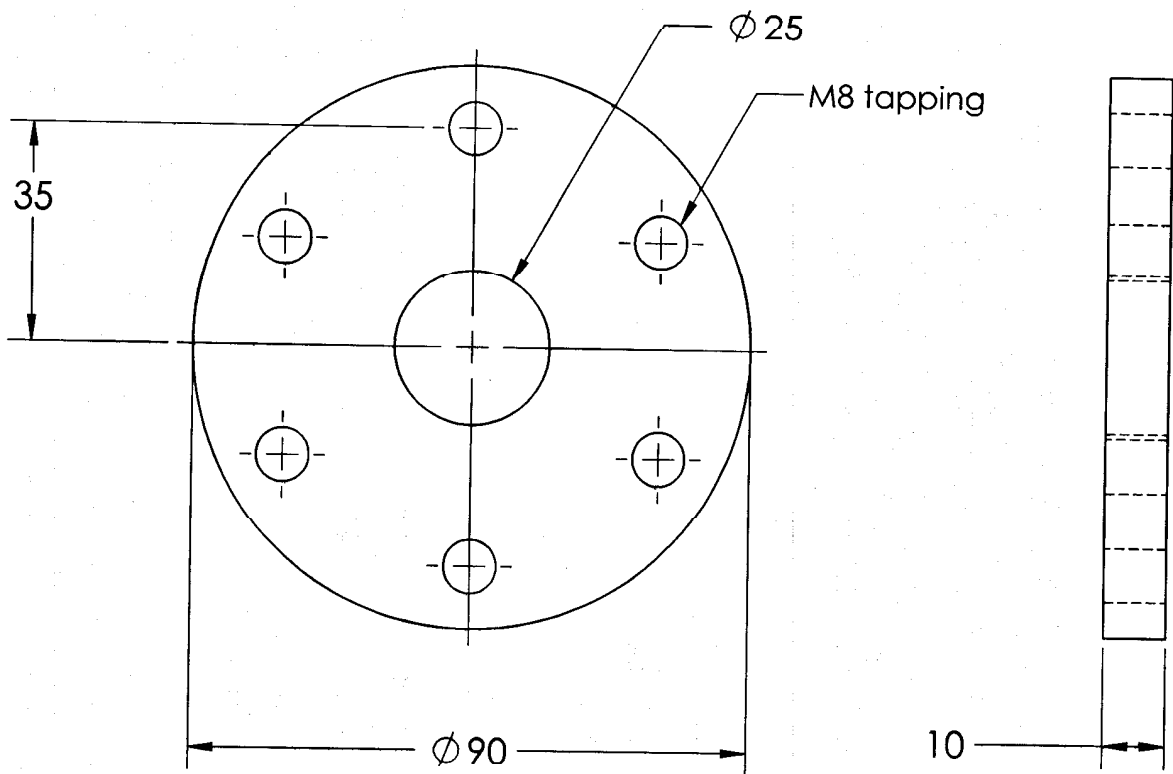
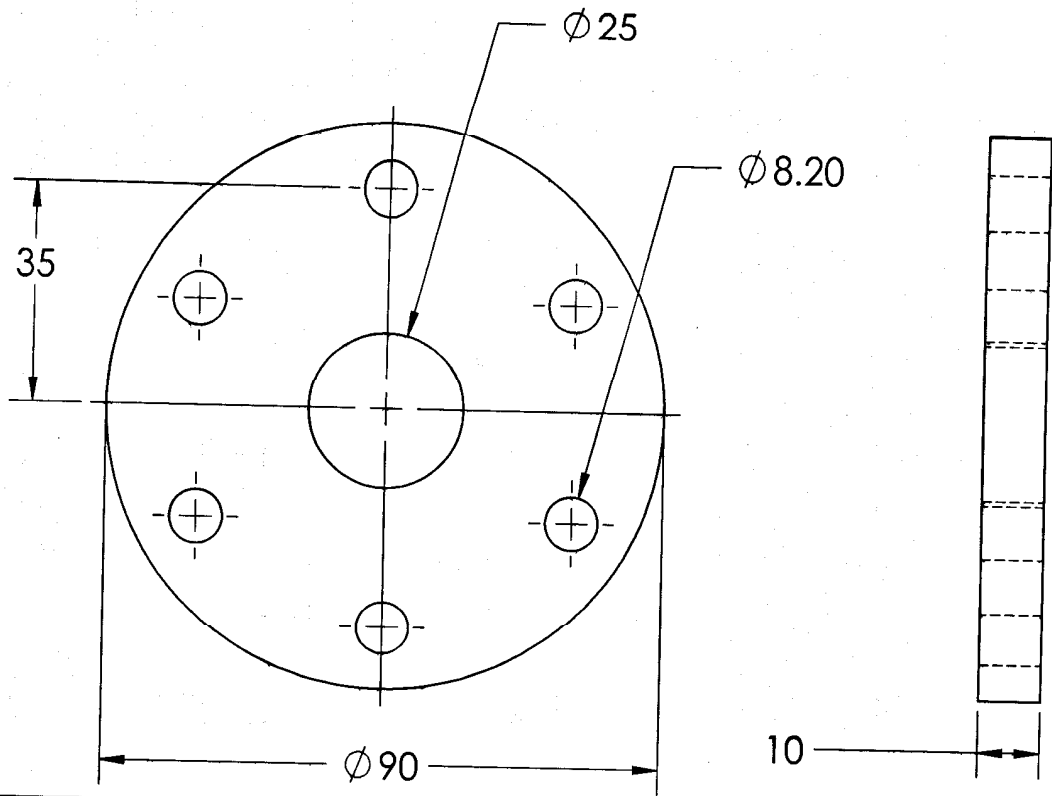
Quantity: 04 Nos.

