ADDENDUM 03

Tender no.2021-22/07

Equipment: 2021-22/07/02 - Clean Room Facilities

The Technical Bid has been replaced for Clean Room Facilities. Due to additional requirements in technical specifications.

Principal Director (T)

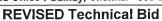


TENDER NO

GOVERNMENT OF INDIA

Central Institute of PetrochemicalsEngineering & Technology
Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers

Head Office : Guindy, Chennai - 600 032.



Tender No.: CIPET_HO / Pur / 2021-22 / 07 / 02

ITEM SCRIPTION	Clean Room Facilities						
SI. No.	PARTICULARS	Quoted By					
1	Name of the Bidder						
2	Postal address						
3	Telephone No. with STD code						
4	Alternative Phone No. with STD Code.						
5	Name of Contact person						
6	Mobile No.						
<u>7</u> 8	e-mail ID BELOW GIVEN DOCUMENTS TO BE SCANNED AND UPLOADED IN THE WEBSITE www.tenderwizard.com/CIPET WITHIN THE PERIOD OF SUBMISSION.	YES					
10072000		Copy to be Enclosed					
1915	Certificates:	copy to be Enclosed					
	i) Certificate of Registration for GST	ii .					
9	ii) Certificate of Registration for NSIC / MSME / Startup / Others						
	iii) Auditor Certificate confirming the Turnover for the past three years 2017-18, 2018-19,2019-20 (Separate One page Auditor Certificate confirming the turnover)						
	iv) Authorization certificate from OEM (If not a Manufacturer for the machine / equipment) - (Section - V)						
	v) Bid Form (Section V)						
mmericial	Terms for Quoted items (Please Provide Commercial terms and conditions in the below form)	Mention - Agreed & Not Agree					
	i) Minmim Required Validity of offer is 90 Days from the date of Price Bid Opening						
10	ii) Price Shall be firm throught out the currency of contract, in the event of placement of purchase order.						
	iii) Terms of Payment:- Please refer Tender / Bid Document Clause nos.4.5, 8.1 and 8.2. Accordingly payment will be released						
	iv) Price Term only in INR (Free Delivery / Safe Door Delivery / F O R)						
	v) Period required for Supply, Installation, Commissioning and Training (in days)						
	vi) Please Indicate the Period of Guaranty / Warranty (Minimum TWO YEARS (2) is Mandatory) (No. of years)						
JESTIONN	AIRE TO BE FILLED BY BIDDER IN AND SENT ALONG WITH OFFER DULY SIGNED	Copy to be Enclosed					
	i) Whether All Documents Relating to tender Viewed						
	ii) BOQ / Packing List (each and every part of the equipment & standard acessories to run the machine) - as per Section - III						
11	iii) Make and Model along with specifiction.						
	iv) Pre-installation requirement if any to run the equipment / machine						
	v) Technical Catalogue / Brouchures / Leaflet clearly mentioning the Model number, name of equipment and technical details						
	vi) Proforma for Deviation Statement (Section - X)						
	vii) Past three years supply details for similar machines (order copy)						

