



Government of India
Bhabha Atomic Research Centre
Electromagnetic Application & Instrumentation Division

Ref: EmA&ID/LMRMSS/RGO/2021/ P-12091

Date 01/11/2021

Sub: **Minor Fabrication: Invitation for Quotation.**

Fabrication of Adapters and Aluminum base plate with cover for optical setup as per attached drawing and specification.

Dear Sir,

1. Quotations are invited for the minor fabrication of Adapters and Aluminum plate with cover for optical setup as per attached drawing & specification.
2. Bidder shall quote for fabrication of these assemblies/subsystems as per the enclosed drawings and specifications **with all required material, hardware and components.**
3. Taxes, Excise Duties, other charges, if any, shall be quoted separately.
4. The quotation must reach **Head, Electromagnetic Application and Instrumentation Division, BARC** by **18/11/2021** and must be sent in a sealed envelope super scribed with the reference **number & the due date given above.**
5. The address on the envelope should read: **Head, Electromagnetic Application and Instrumentation Division, Physics Group, BARC, Trombay, Mumbai - 400 085.**
6. The bidder shall have to take an insurance policy against any material issued to him by the purchaser.
7. The fabrication work shall be subject to inspection by our engineers at bidder's work Place. Necessary inspection facility should be provided to our engineers during fabrication at bidder's premises.
8. The bidder shall deliver the finished components after approval by our engineers within **12 weeks** from the date the firm work order is issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at **Room No. 48, BARCIT, South Site, BARC, Trombay, Mumbai-400085.**
9. Head, EmA&ID, BARC reserves the right to accept / reject any or all quotations without Assigning any reason.
10. Incomplete offer / offer received after the due date shall not be considered.
11. Quotations should be preferably neatly typed and corrections are not acceptable.
12. Quotation received in computer-generated form shall not be acceptable. Quotation must be submitted in printed letterhead, mentioning clearly ST/VAT registration No., PAN

No. & Service Tax Registration No. Submission of challan and Invoice shall also comply the same, incase, work order is placed.

R G Ochani, SO/E
LMRMSS/EmA&ID

Ramab.

Enclosures:

1. Specifications & drawings.

a. CONFIDENTIALITY:

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.

b. **“Restricted information” categories under section 18 of the Atomic Energy act, 1962 and “Official Secrets” under section 5 of the Official secret act, 1923:** Any contravention of the above-mentioned provision by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

c. **Prohibition against use of BARC’s name without permission for publicity purposes:** The contractor, sub-contractor, consultant, adviser or the employees of a contractor shall not use BARC’s name for any publicity purpose through any public media like Press, Radio, T.V. or Internet without the prior written approval of BARC.

GENERAL SPECIFICATIONS

1.0 **Free issue material ---NIL---**

1.1 The free issue supply materials issued by the purchaser to the fabricator shall be covered by insurance policy taken by the fabricator at his own cost for its full value.

1.2 The insurance policy shall voucher losses or damages to the purchaser’s material due to fire, riot, strikes, theft, civil commotion etc. or any other causes.

1.3 The insurance policy shall be valid till the date of actual delivery of the components to the purchaser.

1.4 The purchaser shall be named as the beneficiary.

1.5 Fabricator shall return the balance material such as scraps, outpits, etc. after the fabrication to the purchaser.

1.6 Free issue material is ---NIL--- and shall be issued to fabricator / bidder at ---NIL---

2.0 **Quality surveillance, inspection and inspection report**

2.1 All work covered by this specification shall be subject to quality surveillance by the purchaser or his authorized representative for which purpose the fabricator shall allow access at all reasonable times during manufacture to

2.2 The premises in which the work is being carried out.

2.3 The drawings and / or tooling involved.

2.4 Gauges, instruments, etc. required inspecting the work.

2.5 The fabricator shall submit three copies of inspection reports to the purchaser the material test certificate for his approval.

2.6 Inspection and tests shall be carried out by the fabricator as per the requirements detailed in the drawings and these specifications.