Material: Acrylic

DATE: 22/03/2022

NAME & Sign.: Rahulnath





All dimensions are in mm

## SS Disc

DRG. No.: 16

SCALE: 1:1.2

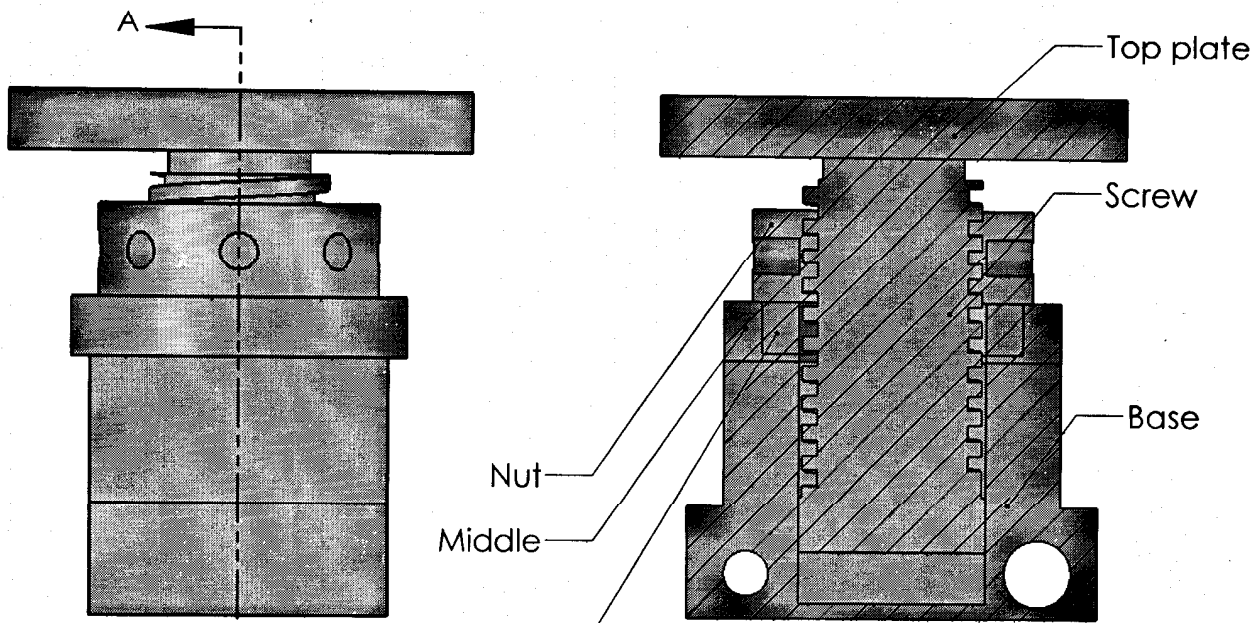
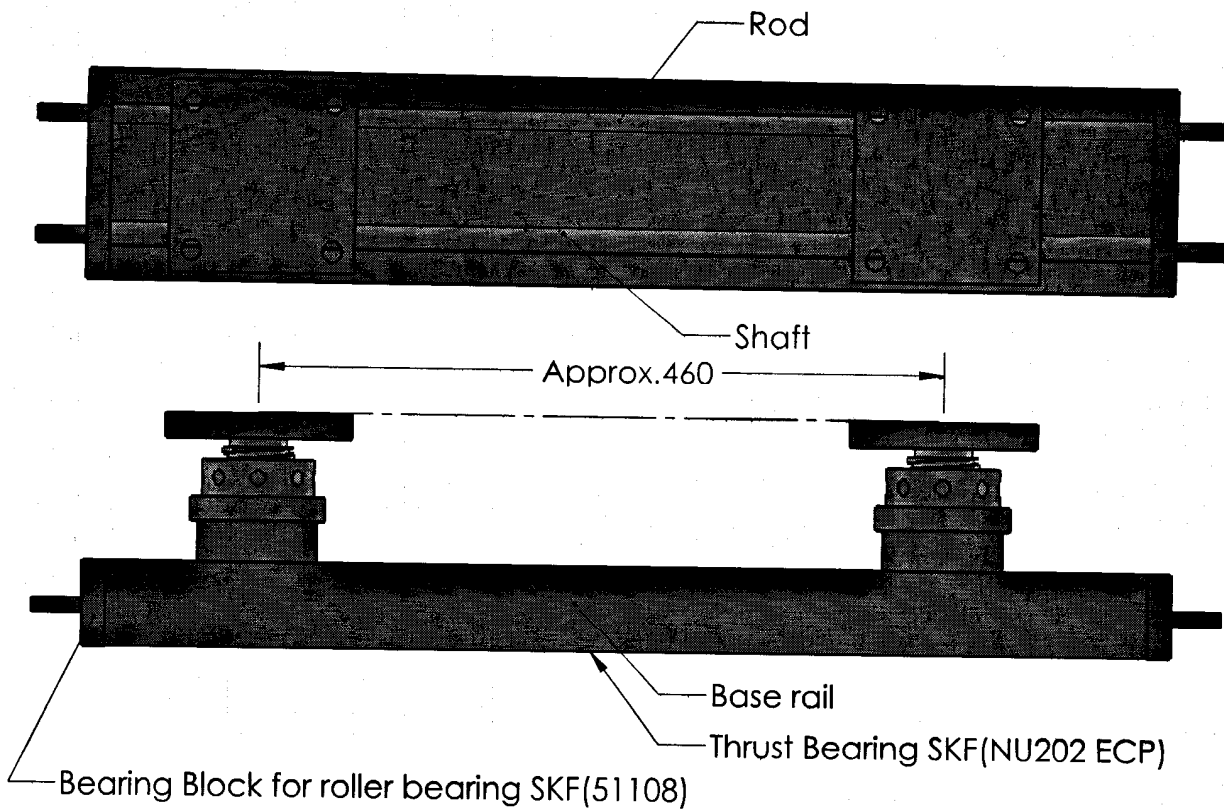
Quantity: 04 Nos. Each