	ix) Self Certification under Prefe	rence to "Make In India" - (Section - XII)	
	X) Integrity Pact - (Section - XIII)		
	XI) Mention the Country of Origin		
	XII) Kindly Mention the Local Col India) (Section XI & XII)		
		/lake	
	N	lodel	
SI. No	Item	Unit Specication	Bidder Specification
		RCA Process., Piranha Process.	
		Development process.	
		Lift off and metal etch process.	
1	Application	HF dip for native oxide removal.	
		Wet etch.	
		Glass/PET substrate cleaning.	
		Semiconductor Processing Lab	
		It is design and built scope.	
		it is design and built scope.	
		• The size of clean room is 600 sq. f and 500 sq. f of it is	
		maintained as (ISO 6) class 1000 and the rest 100 sq. f is	
2	Description	class 10,000 (ISO 6).	
		10,000 (45 0 0)/	
		Complete area covered with yellow light and dedicated for	
		semiconductor process.	
3	List of chemicals allowed	Acetone, IPA, NH4OH, HCL, HF, H ₂ O ₂ , H ₂ O, BHF, TMAH, HNA, Resists, developers and strippers.	-
4	Substrates allowed	Si, Quartz, GaAs, Ge, Al2O2, SiC and other substrates on request.	
		Suitable fume hood for device fabrication.	
		Hood should have constructed from all white stress-	
		relieved, acid resistant, non-corrosive polypropylene or better.	
		Working dimension:2000mm X1000 mm X900 mm and closing slash	
		Microprocessor based controls: A microprocessor controller monitors face velocity and displays the real-time airflow on the LCD screen in linear feet per minute.	
5	Fume hood & Clean Bench	Easy-access utilities panel for operation and maintenance.	
		Should have sink, electrical outlets, digital airflow alarms, gas, water, air facilities and base cabinetry.	
		Corrosion resistant interiors and exteriors.	
		Noise and Sound Levels < 60db	
		• Filter Assembly: Large Separator-Less HEPA Filters, 99.99% Efficient on 0.3 Micron Particle	
	*	• Air Velocity: Down Flow Velocity: 60 LFPM (0.30 m/s) Inflow Velocity: 105 LFPM (0.53 m/s)	
		Suitable light for clean room	
		Ø Working area dimensions: 2000mm X1000 mm X900 mm and closing slash.	
6	Technical specifications	Ø Laminar flow dynamics with FFU and HEPA filers 99.99%.	
ū	A COMMISSION OF CONTRACTOR	Temperature: 20 +/- 2 &Room Humidity:< 50%	
		Ø General exhaust is available to remove fumes during process.	

Gas Cylinders with Refill & Regulators Gas line should be in stainless steel. Cylinder should be placed outside the building. • Ultra High Pure, Brand New High Pressure Seamless Steel Cylinder, ISI Marked, Confirming IS 7285 specification, Flat / Concave Bottom fitted with Valve as per IS: 3224-1988 complete with neck ring & cap, painted as specified under Gas Cylinder Rules 2004 • Supported with following documents: ISI Marking / Quality Certificate, Hydraulic Test Certificate, Approval Certificate from Chief Control of Explosives, Govt. of India Gas Cylinders with Refill: Argon-01, Oxygen-01 and Nitrogen-01 • Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm², Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: O2 < 2. H2O < 2, CO+CO2 < 0.2; PPM: THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen-01 Resistance Pressure: • It is compatible with valve as per IS: 3224-2002 • Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₃ , Gas Specifications: • Stainless Steel Specially cleaned Body	
Cylinder should be placed outside the building. Ultra High Pure, Brand New High Pressure Seamless Steel Cylinder, ISI Marked, Confirming IS 7285 specification, Flat / Concave Bottom fitted with Valve as per IS: 3224-1988 complete with neck ring & cap, painted as specified under Gas Cylinder Rules 2004 Supported with following documents: ISI Marking / Quality Certificate, Hydraulic Test Certificate, Approval Certificate from Chief Control of Explosives, Govt. of India Gas Cylinders with Refill: Argon-01, Oxygen-01 and Nitrogen-01 Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: O2 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen-01 Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₃ , Gas Specifications:	
Ultra High Pure, Brand New High Pressure Seamless Steel Cylinder, ISI Marked, Confirming IS 7285 specification, Flat / Concave Bottom fitted with Valve as per IS: 3224-1988 complete with neck ring & cap, painted as specified under Gas Cylinder Rules 2004 • Supported with following documents: ISI Marking / Quality Certificate, Hydraulic Test Certificate, Approval Certificate from Chief Control of Explosives, Govt. of India Gas Cylinders with Refill: Argon-01, Oxygen-01 and Nitrogen-01 • Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cum per Cylinder Impurities in: 02 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen- 01 Resistance Pressure: • It is compatible with valve as per IS: 3224-2002 • Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₃ , Gas Specifications:	
Seamless Steel Cylinder, ISI Marked, Confirming IS 7285 specification, Flat / Concave Bottom fitted with Valve as per IS: 3224-1988 complete with neck ring & cap, painted as specified under Gas Cylinder Rules 2004 Supported with following documents: ISI Marking / Quality Certificate, Hydraulic Test Certificate, Approval Certificate from Chief Control of Explosives, Govt. of India Gas Cylinders with Refill: Argon-01, Oxygen-01 and Nitrogen-01 Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: 02 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen-01 Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₃ , O ₂ , Gas Specifications:	
Quality Certificate, Hydraulic Test Certificate, Approval Certificate from Chief Control of Explosives, Govt. of India Gas Cylinders with Refill: Argon-01, Oxygen-01 and Nitrogen-01 Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: O2 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen- 01 Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₂ , Gas Specifications:	
Nitrogen-01 Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: O2 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen-01 Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₂ , Gas Specifications:	
 Ultra High Pure; Cylinder Capacity: 47 ltrs; Cylinder Type: Carbon Steel; Purity: 99.999% (5.0 Grade); Pressure: 130 – 140 Kg/cm²; Gas Volume: Approx. 7.0 Cu.m per Cylinder Impurities in: O2 < 2. H2O < 2, CO+CO2 < 0.2; PPM:THC < 0.2; Stability: 12 Months. Gas Regulators: Argon-01, Oxygen-01 and Nitrogen-01 Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H2, N2, O2, Gas Specifications: 	
Resistance Pressure: It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H ₂ , N ₂ , O ₂ , Gas Specifications:	
 It is compatible with valve as per IS: 3224-2002 Regulator with Input and Output gauge suitable for Argon, H₂, N₂, O₂, Gas Specifications: 	
 Regulator with Input and Output gauge suitable for Argon, H₂, N₂, O₂, Gas Specifications: 	
Argon, H ₂ , N ₂ , O ₂ , Gas Specifications:	
7 Specifications:	
Specifications:	
• Stainless Steel Specially cleaned Body	
• Leaking Rate: <1 x 10 ⁻⁶ Mbar	
 Seals: Teflon Diaphragm: Stainless Steel SS 	
• Inlet Pressure: 0 – 140 Kg/Cm ²	
• Outlet Pressure: 0 – 16 Kg/Cm ²	
Cylinder opener: 02 Nos; Gas tube (Polyurethane): 8 mm dia50 mtr, 10 mm dia50 mtr, Pneumatic Connectors: 8mm to 6 mm - 5 Nos; 10mm to 8 mm - 5 Nos; 8mm to 8 mm -5 Nos; 10mm to 10mm - 5 Nos.	
Accessories to quote along with the equipment cost: It is design and built scope: Chair:05 Table:03 Cross over bench:01 Shoe rack:01 Shoe dispenser:01 Garment storage:02 Mirror:01 Static pass box:01 Dynamic pass box:01	
Power requirement in side clean room Minimum Power: 35 kW	
Equipment's Planning to keep inside clean room Mask aligner, Optical Microscope, Semiconductor Parameter Analyser with Probe Station, Hot Air Oven, Hot Plate, Work Bench etc.,	
Available Space: 2000 sq. f. Floor height: 13 feet (including 2 feet of beam) Wall thickness: 11 inch Flooring at present site: Titles Ground floor Draft Site Layout Attached.	

