

HLL LIFECARE LIMITED
(A Government of India Enterprise)
Projects Division
Corporate Head Office, Poojappura.P.O,
Thiruvananthapuram – 695012,
Kerala, India
Phn: 0471- 2354949, 2775588

AMENDMENT No. 2

Sub: Supply, Installation, Testing and Commissioning of X-RAY Machine & its accessories for Diagnostic Lab Facility at Sector 39, Gurugram - reg.

Ref: 1) Our IFB Ref No: HLL/CHO/PROJ/HCS/MCG-EQP/X-RAY/2018-19 dated 12.10.2018
2) Pre-bid Meeting held on 25-10-2018.

Amendment Date: 03-11-2018

With reference to the tender and the pre-bid meeting held on 25-10-2018, **Schedule II - Specifications** is amended and attached herewith.

All other terms and conditions of the tender remain unchanged.

SENIOR MANAGER (PROJECTS)

SCHEDULE II - AMENDED

SPECIFICATIONS

Sub: Supply, Installation, Testing and Commissioning of X-RAY MACHINE & its accessories **as per AERB guidelines** for Diagnostic Lab Facility at Sector 39, Gurugram, Haryana as per the tender specifications – reg.

Item Name: X-RAY MACHINE & its accessories

Quantity: 1 No

TECHNICAL SPECIFICATIONS
A Brand new High frequency X-Ray machine suitable for General Radiography
X-RAY GENERATOR:
High Frequency X-Ray Generator having frequency of 40 kHz or more should be provided.
Power output of generator should be 50 kW.
Radiographic KV Range should be 40 to 125 kV
mA Range (Rad.): 500mA or more.
Exposure time (Rad.): 3 ms to 3 Sec.
Control:
A very compact, Control Panel having following functions & indications should be provided. The panel can be supplied in Floor or Wall mount with Spill Proof design.
Following features should be available on the control panel.
Machine ON/OFF Switch.
Digital Display of KV & mAs.
KV & mAs Control with AEC Mode
Tube focal spot selection Switch.
Ready and X-Ray-ON switch with Indicators.
Bucky Selection Switch.
Self diagnostic Programme with Indicators for Earth fault error, KV error, Filament error & X-Ray Tube Thermal Overload.
Anatomical Programming Radiography (i.e. APR) should have reprogrammed parameters of human anatomy Upto 100 programs which helps the user to select exposure parameters based on body part, examination view and size of the patient.
A dual action hand Exposure switch with retractable cord.
Auto shut-off of system, in case of idling.

X-RAY TUBE:
One No. Dual focus Rotating Anode X-Ray tube thermally protected
Anode heat storage capacity of tube should be more than 140KHU.
One No. Collimator with Light auto shut-off.
TUBE STAND:
Floor to Ceiling Stand with Counter Balanced Tube Head (Rotatable \pm 180 Degree), 360 Degree Rotatable; mounted on Floor & Ceiling Rails for convenient movements.
TABLE:
Motorized table should have motorized Bucky consisting of Bucky grid with ratio 8:1 or more, 80 lines/inch.
VERTICAL BUCKY STAND:
Vertical Bucky Stand with oscillating Grid of Ratio 8:1 or more, 80 lines/inch is provided.
The Bucky moves up & down with counter balance & is equipped with a stainless steel cassette Holder
Tray.
The stand is Floor-mounted type & can accommodate cassettes up to 14" X 17".
The Bucky is tilted in 6 steps of 15 degree Angle each for various Radiographs.
Suitable Lead-protected Three-fold screen with Lead Glass window.
3. ACCESSORIES, SPARE PARTS, CONSUMABLES
2 No. lead aprons 0.5 mm with thyroid shield, gonad shield and all protection attachments and 1 No. Three fold X-ray protection barrier
STANDARDS AND SAFETY
AERB type approved
The Bidder should assist the institution for e-LORA registration formalities.
Regular QA according to AERB norms will be responsibility of bidder during warranty and CMC period.
TRAINING AND INSTALLATION
1) Training of users on operation and basic maintenance;
2) Advanced maintenance tasks required shall be documented
Installation work:
The department would provide standard room with only three phase power supply in the room. The rest of the installation work will be done by the supplier, including girders for ceiling suspension etc., The installation of X- Ray machine includes all the associated work like suitable AC (min 4 TR), suitable flooring, cabling. Earthing, Lead lining etc. should be done by the vendor. The site modification work should be as per AERB guidelines.
BOQ