Material: SS304

DATE: 22/03/2022

NAME & Sign.: Rahulnath

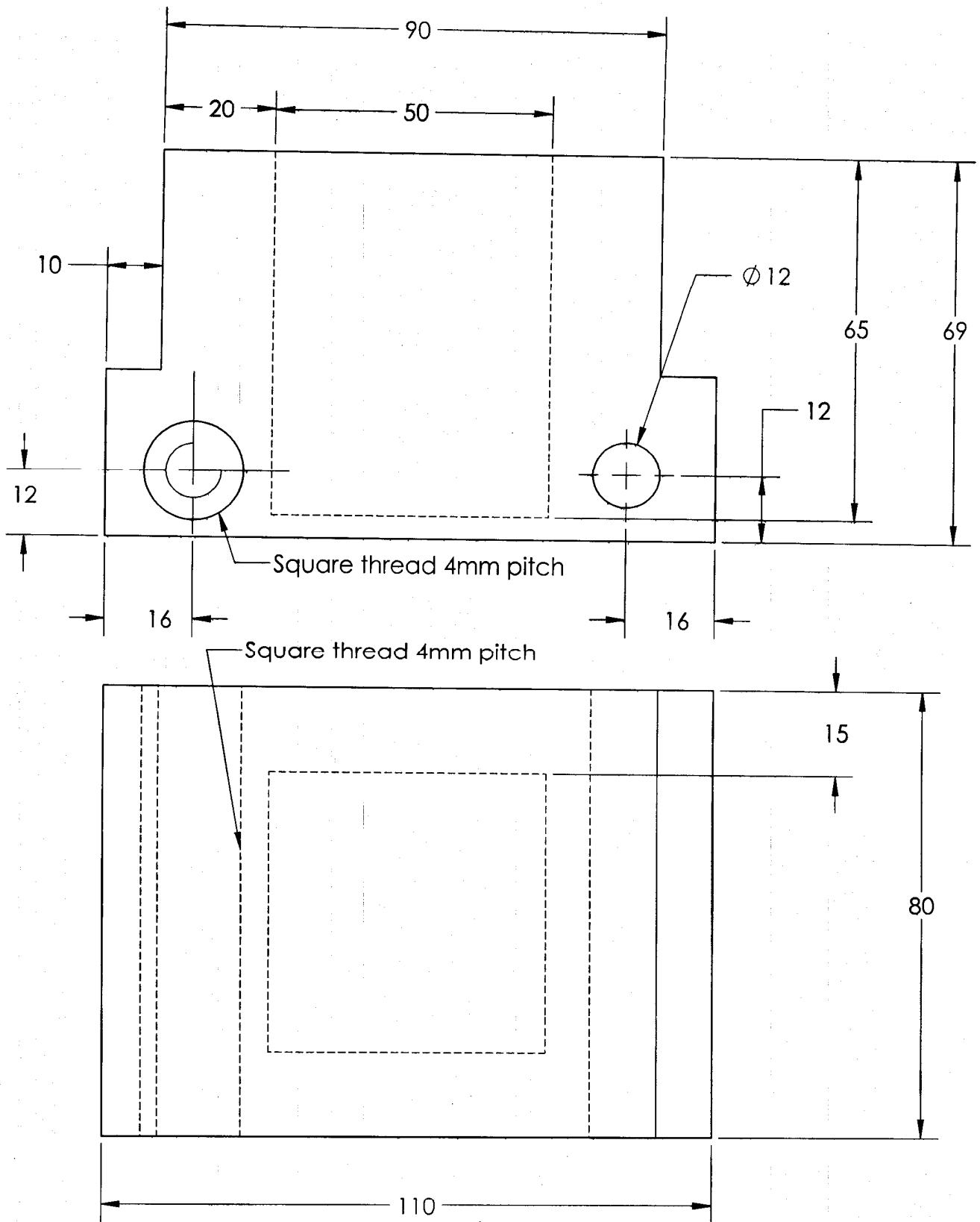




SECTION A-A  
SCALE 1 : 2

# Level adjuster\_Sliding rail

DRG. No.: 17	All dimensions are in mm		
Quantity: 02 Nos.	SCALE:1:10	Material:MS	
DATE:01/04/2022	MF:22-23/	NAME & Sign.:Rahulnath	



## Level adjuster\_Base

DRG. No.: 18

All dimensions are in mm

Quantity: 02 Nos.

