



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076.

Ref. No. (PR.1000042920)

Rx No. 6100001945

Specifications for Advance Gas Chromatography Equipment

	Detailed Specifications for Advance Gas Chromatography Equipment		
Sr no	Tender Specifications	Compliance (Yes/No)	Additional Information
1	Injector: port should be capable of handling capillary and packed column. Independent injectors for both detectors, Gas sampling valve for gas analysis, Split Ratio upto 500:1		
2	Detector Detector Details Minimum Detectable Amount 1. Flame Ionization Detector (FID) Capillary Column HP5 (GC Column 30m x 0.32mm x 0.25µm) Minimum Detectable Amount: <3 pg carbon/s as Tridecane Retention time repeatability < 0.06% Peak area repeatability < 2% 2. Thermal Conductivity Detector (TCD) Packed column (SS 3 FT X 1/8" PORAPAK-N 80/100 MESH) Minimum Detectable Amount: <800 pg carbon/s as tridecane Analysis of tridecane Retention time repeatability < 0.06% Peak area repeatability < 2%		
3	Oven Operating temperature 8 °C (above ambient) to 400 °C Temperature, Maximum temperature ramp rate 50 °C/min, Oven cools down 300 °C to 50 °C in 7 minutes (25 °C ambient), Number of Oven, Ramps / Plateaus for Temperature programming: at least 5		
4	Autoinjector Capacity of the Liquid Auto Sampler (Number of Vials) min 50		

	<p>Volume of each Vial of the Liquid Auto Sampler 2 milliliter</p> <p>Number of Injection Ports in the Liquid Auto Sampler 2</p> <p>Number of Channels in the Liquid Auto Sampler 2</p> <p>Minimum Volume of the injected liquid sample 0.1 microliter</p> <p>Maximum Volume of the injected liquid sample 10 microliter</p>		
5	<p>Software</p> <p>The system must be provided with software that works on a single software platform with full networking capabilities and has capability to be controlled through an independent desktop or laptop computer.</p> <p>Simple, easy to operate, Compatible with Windows 10 and higher versions of windows.</p>		
6	<p>Instrument tool kit</p> <p>Must include necessary tool kits to maintain individual module of the system like pump, autosampler, column oven, detector etc. All the required gaskets, septums, injector glass wool, allen key set, wrenches, spanners, capillary cutters, seal insert tools, adapters, seal keepers, support rings, silicon tubing's, all type of screws for individual modules etc. (All mentioned components should be provided additional to the installation kit).</p>		
7	<p>Warranty and Reports</p> <p>7.1 : 1-year default factory warranty insuring consistence performance of equipment and should replace any part damaged during warranty period.</p>		
	<p>7.2 :Seller should list of at least 5 installations of similar equipment's in central research lab /state/PSU research lab/ Govt. Hospitals from atleast 10 years. Other than OEM if reseller supplies the consignment then reseller shall ensure uninterrupted availability of all spares for 10 years. This should be furnished in written format on a letter head addressing to the concern authority of the organization.</p>		
	<p>7.2 : During the warranty period it shall be ensured that all the break down calls are attended within 24 hrs and the complete details of service agents / contact details should be furnished to buyer and consignee at time of supplies. The Principal Manufacturer must have direct Presence/approved service centres In India.</p>		
8	<p>Vendor declaration:</p> <p>Vendor should be capable of giving CMC and AMS atleast for next 5 year with subsidised academic cost.</p>		

	<p>Special Terms and Conditions</p> <p>9.1. Comprehensive Warranty Comprehensive warranty shall include preventive maintenance including calibration as per technical/ service /operational manual of the manufacturer, service charges and spares. During warranty period commencing from the date of the successful installation (demonstration of all committed parameters, qualitative and quantitative sample runs and necessary training) till completion of warranty period, service personnel shall visit consignee site as per the recommended in the manufacturers technical/service/operational manual or at least once in six months. Warranty shall not be including the consumables. Further there will be 98% uptime warranty during warranty period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend warranty period by double the downtime period.</p>		
9	<p>9.2. Service centres Details of Service outlets in India to render services for equipment to be furnished to buyer/consignees with complete address, telephone numbers, e mails etc at time of making the supplies. to be provided buyer/consignee at the time of supplies.</p>		
	<p>9.3. Spare Parts Seller shall provide materials, information etc. pertaining to spare parts manufactured and supplied in the OEM. It shall be ensured that the required spares are available for purchase at least for 10 years from date of supplies.</p>		
	<p>9.4. Installation, Training, Manuals Seller shall be responsible to carry out Installation and commissioning, Supervision and demonstration of the goods. They shall provide required jigs and tools for assembly, minor civil works for the completion of the installation.</p>		
	<p>9.5. Transportation and safely installation of equipment at site is responsibility of seller only.</p>		
10	<p>Software: All software's with license and updates should be provided free of cost.</p>		