8	TERMS & CONDITIONS	1. Tenders should specify and quote all mandatory and other accessories required for installation, commissioning and running the machine.	
		2. The vendor should supply PCs with requisite specifications and data transfer accessories compatible with the equipment.	
		3. All necessary CRM along with the calibration certificates wherever required traceable to international standard should be provided.	
9	AMC	AMC charges for additional 3 years should be quoted additionally.	
10	PRE-REQUISITES	1. Pre-installation requirements indicating details of power requirement, utility air, water, ventilation, safety device, if any, along with the foundation requirement needed for installation & commissioning should be provided with tender document.	
		2. The vendor should have technical support in the area of application and service available within the country.	_
		3. The power requirement of UPS for providing a back- up of minimum 01 hour should be specified.	
11	SERVICE	Appropriate tool box/kit for routine maintenance should be provided with the equipment	
		2. All documents (i.e. operating & service manuals, drawings etc.) and original softwares relevant to the instrument and its accessories must be supplied.	
		3. In case of any up gradation of software within the period of warranty then the same should be provided free of cost by the supplier/manufacturer.	
		4. Power and receptacle/socket as per Indian Standards should be provided.	
		5. The vendor shall have local service and application office and infrastructure to attend by visit within 48 hours of need.	
12	VENDOR TRACK RECORD	6. The vendor should furnish details of customers in India.	
13	TRAINING	Onsite training for system operation and maintenance as well as application support should be provided by the vendor at its own cost.	