SCALE: 1:5

Material: MS

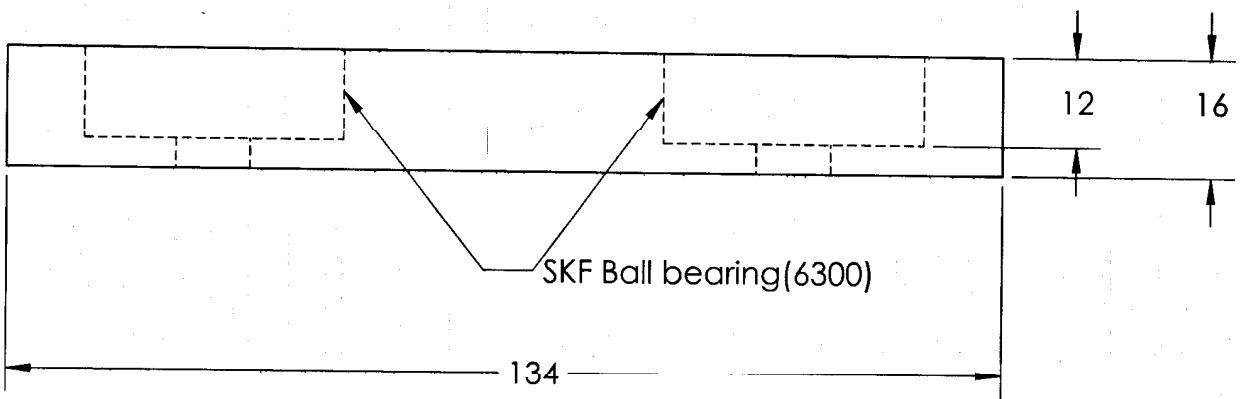
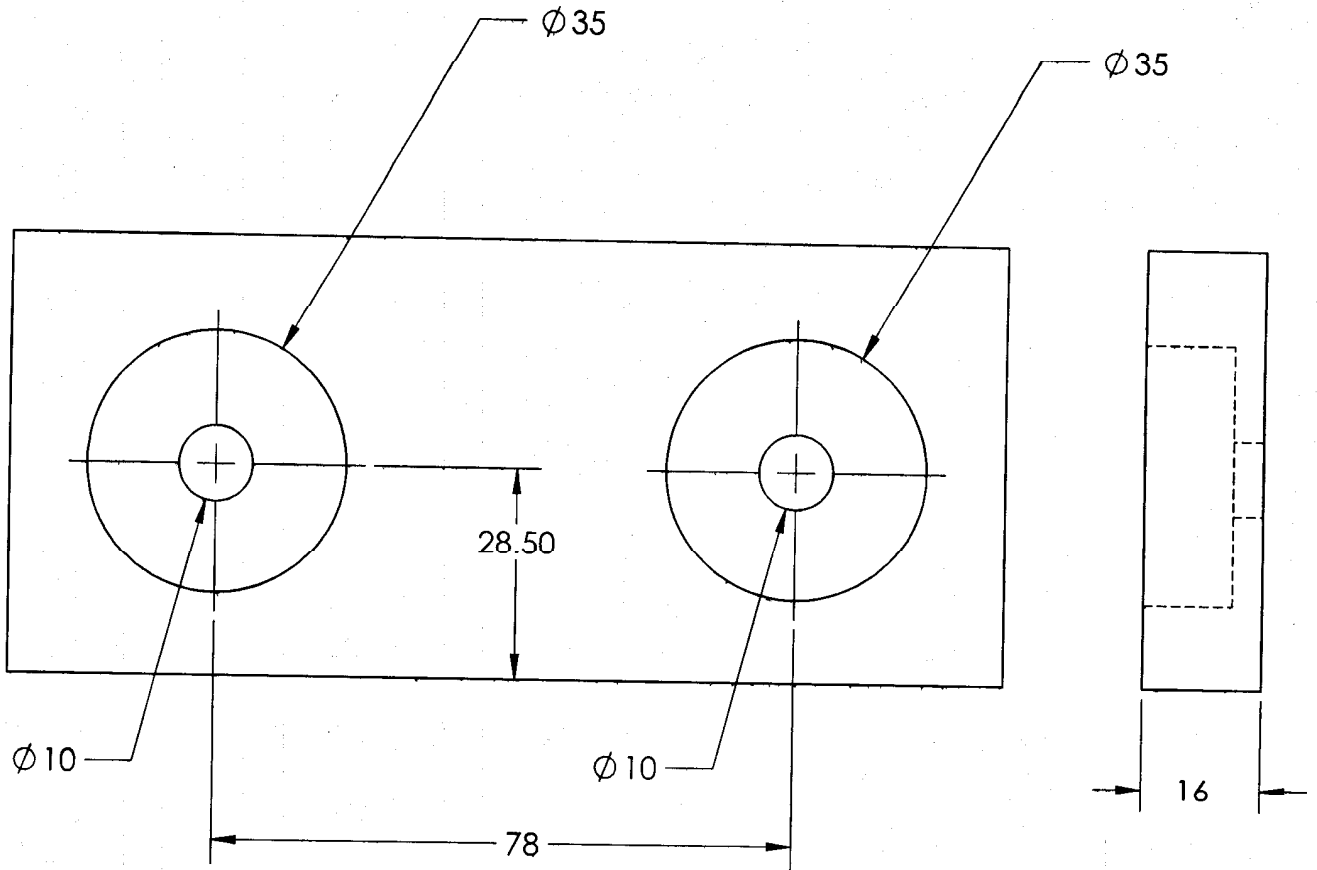
DATE: 01/04/2022

MF: 22-23/

NAME & Sign.: Rahulnath







## Level adjuster\_Bearing block

DRG. No.: J9

All dimensions are in mm

Quantity: 04 Nos

SCALE:1:1

Material:MS

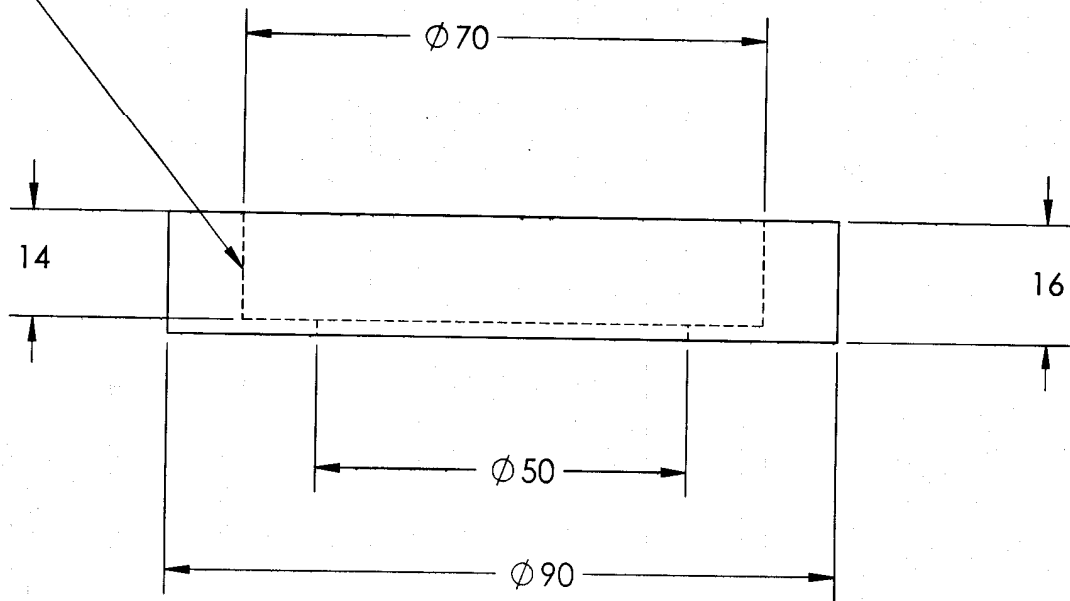
DATE:01/04/2022

MF:22-23/

NAME & Sign.:Rahulnath



Bearing SKF51110 has to be attached here



## Level adjuster\_Middle

DRG. No.: 20

All dimensions are in mm

Quantity: 04 Nos.

