



HLL INFRA TECH SERVICES LIMITED
(Subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise)
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HITES/BME/PRE-TENDER/05/AC/2022-23

Date: 15.03.2023

NOTICE OF INVITATION FOR PRE-TENDER MEETING

Biomedical Engineering Division of HLL INFRA TECH SERVICES LIMITED (a fully owned subsidiary of HLL Lifecare Limited, a Govt. of India Enterprise) is in the process of finalising technical specifications for various Medical/Laboratory/Scientific equipment. In this context, HITES is organising an ONLINE PRE-TENDER MEETING with prospective vendors for the following items to acquire further insight to make technical specification in general without compromising the quality:

SN	Item Name	Department
1	Anaesthesia Workstation with Electronic Charting System	Anaesthesia

All the interested prospective vendors are invited to participate in the online pretender meeting and requested to please send your suggestions with respect to the specifications of above items (**Enclosed in Annexure I_Technical Specification**) to the below mentioned e-mail IDs on or before 20.03.2023, 11:00 AM. The details of the Pre-Tender meeting are detailed below:

Date & time of the Pre-Tender meeting	21.03.2023 at 11:00 AM
Details of meeting	The meeting shall be conducted through following Google meet Link: https://meet.google.com/mrq-tmpe-ths
Last date for submitting suggestions with respect to the technical specifications	20.03.2023, 11:00 AM
Contact Details	Ph: 0120-4071500/ 609/577 Email: bmenoida@hllhites.com

Disclaimer: This notification is not a tender or does not construe that participating vendors shall be qualified for prospective tender in this matter.

For HLL Infra Tech Services Limited
Deputy Vice President (BME)

ANNEXURE 1 _ TECHNICAL SPECIFICATIONS

SN	Item Name	Page No
1	Anaesthesia Workstation with Electronic Charting System	3

1. Anaesthesia Workstation with Electronic Charting System

Sl. No	Technical Specification
1	Anaesthesia Machine, vaporizer(s), ventilator, should be from a single (same) manufacturer. It should be integrated Anaesthesia work station.
2	It should offer ICU quality ventilator, suitable for adult children and neonate. Suitable for low and minimal flow anaesthesia application.
3	Vaporizer must be isolated from gas flow in off position and prevent simultaneous activation of more than one vaporizer. Temperature pressure compensated and flow compensated independent vaporizer.
4	Safety features like electronic hypoxic guard, should provide atleast 25% or more of oxygen when an anesthetic gas mixture is in use with electronic gas mixture. Should have extra flow meter for oxygen only.
5	Digital display of pressure value for cylinder and pipeline pressure.
6	Single chamber soda lime canister with a capacity of 0.6 kg or higher and should be auto cleavable.
7	Independent port for open circuit.
8	Machine should have drawers for storage space and good quality handle and castors to move the machine with locking system
9	Ventilator of the machine should suitable be for new born pediatric and adult which should have colored touch screen with 15 inch screen size or more.
10	Modes of ventilation should be volume and pressure controlled, SIMV and pressure support mode. Tidal volume range from 20 ml to 1500 ml RR from 4-80 or more.
11	There should be no collection of water in the breathing circuit (Integrated heating mechanism in breathing system for same).
12	It should have independent para magnetic oxygen sensor/Electromagnetic sensor or cell for FiO ₂ with an expected life of atleast 2 years, however suitable no. of such sensors so as to cover 5 years warranty shall have to be supplied along with machine & Bidders quote should address this suitably.
13	Should have a battery backup at least more than or equivalent to 60 minutes or more.
14	Monitor should display spirometry loops pressure V/s time volume /flow V/s time.
15	The machine should have Isoflorane, Sevoflorane and Desflurane vaporizers of same OEM as machine.