- 2.7 Components found unsatisfactory as to workmanship or material shall be removed by fabricator and replaced by components which are satisfactory.
- 2.8 The fabricator shall use materials as specified by the purchaser and submit to the purchaser, the material test certificate for his approval.
- 2.9 The finished components shall be dispatched prior to approval by our engineer at bidder's works.
- 3.0 **Delivery**
- 3.1 The bidder shall deliver the finished components after approval by our engineer within **12 weeks** from the date of the firm purchase order is issued to the bidder.
- 4.0 **Sub-contract**
- 4.1 The fabricator shall not sub-contract any or all the work without written consent from the purchaser. The fabricator shall be responsible to the purchaser for all the work of the sub-contractor is allowed by the purchaser.
- 5.0 **GST exemption**
- 5.1 GST exemption certificates will be issued, wherever necessary.
- 5.2 Income Tax @ 2% , surcharge on IT as applicable and Education Cess @3% (on IT & SC) will be deducted from your bill
- 1.0 Payment:** Full Payment will be made after satisfactory completion of the work and production of Bill and Advanced Stamped Receipt along with guarantee/warranty certificate.

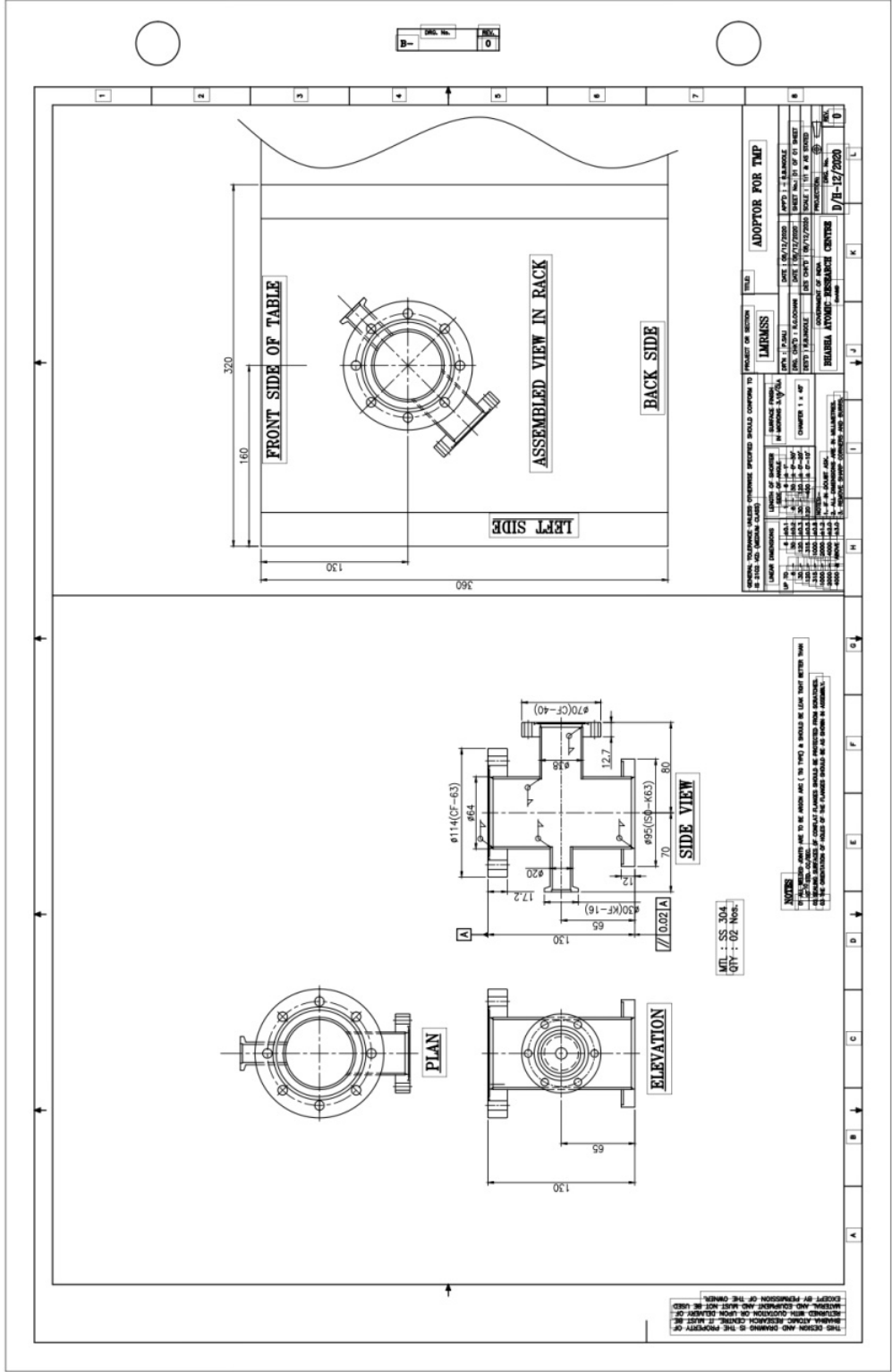
Specification

- **Adapter for TMP:** **Qty: 2 Nos.**
Material - SS 304
End Connections - DN 63 ISO-K (TMP), CF 63 (M S), CF 40 (Gauge) and KF-16
Dimension - As per attached drawing
- **Adapter for IP:** **Qty: 2 Nos.**
End connections – CF 100 to CF 160
Material - SS 304
Dimension - As per attached drawing
- **Supports for ion source and analyser:** **Qty: 4 Nos.**
Dimension - As per attached drawing
Material - SS 304

Aluminum base plate

Qty: 1 No.

- Thickness: 25 mm
- Material: Aluminum 6063 (Material report is to be submitted)
- Flatness of base plate surface (both sides) : better than ± 5 Micron
- Surface finish/ Accuracy of the base plate have to be validated on CMM machine before delivery and also the test report.
- Dimensions: As per attached drawing



THIS DESIGN AND DRAWING IS THE PROPERTY OF BARILDA ATOMIC RESEARCH CENTER. IT MUST BE KEPT IN CONFIDENCE AND NOT BE USED EXCEPT BY PERMISSION OF THE OWNER.

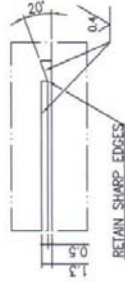
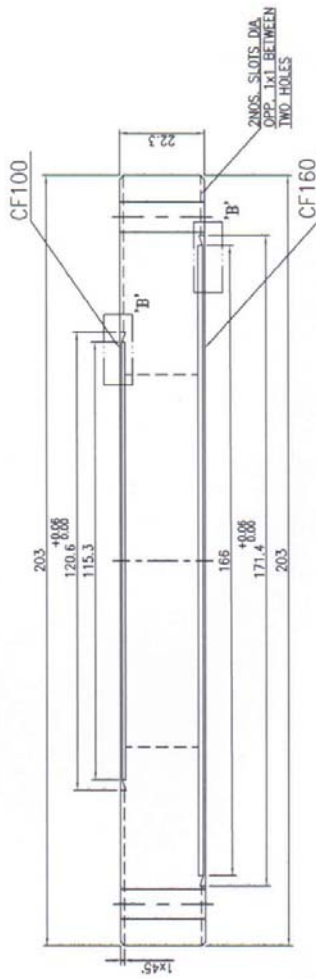
MTL - SS 304
QTY - 02 Nos.