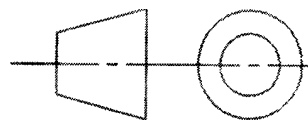
SCALE:1:1

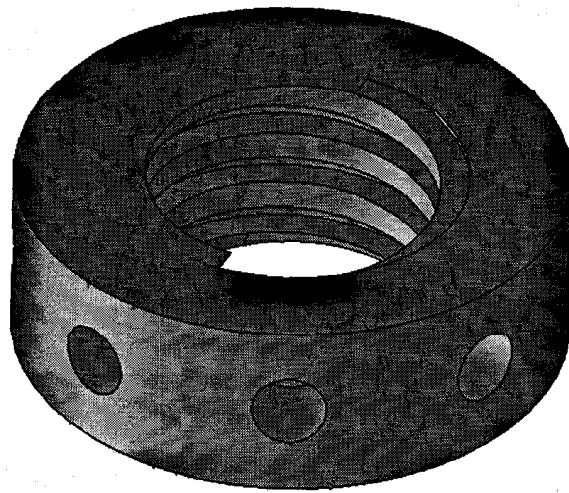
Material:MS

DATE:01/04/2022

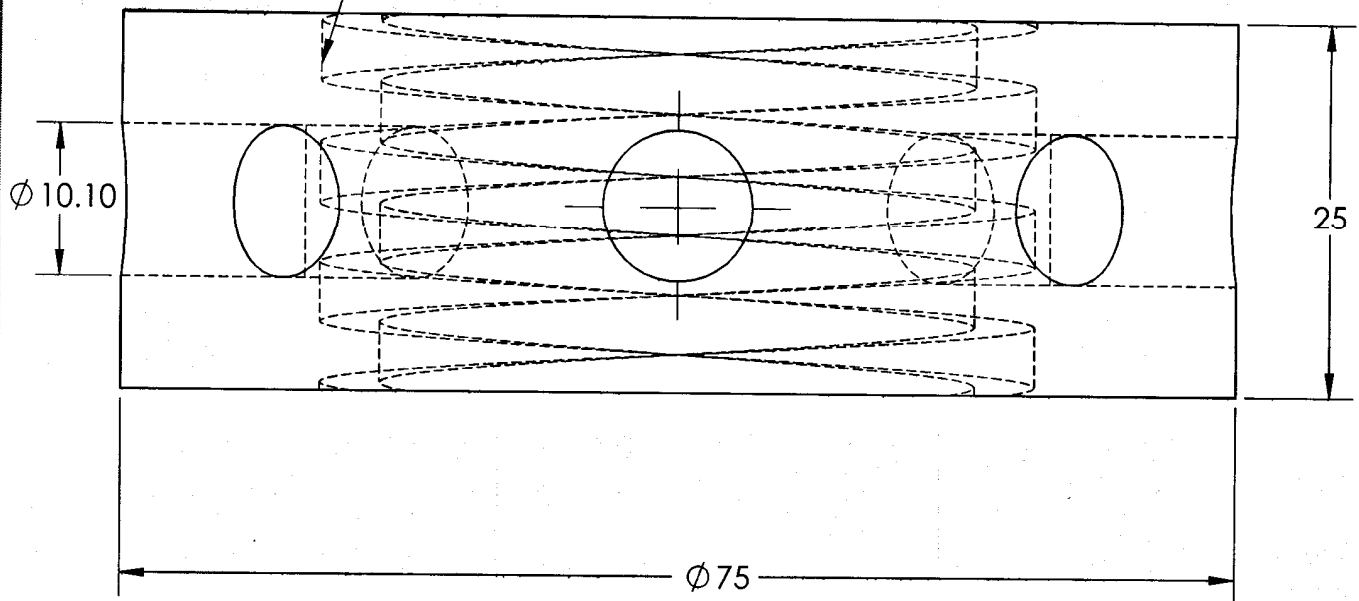
MF:22-23/

NAME & Sign.:Rahulnath



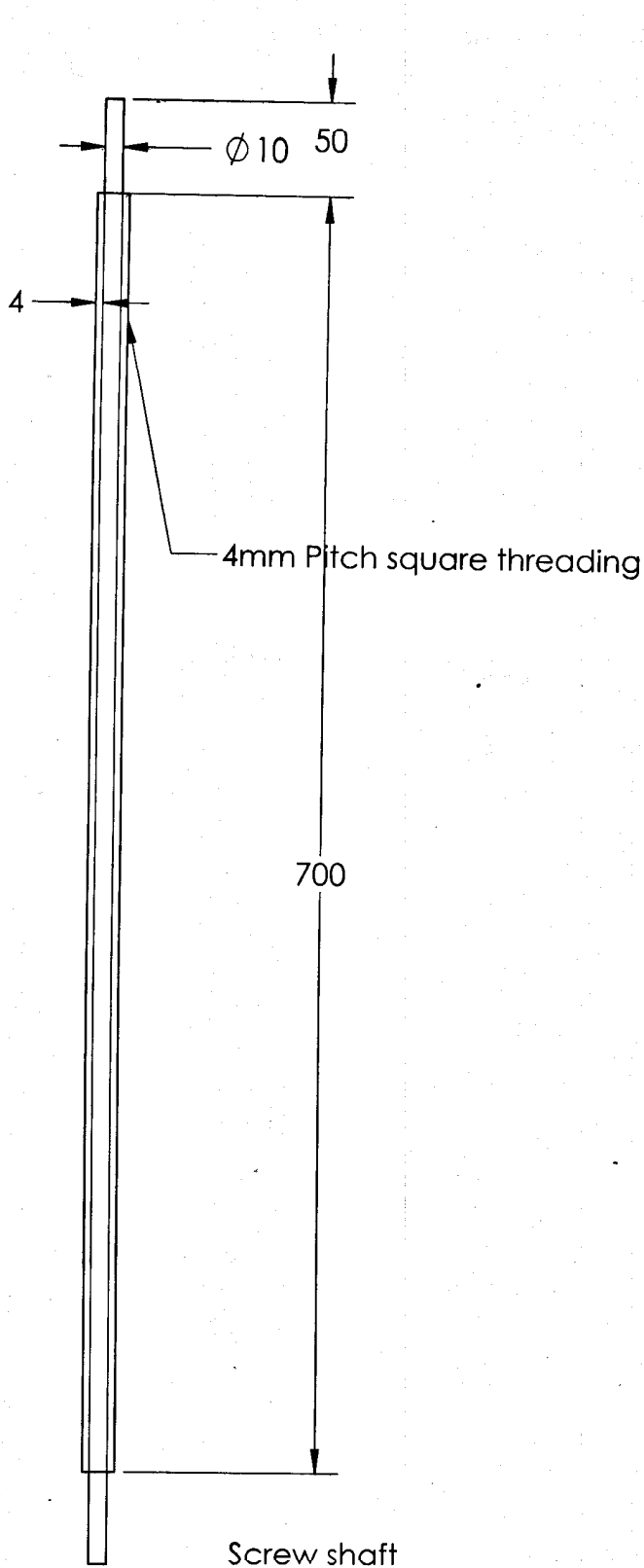