16	The machine should have target controlled settings for oxygen and anesthetic agent based on continuous monitoring of patients end tidal O2 and end tidal anesthetic agent values or should support with guidance tool that automatically monitors and analyze inhaled and exhaled oxygen and anaesthetic agent data including patient uptake with actual fresh gas settings to efficiently reduce the agent consumption in low and minimal flow anaesthesia practice. OR Should have end tidal software tool or low flow wizard software tool for driving the efficiency in low and minimal flow anaesthesia practice. OR Should have target based software tool to control fresh gas flow, anesthetic agent or tool to calculate and show the exact flow required to set as per need of the patient.
17	The machine should have the indicator or decision support tool to show the efficiency of fresh gas setting while used in Low flow and minimal flow.
18	Multi gas analysis with auto detection of all anesthetic agents on anesthesia machine.
19	Automatic display of MAC of all anesthetic gases and FIO2 on anesthesia machine.
	<u>Patient Monitor</u>
1	The monitor should be light weight and have bright, clearly visible, 15 inch colour LED display for easy viewing from a distance in a large critical care setup . Display capability should be for up to 10 simultaneous waveforms.
2	The monitor should have an optical knob as well as touchscreen option for the ease of operation. For ease of use a user should be able to access the same function using either of the two (optical encoder or touch screen) based on his convenience.
3	The monitors should have an inbuilt & standard capability to monitor ECG, NIBP, SpO2 (Nellcor / Masimo technology) , dual Temperature and dual IBP
4	Should have ST segment analysis as standard.
5	The Display should be configurable by Doctor . Screen Auto formatting to make maximum use of screen based on parameters used is desirable.
6	Monitor should have minimum 240 Hrs of graphical and tabular trends and minimum 2hrs of online trend. The graphical & tabular trend should be seen simultaneously.
7	Monitor should have OxyCrg trend .
8	Bed to bed monitoring is required.
9	The monitor should have an advanced HDMI port to enable large screen Slave display connectivity.
10	Machine should be usable for measuring advanced measurements like Wedge pressure, Haemodynamic calculations, Drug dose calculations.
11	Should have Standard Integrated BIS or Entropy.
12	Upgradable to cardiac output monitoring, Modular/Standalone NMT.

13	The quoted model (Both Anaesthesia machine and Monitor) should be European CE with four digit notified body number or US FDA or BIS approved and certificate to be submitted. OR Should meet IEC 60601-1, IEC 60601-1-2 (Both Anaesthesia machine and Monitor) , ISO 80601-2-13 (for Anaesthesia machine), IEC 80601-2-49 (for Monitor) and should submit valid test report for the quoted model.
14	Manufacturer should have ISO 13485 certification from : Any Certification Bodies registered with NABCB under Medical Devices Quality Management System OR Any notified body registered with CDSCO OR Any 4-digit CE notified body
<u>Integrated Documentation System</u>	
1	The Software should be able to integrate Patient monitor, Anesthesia machine and Syringe pumps.
2	Should display all OR Patient information like Name, Room Number, Patient ID, Ventilator status and attending physician names in single screen.
3	Should enable OR workflows such as ADT (Admission Discharge and Transfer), flowsheet, Anesthesia documentation, Infusion Management, Medication, notes, scoring and other workflows.
4	Should have Electronic patient charts (flowsheets) which are populated with data acquired electronically via medical interface to other devices/information systems. Flowsheet data can be edited, validated, and annotated.
5	Should have automatic/manual fluid Input/output sheets which allow the tracking of a patient's total fluid intake and output.
6	Should have medication scheduling to create care-unit-based medication schedules which alert the staff to upcoming/past-due medication needs.
7	Should have special data screens for OR care units, such as customized data forms, outcomes documentation, staffing documentation and OR scheduling and Data annotation (notes/event, notes/OR event capture).
8	Should have data protection Data and System Protection and Security like all users should be given an individual password that only they or admin can change. Personal data (name, DOB, etc. of patients and staff) should protected in the database under special password protection.
9	Should have staff documentation during the case and should provide a configurable list of staff members like Name (first, middle, and last), Role, Group, Supervisor/Supervisor level, Time in/Time Out
10	Should have post-op prescription and should be able to generate final anesthesia report in pdf format
11	Wireless Remote viewing of centralised/individual OR Data should be possible.
12	Each machine should have the following accessories:
A	Reusable Spo2 sensors 1 each for adult, pediatric/neonate. Extn Cable -1 Nos.

B	ECG cable -1 Nos., 5 Lead ECG - 2 Nos.
C	NIBP cuff 2 each for adult 2 each for pediatric and 2 for neonate. NIBP Extn Cable - 1 nos.
I	Temperature probe 2 Nos.
D	IBP transducers 10 No.
E	IBP cable 2 in No.
F	ETCO2 sample line 10
G	Water trap 10 No.
H	Reusable autoclave breathing circuit 2 nos. for adult and 1 nos. for pediatric alongwith water traps.
J	Disposable breathing circuit with water trap 25 No. for adult and 25 nos. for Pediatric
K	BIS or entropy cables 1 nos. each and respective electrode 10 Nos.
13	Server WITH 17" Screen , UPS, Laser Printer , Additional PC / Screen (Touch and/ or Keyboard) mounted on Anesthesia Machine for running the Charting solution
14	Bidder has to supply all necessary hardware, software, cables, etc required for successful installation and commissioning of the entire system.
15	The bidders are strongly advised to visit the site before submission of the bid for assessment of work.
16	Bidder has to provide onsite demonstration of the whole system along with all components, if desired by the Technical Specification committee.