NOTES

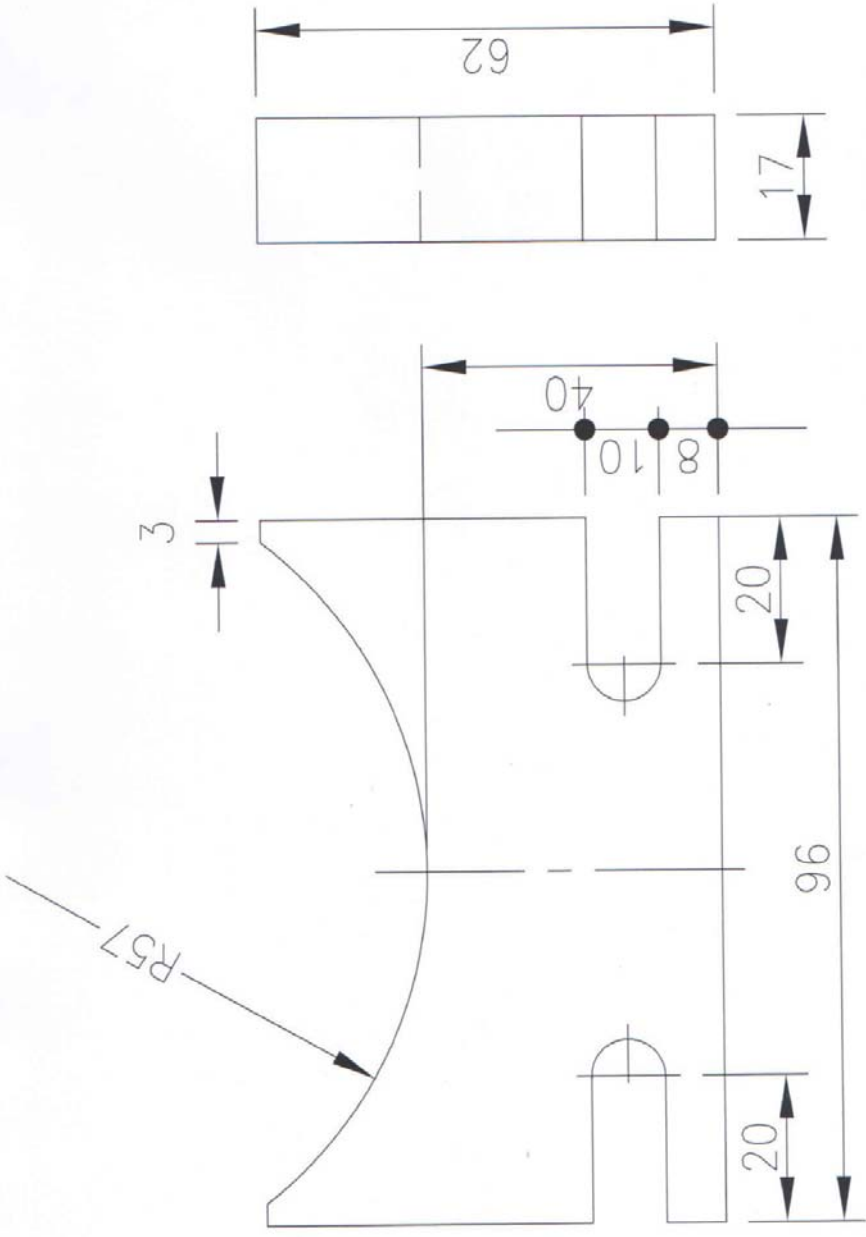
1. ALL DIMENSIONS ARE TO BE SHOWN AND 1 IN TWO IS SHOWN AS LONG THAT BETTER DIM.
2. THE DIMENSIONS OF COMPLEX SHAPES SHALL BE INDICATED AND DIMENSIONED.
3. THE CONSTRUCTION OF PIECE OF THE PARTS SHALL BE AS GIVEN IN DRAWING.