Screw thread pitch 6mm compatible with 'Screw'

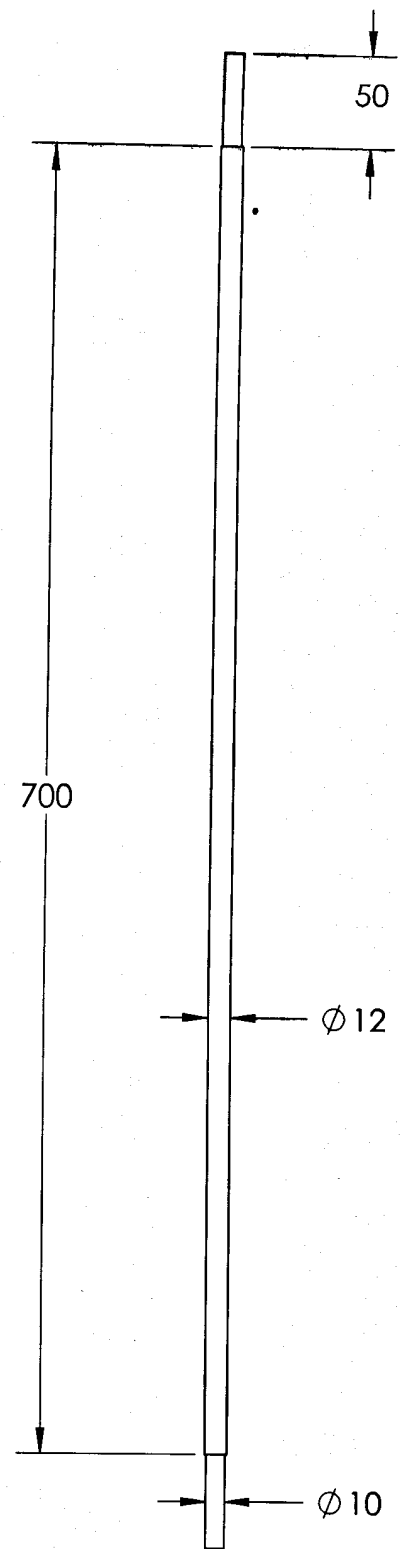


## Level adjuster\_Nut

DRG. No.: 21	All dimensions are in mm		
Quantity: 04 Nos	SCALE:2:1	Material:MS	
DATE:01/04/2022	MF:22-23/	NAME & Sign.:Rahulnath	