Item Description
500 mA X-Ray System with accessories as per the Tender Specification
Site Modification Work for 200 Sq.ft.
Air Conditioning (Minimum 4 TR)
Lead aprons 0.5 mm with thyroid shield, gonad shield and all protection attachments (2 nos. Each) Three fold X-ray protection barrier - 1 No.
Lead Apron Stand (1 No.) with hanger (2 Nos.)
Cassette of 8"x10" size. (Optional)
Cassette of 10"x12" size. (Optional)
Cassette of 14"x17" size. (Optional)

GENERAL SPECIFICATIONS

1. Power Supply: The equipment offered should be suitable for Indian electrical ratings as follows:
Power supply: 200-230V, 50 Hz (Single Phase) or 400-440 V, 50 Hz (3 Phase)
2. HLL will provide necessary incoming power supply upto isolator DB only. The contractor shall provide all necessary electrical connections from the equipment panel to this isolator panel for the operation of equipment/s.
3. The unit should be complete with all accessories and interconnections required for machine operation.
4. Stain Retardant Curtains:The Supplier shall provide 1 No. of stain retardant cubicle curtain of polyester material for cubicle (covered on all 4 sides) of size approx. 1.2 m x 1.2 m and height not less than 2.7 metres and 1 No. of stain retardant curtain of length up to 6 metres, both supported at false ceiling level with powder coated aluminium channels/rails as curtain rods (heavy duty) with rollers including necessary supporting at required levels, necessary hooks including holding arrangement for holding the curtain, stitching, fixing etc. complete
5. **Equipment shall be connected to RIS / PACS system for communication with External PC.**
6. **Parts required on FOC with the equipment: CD/ DVD Rom with driver, softwares and Instruction manual Hard copy original, Operations manual, 1 Nos. of External Barcode reader**
7. Should be able to connect to external printer / should have in built thermal printer.
8. Instrument should have quality certificate as mentioned in the receptive technical specifications.

9. The supplier shall install, calibrate and validate the equipment at the location specified in the purchase order / Notification of award at the suppliers cost.
10. The maximum time allowed to attend any maintenance/ repair call by the supplier shall be within 12 hours. The supplier if does not attend and resolve the maintenance /repair call within the said period, will have to pay a penalty as levied by HLL. (As per clause17)
11. The supplier shall ensure 98% uptime in a financial year. If the uptime is less than the said percentage then penalty shall be imposed in a manner detailed in downtime penalty clause (Clause 6 in GCC).
12. The supplier shall provide brand new machines only.
13. The quote should be inclusive of comprehensive training in the equipment supplied for minimum 1 week to HLL staff.
14. The quote should also include comprehensive warranty for a minimum period of 5 years and submit rates for CAMC period of another 5 years.
15. The supplier should submit 3 copies of the following documents relevant to his scope of work, two weeks prior to the commissioning of the unit, free of cost.
 - a. Instruction / Testing / Operation manual (3 copies)
 - b. Maintenance manual / Lubrication Chart (3 copies)
 - c. All final drawings - Electrical, mechanical and civil (3 copies)
 - d. Relevant Test Certificates, Guarantee Certificate for each item of equipment.
 - e. Catalogue and literature on bought outs (3 copies)
 - f. Any other related documents
16. All electrical parts and control panel shall be conforming to and shall be done as per relevant BIS and any other standard stipulated by Electrical Inspectorate.
17. All the bought out items should be of standard and reputed make.
18. Utility requirements (Quality, Quantity, rating etc.) for the equipments shall be indicated in the bid.
19. Calibration certificates with traceability to National Standards shall be supplied for all the instruments coming under the scope of supply of supplier.
20. The bidder should attach to their bid detailed specifications, catalogues and other details of all the equipments quoted by them.
21. The supplier should submit necessary test certificates of the equipment.
22. After sales service center should be available at the city of Diagnostic Lab on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 12 hrs. The service should be provided directly by Tenderer / Indian Agent. The spares for the equipment shall be available for at least 10 years from the date of supply.
23. **Comprehensive Warranty:** 5 years comprehensive warranty shall be provided free of cost with the Equipment.

24. **Comprehensive Annual Maintenance Contract (CAMC) rates:** Should be quoted for another 5 Years after the completion of 5 years comprehensive warranty period in Price Bid (Schedule V - Annexure II) which will be considered for finalizing the L1 bidder and order placement on the Supplier after comprehensive warranty period of 5 years.
25. Any deviations from the bid documents shall be clearly indicated.