LIMITS OF DEVIATION		ADAPTOR FOR TMP	
UP TO 100	± 0.10	DATE: 09/17/2020	APPROV. I. C. BANERJEE
100 TO 300	± 0.15	DATE: 09/17/2020	DATE: 09/17/2020
300 TO 1000	± 0.20	DATE: 09/17/2020	DATE: 09/17/2020
1000 TO 3000	± 0.30	DATE: 09/17/2020	DATE: 09/17/2020
3000 TO 10000	± 0.40	DATE: 09/17/2020	DATE: 09/17/2020
10000 TO 30000	± 0.50	DATE: 09/17/2020	DATE: 09/17/2020
30000 TO 100000	± 0.60	DATE: 09/17/2020	DATE: 09/17/2020
100000 TO 300000	± 0.70	DATE: 09/17/2020	DATE: 09/17/2020
300000 TO 1000000	± 0.80	DATE: 09/17/2020	DATE: 09/17/2020
1000000 TO 3000000	± 0.90	DATE: 09/17/2020	DATE: 09/17/2020
3000000 TO 10000000	± 1.00	DATE: 09/17/2020	DATE: 09/17/2020
10000000 TO 30000000	± 1.10	DATE: 09/17/2020	DATE: 09/17/2020
30000000 TO 100000000	± 1.20	DATE: 09/17/2020	DATE: 09/17/2020
100000000 TO 300000000	± 1.30	DATE: 09/17/2020	DATE: 09/17/2020
300000000 TO 1000000000	± 1.40	DATE: 09/17/2020	DATE: 09/17/2020
1000000000 TO 3000000000	± 1.50	DATE: 09/17/2020	DATE: 09/17/2020
3000000000 TO 10000000000	± 1.60	DATE: 09/17/2020	DATE: 09/17/2020
10000000000 TO 30000000000	± 1.70	DATE: 09/17/2020	DATE: 09/17/2020
30000000000 TO 100000000000	± 1.80	DATE: 09/17/2020	DATE: 09/17/2020
100000000000 TO 300000000000	± 1.90	DATE: 09/17/2020	DATE: 09/17/2020
300000000000 TO 1000000000000	± 2.00	DATE: 09/17/2020	DATE: 09/17/2020
1000000000000 TO 3000000000000	± 2.10	DATE: 09/17/2020	DATE: 09/17/2020
3000000000000 TO 10000000000000	± 2.20	DATE: 09/17/2020	DATE: 09/17/2020
10000000000000 TO 30000000000000	± 2.30	DATE: 09/17/2020	DATE: 09/17/2020
30000000000000 TO 100000000000000	± 2.40	DATE: 09/17/2020	DATE: 09/17/2020
100000000000000 TO 300000000000000	± 2.50	DATE: 09/17/2020	DATE: 09/17/2020
300000000000000 TO 1000000000000000	± 2.60	DATE: 09/17/2020	DATE: 09/17/2020
1000000000000000 TO 3000000000000000	± 2.70	DATE: 09/17/2020	DATE: 09/17/2020
3000000000000000 TO 10000000000000000	± 2.80	DATE: 09/17/2020	DATE: 09/17/2020
10000000000000000 TO 30000000000000000	± 2.90	DATE: 09/17/2020	DATE: 09/17/2020
30000000000000000 TO 100000000000000000	± 3.00	DATE: 09/17/2020	DATE: 09/17/2020
100000000000000000 TO 300000000000000000	± 3.10	DATE: 09/17/2020	DATE: 09/17/2020
300000000000000000 TO 1000000000000000000	± 3.20	DATE: 09/17/2020	DATE: 09/17/2020
1000000000000000000 TO 3000000000000000000	± 3.30	DATE: 09/17/2020	DATE: 09/17/2020
3000000000000000000 TO 10000000000000000000	± 3.40	DATE: 09/17/2020	DATE: 09/17/2020
10000000000000000000 TO 30000000000000000000	± 3.50	DATE: 09/17/2020	DATE: 09/17/2020
30000000000000000000 TO 100000000000000000000	± 3.60	DATE: 09/17/2020	DATE: 09/17/2020
100000000000000000000 TO 300000000000000000000	± 3.70	DATE: 09/17/2020	DATE: 09/17/2020
300000000000000000000 TO 1000000000000000000000	± 3.80	DATE: 09/17/2020	DATE: 09/17/2020
1000000000000000000000 TO 3000000000000000000000	± 3.90	DATE: 09/17/2020	DATE: 09/17/2020
3000000000000000000000 TO 10000000000000000000000	± 4.00	DATE: 09/17/2020	DATE: 09/17/2020
10000000000000000000000 TO 30000000000000000000000	± 4.10	DATE: 09/17/2020	DATE: 09/17/2020
30000000000000000000000 TO 100000000000000000000000	± 4.20	DATE: 09/17/2020	DATE: 09/17/2020
100000000000000000000000 TO 300000000000000000000000	± 4.30	DATE: 09/17/2020	DATE: 09/17/2020
300000000000000000000000 TO 1000000000000000000000000	± 4.40	DATE: 09/17/2020	DATE: 09/17/2020
1000000000000000000000000 TO 3000000000000000000000000	± 4.50	DATE: 09/17/2020	DATE: 09/17/2020
3000000000000000000000000 TO 10000000000000000000000000	± 4.60	DATE: 09/17/2020	DATE: 09/17/2020
10000000000000000000000000 TO 30000000000000000000000000	± 4.70	DATE: 09/17/2020	DATE: 09/17/2020
30000000000000000000000000 TO 100000000000000000000000000	± 4.80	DATE: 09/17/2020	DATE: 09/17/2020
100000000000000000000000000 TO 300000000000000000000000000	± 4.90	DATE: 09/17/2020	DATE: 09/17/2020
300000000000000000000000000 TO 1000000000000000000000000000	± 5.00	DATE: 09/17/2020	DATE: 09/17/2020