Screw shaft



Sliding rod

## Level adjuster\_Shaft and rod

DRG. No.: 22

All dimensions are in mm

Quantity: 02 Nos.  
Each

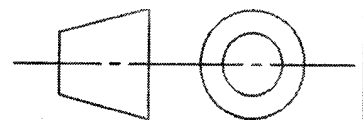
SCALE: 1:4

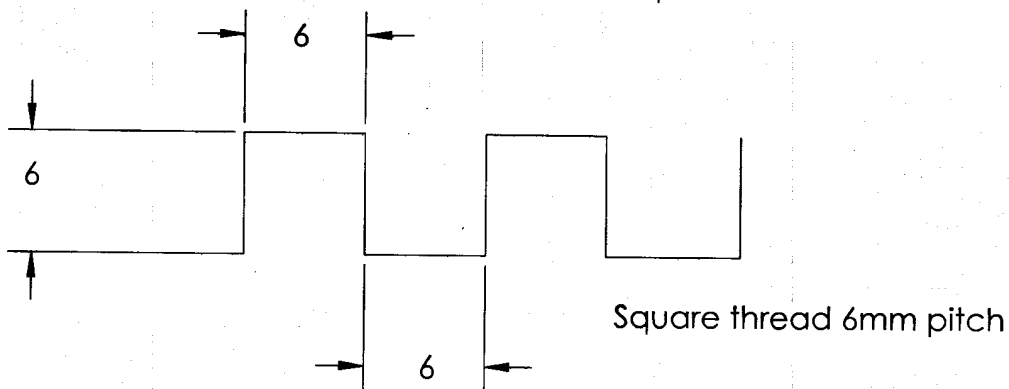
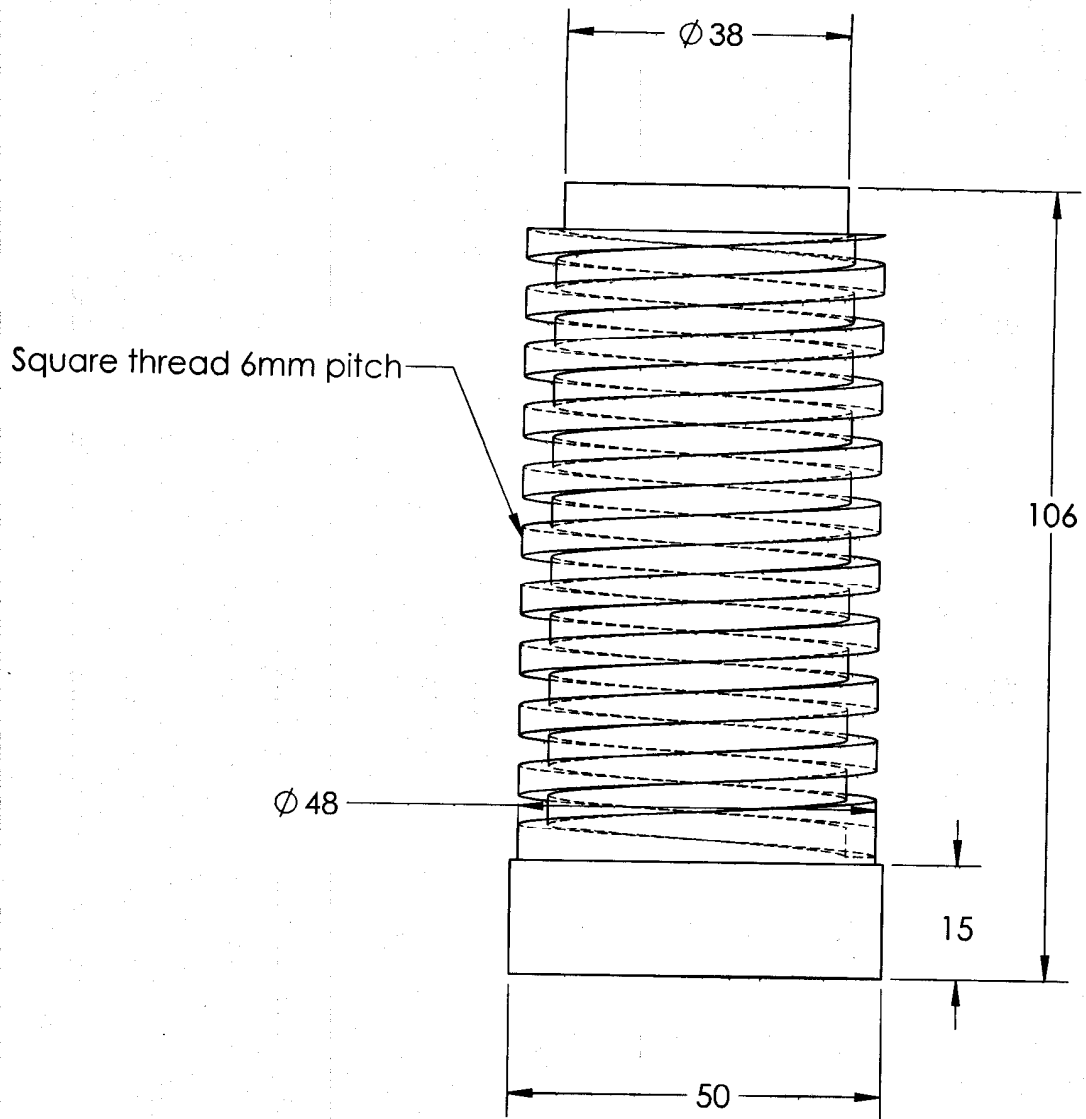
Material: MS

