

**Department of Health
EAST AVENUE MEDICAL CENTER
EAST AVENUE , DILIMAN QC
Tel. Nos. 928-06-11 loc. 560 or 224**

**[Lot Bidding for Supply, Delivery, Installation and Commissioning of Chest Stand Thorax Room with Flat Panel Detector System and Mobile X-Ray Machine]
[PRICE QUOTATION LIST]**

| ITEM NO. | ITEMS/ SPECIFICATIONS | TOTAL QTY. | UNIT | CEILING PRICE PER UNIT | BID PRICE PER UNIT | AMOUNT IN WORDS | BIDDERS SPECIFICATION | BRAND AND COUNTRY OF ORIGIN |
|----------|---|------------|-------------|------------------------|--------------------|-----------------|-----------------------|-----------------------------|
| 1 | Lot Bidding for Supply, Delivery, Installation and Commissioning of Chest Stand Thorax Room with Flat Panel Detector System and Mobile X-Ray Machine | 1 | lot | 8,600,000.00 | | | | |
| | | | | | | | | |
| | Chest stand Thorax Room for COVID-19 patients | 1 | unit | | | | | |
| | A. Tube Column | | | | | | | |
| | Maximum height of the x-ray tube focus: Not less than 2008 mm | | | | | | | |
| | Minimum height of the x-ray tube focus | | | | | | | |
| | At least 418 mm with vertical x-ray beam | | | | | | | |
| | At least 395 mm with horizontal x-ray beam | | | | | | | |
| | Vertical travel of X-ray tube: At least 1500 mm | | | | | | | |
| | Standard column rotation: +90°;-90° with mechanical detents every 90° | | | | | | | |
| | X-ray tube rotation on its axis, at least -135°& +135° | | | | | | | |
| | Breaking system: Electromagnetic brakes | | | | | | | |
| | Tube column height: minimum 2300 mm | | | | | | | |
| | Arm length (x-ray focus –column centre) | | | | | | | |
| | At least 750 mm | | | | | | | |
| | | | | | | | | |
| | B. Vertical Bucky Stand | | | | | | | |
| | Column height: at least 2100mm | | | | | | | |
| | Max height to the panel centre: 2000mm or higher | | | | | | | |
| | Min height panel centre Vertical travel: 440 mm or lower | | | | | | | |

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| | Vertical Travel: At least 1500mm | | | | | | | |
| | Breaking System: Electromagnetic brakes | | | | | | | |
| | Panel dimensions: Not less than 600mm x 670 mm | | | | | | | |
| | Panel to detector distance: not more than 60mm | | | | | | | |
| | Al equivalence (Panel) <0.5mm Al @70kVp | | | | | | | |
| | Must be an Oscillating or potter bucky system | | | | | | | |
| | Grid type: At least a ratio of 10:1, 40 L/cm | | | | | | | |
| | | | | | | | | |
| | C. Collimator | | | | | | | |
| | Multi-leaf type manual collimator with retractable tape, laser light pointer with light timer | | | | | | | |
| | Rotation: +/- 45 Degrees | | | | | | | |
| | Light Source: Halogen lamp or LED | | | | | | | |
| | Collimation Square field multilayer 48x48 cm @SID=1m | | | | | | | |
| | | | | | | | | |
| | D. X-Ray Generator | | | | | | | |
| | High-frequency Generator type up to 40 kHz output | | | | | | | |
| | Output power: 50 KW | | | | | | | |
| | kV range: 40-150 kV | | | | | | | |
| | mA range: 10-630 mA or better | | | | | | | |
| | mAs range: 0.1-150 mAs or higher | | | | | | | |
| | Time range: 0.001-6.3 s | | | | | | | |
| | Anatomical Programs (APR) | | | | | | | |
| | o At least 300 possible storage | | | | | | | |
| | o With 1 point exam techniques | | | | | | | |
| | o 2 point (kV, mAs) techniques | | | | | | | |
| | o 3 point (kV, mA, s) techniques | | | | | | | |
| | AEC interface; Ionization or Solid state | | | | | | | |
| | Tube overload protection | | | | | | | |
| | Console must have at least 7" digital touch screen display | | | | | | | |
| | | | | | | | | |