DRG. No. 0

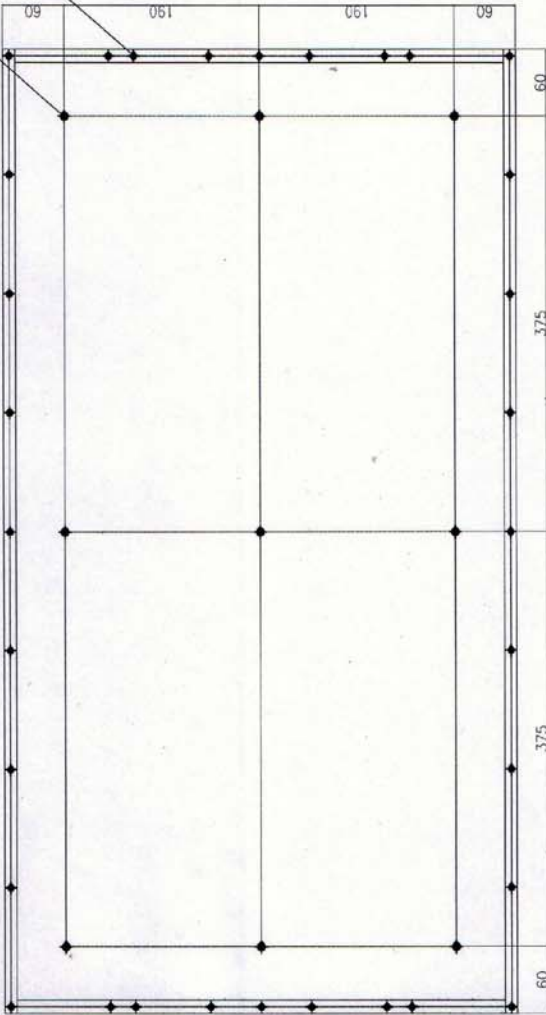


CF160 TO CF100 ADAPTAR

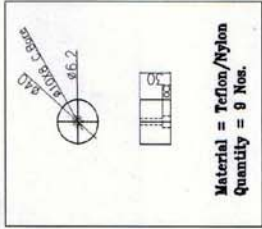


SUPPORT FOR SOURCE CHAMBER

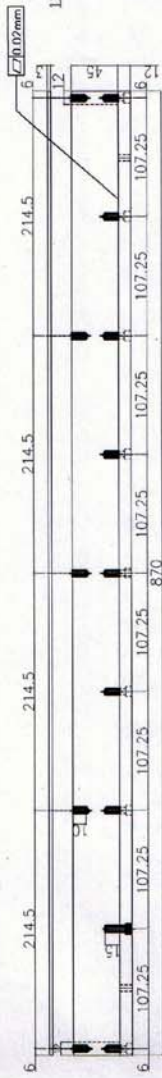
M6 Tapping with Helicoil insert, 9 Nos.