DATE: 01/04/2022

MF: 22-23/

NAME & Sign.: Rahulnath





## Level adjuster\_Screw

DRG. No.: 23

All dimensions are in mm

Quantity: 04 Nos

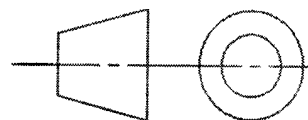
SCALE: 1:1

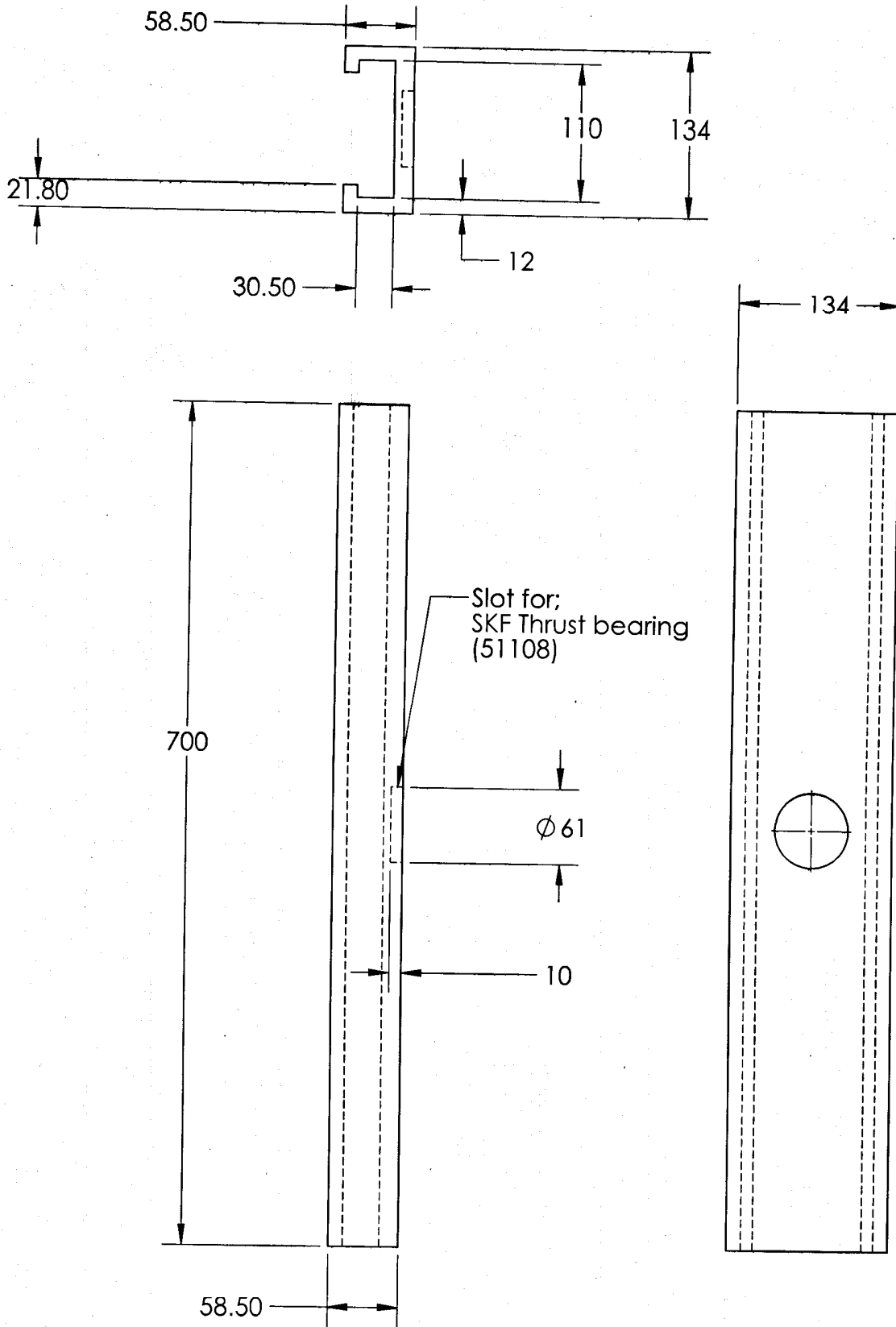
Material: MS

DATE: 01/04/2022

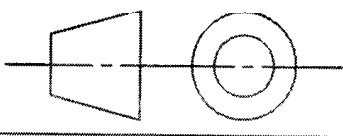
MF: 22-23/

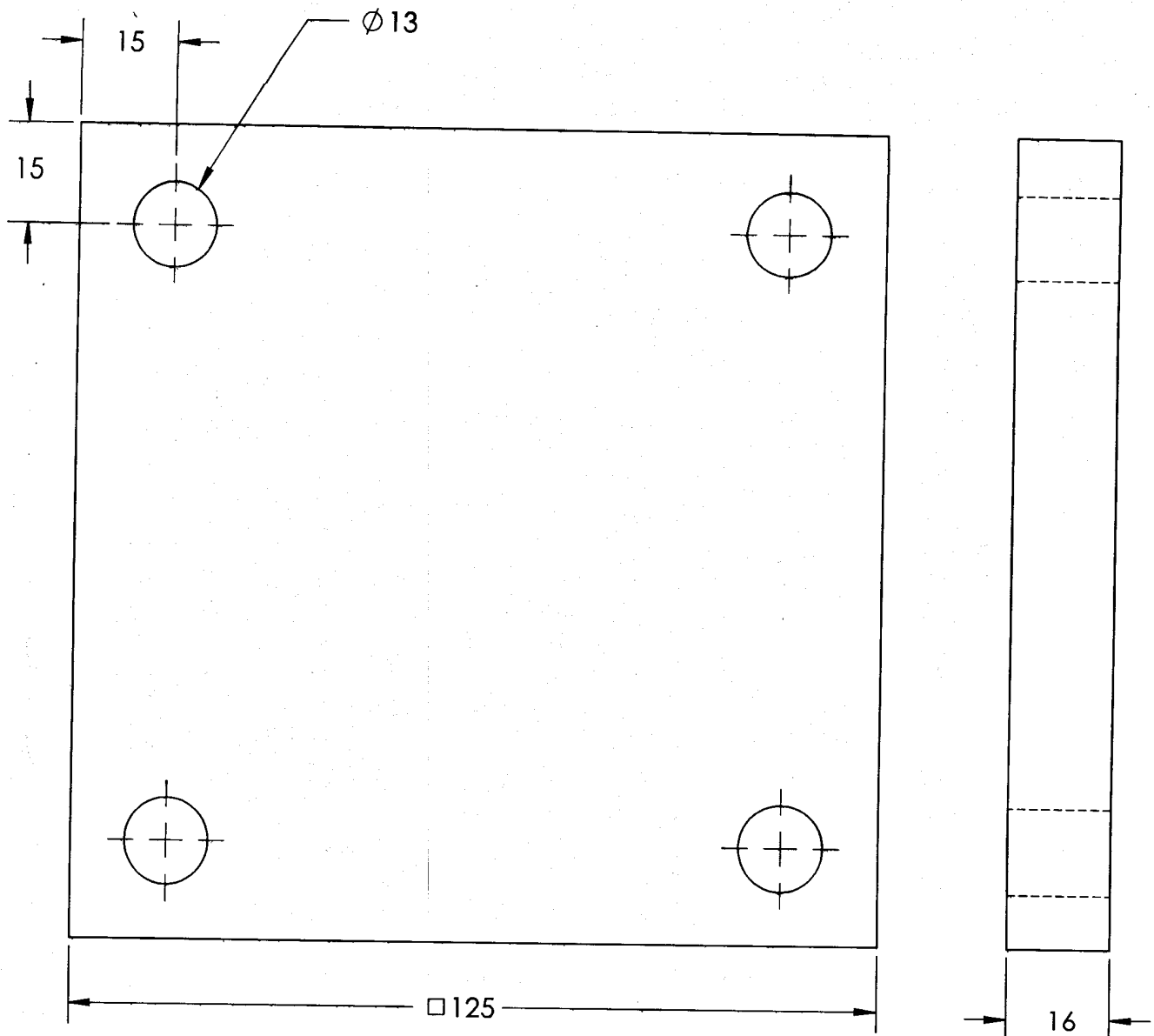
NAME & Sign.: Rahulnath



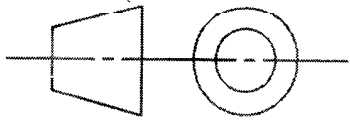


## Level adjuster\_Sliding rail

DRG. No.: 24	All dimensions are in mm		
Quantity: 02 Nos	SCALE:1:5	Material:MS	
DATE:01/04/2022	MF:22-23/	NAME & Sign.:Rahulnath	



## Level adjuster\_Top plate

DRG. No.: 25	All dimensions are in mm		
Quantity: 04 Nos.	SCALE: 1:1	Material: MS	
DATE: 01/04/2022	MF: 22-23/	NAME & Sign.: Rahulnath	