### Ref : TPD / TFDS/ VS/2022/1

Dated : 06/04/2022

## Sub : Minor Fabrication - Invitation of Quotation

#### Dear Sirs,

- 1. Quotations are invited for the minor fabrication job "Supply and Installation of (i) Gas control system with gas lines for transfer of Argon and Nitrogen gas to lab (ii) Workstations and (iii) Exhaust system per attached specifications" as per the attached specifications and drawings.
- 2. Bidder shall quote for fabrication of these components with material.
- 3. Taxes and excise duties shall be quoted separately. Form 'AF' shall be provided where necessary.
- The quotations must reach Head, Technical Physics Division, by 22-04-2021 and must be sent in a sealed envelope superscribed with the above reference number and due date given above.
- 5. The address on the envelope should read: <u>The Head</u>, <u>Thin Film Device Section</u>, <u>Mod Labs.</u>, <u>Bhabha Atomic Research Centre</u>, <u>Trombay</u>, <u>Mumbai - 85</u>. Attn : Dr. Vibha Saxena
- 6. The bidder shall have to take an insurance policy against any material issued to him by the purchaser.
- The fabrication work shall be subject to inspection by our engineers at bidder's works. Necessary inspection facilities should be provided to our engineers during fabrication at bidder's premises.
- 8. The bidder shall deliver the finished components after approval by our engineer within 8 weeks from the date the firm purchase order is issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at G-294-S, Mod Labs., T. P. D, B. A. R. C, Trombay, Mumbai 85.
- 9. Head, TPD BAR C., reserves the right to accept /reject any or all quotations without assigning any reason.

OLL APPRIZUZ

H. दुर्गमारं पूर्णमिङभुठे Dr. Kunal Purnachandra Muthe अध्यक्ष / Head २० (२४) शिन फिल्म उपकरण अनुभाग / Thin Film Devices Section तकनीको भौतिकी प्रभाग / Technical Physics Division भाभा परमाणु अनुसंधान के / Bhabha Atomic Research Centre ट्रॉन्से, मुंबई-४०० ०८५ / Trombay, Mumbai - 400 085. Supply and Installation of (i) Gas control system with gas lines for transfer of Argon and Nitrogen gas to lab (ii) Workstations and (iii) Exhaust system per attached specifications

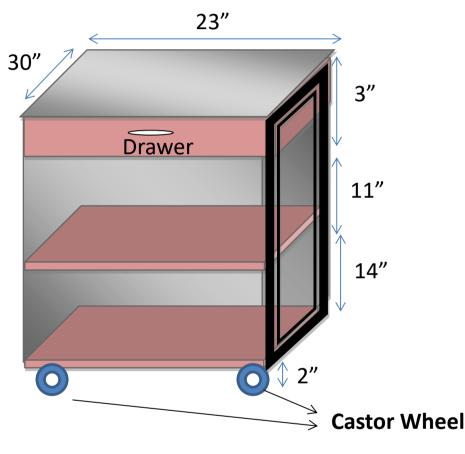
S. No		Description	Quantity
01.	(i)	High Pressure Gas Manifold System for Argon and Nitrogen Gas cylinder with Pigtail	2 Nos.
	(ii)	Cylinder Regulator with fully S.S. body with SS 316 Diaphragm for Argon and Nitrogen Gas Inlet Pressure gauge: 0-280 kg/cm <sup>2</sup> , Outlet Pressure gauge: 0-14 kg/cm <sup>2</sup> , Outlet Connection : 1/8" & 1/4" ferrule fitting Inlet Connection : 5/8" BSP Male (RHT), LHT (H2)	2 Nos.
	(iii)	Suitable <sup>1</sup> / <sub>4</sub> " SS tubing 0.9mm thick with color coded sleeves to transfer Gas from the cylinder to the lab facility.	100 feet
	(iv)	Cylinder cage with suitable mounting brackets for holding 3 cylinders (with suitable SS braided pigtail of suitable length for keeping each cylinder with safety ropes) inside the cage. The structure should have MS support structure bracket, held MS and net for proper ventilation. It should have door opening from outside. Size 4'x3'x1'	2 Nos.
	(v)	Genetic Valve with pressure gauge and suitable fittings for outlet	2 Nos.
	(vi)	1/4", 1/8" Installation: Standard fittings, coupling, clamps, hardware as well as suitable arrangement for the transfer of gas from cylinder to the lab facility has to be carried out by the vender.	1 Pack
02.		Exhaust system 3600CFM with 40x40x6mm MS angel frame with protective GI Mesh and flap cover	1No.
03.		Work station for (a) Plasma Cleaner (1No.) (b) Julabo water bath (1No.), (c) Spin coater (1No.) and (d) ultrasonicator (1No.) as per attached drawing (annexure1)	-

# Annexture1:

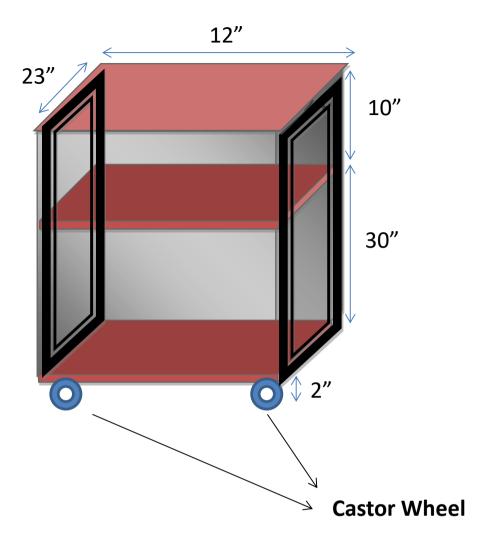
Drawing: All Work stations (a-d) should be made of 1mm or thicker GI sheets and fulfill following specifications

- (i) The telescopic drawer slide should be used for drawers and should be able to take load up to 30Kg. All drawers should have hettich make multipurpose lock
- (ii) The top of work station should be made of 17-19mm thick granite top with chamfer molding at the front.
- (iii) The supplier should fix work stations alongwith wall-mounted cabinets in our laboratory. Prior to installations the lab should be visited to verify the dimensions.
- (iv) Good quality castor wheels with brake

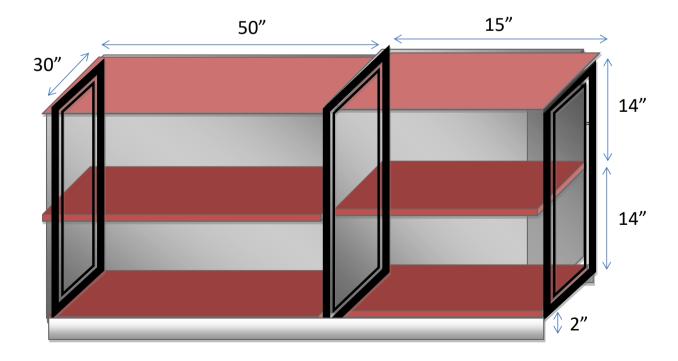
## (a) Work station made of 1mm or thicker GI sheets for Plasma Cleaner (1No.)



(b) Work station made of 1mm or thicker GI sheets for Julabo water bath (1No.)



(c) Work station made of 1mm or thicker GI sheets for Spin coater (1No.)



(d) Work station made of 1mm or thicker GI sheets for ultrasonicator (1No.)