M5 Tapping, 32 Nos.



Material = Teflon/Nylon
Quantity = 9 Nos.



Material = Aluminium

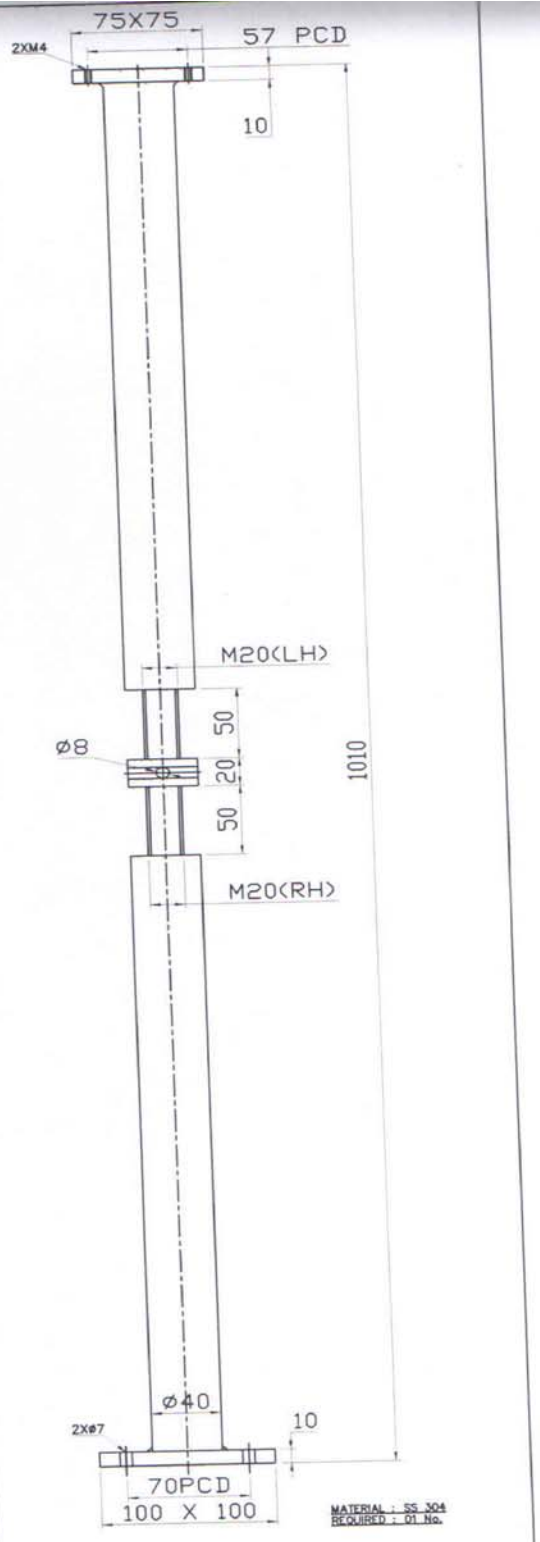
- Screws M6X 30mm Long = 15 Nos.
- Screws M5X 15mm Long = 35 Nos.
- Screws M5X 10mm Long = 25 Nos.
- Screws M4X 12mm Long = 30 Nos.
- Helicoils M4X12mm = 40Nos

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS 2102 VIZ: (MEDIUM CLASS)

LINEAR DIMENSIONS	±0.1	LENGTH OF SHORTER SIDE OF ANGLE
UP TO 6	6	1 - 6 ± 1'
6 - 30	±0.2	6 - 30 ± 0'-30"
30 - 120	±0.3	30 - 120 ± 0'-20"
120 - 315	±0.5	120 - 315 ± 0'-10"
315 - 1000	±0.8	120 - 400 ± 0'-10"

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REMOVE SHARP CORNERS AND BURRS.

SURFACE FINISH IN MICRONS 3.15 CLA
CHAMFER 1 x 45



SUPPORT OF TWIN BELLOW VALVE