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| | E. X-Ray Tube | | | | | | | |
| | Type Rotating anode: | | | | | | | |
| | o Anode rotating speed: 3000rpm-9000rpm | | | | | | | |
| | o Focal spot 0.6 mm/1.2 mm | | | | | | | |
| | o Max KV value 150kV | | | | | | | |
| | o Anode heat storage capacity 400 KHU (according to IEC 60613) | | | | | | | |
| | o Housing Capacity 1508 kHU | | | | | | | |
| | o Housing Heat Dissipation Rate 18 kHU/min | | | | | | | |
| | o Tube-Housing total filtration 2.5 mm Al Eq (IEC 60601-1-3) | | | | | | | |
| | o Line voltage of system 3 Phase 270 VAC Including at least 60 kW Constant Voltage Isolation Transform with dedicated grounding system | | | | | | | |
| | | | | | | | | |
| | F. Accessories | | | | | | | |
| | • 3 pcs lead aprons | | | | | | | |
| | • 3 pcs Lead thyroid shield | | | | | | | |
| | • Radioluscent mobile stretcher | | | | | | | |
| | Dimensions at least 2000 x 660mm | | | | | | | |
| | Height from floor at least 780mm | | | | | | | |
| | Weight not more than 80kg | | | | | | | |
| | | | | | | | | |
| | Flat Panel Detector System | 1 | unit | | | | | |
| | A. Flat Panel Detector | | | | | | | |
| | Detector Technology: Amorphous Silicon | | | | | | | |
| | Scintillator: Csi | | | | | | | |
| | Wireless: WiFi | | | | | | | |
| | Active Area: 14 x 17 inch | | | | | | | |
| | Number of Pixels: at least 2500 x 3072 or better | | | | | | | |
| | Pixel size: 140 micron or smaller | | | | | | | |
| | AD Conversion: 16 bit | | | | | | | |
| | | | | | | | | |

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| | B. Laptop for Acquisition | | | | | | | |
| | Laptop Screen: at least 15 inch LED | | | | | | | |
| | Resolution: 1920 x 1080 | | | | | | | |
| | Processor: AMD Ryzen 7 3750H or better | | | | | | | |
| | Graphics Card: NVIDIA GeForce RTX2060 (6GB) or better | | | | | | | |
| | RAM: 8 GB DDR4 | | | | | | | |
| | HD at least 1TB HDD + 512 GB SSD | | | | | | | |
| | OS Windows 10 Pro | | | | | | | |
| | Network Wi-Fi Integrated 802.11ac | | | | | | | |
| | | | | | | | | |
| | C. Other Requirements | | | | | | | |
| | Must be compatible with the current PACS of the hospital. | | | | | | | |
| | | | | | | | | |
| | Mobile X-Ray Machine | 1 | unit | | | | | |
| | A. General Specification of the Unit: | | | | | | | |
| | Manually driven | | | | | | | |
| | Complete with handrails and positive foot or hand operated brakes | | | | | | | |
| | Electrically grounded | | | | | | | |
| | Maneuverable | | | | | | | |
| | Maximum height of 1.5 meters at transport position | | | | | | | |
| | Telescopic or foldable arm configuration | | | | | | | |
| | With compartment for cassette storage (cassette bin) | | | | | | | |
| | System weight: not more than 150 kg | | | | | | | |
| | | | | | | | | |
| | B. X-Ray Generator | | | | | | | |
| | Generator Type: High frequency | | | | | | | |
| | Generator Setting: | | | | | | | |
| | Kilovoltage Setting | | | | | | | |
| | Minimum Setting: 40kV | | | | | | | |
| | Maximum Setting: $\geq 125\text{kV}$ | | | | | | | |
| | Maximum tube current: atleast 400mA | | | | | | | |

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| | Power rating: Atleast 32kW | | | | | | | |
| | | | | | | | | |
| | C. X-Ray Tube Assembly | | | | | | | |
| | Anode Type: Rotating | | | | | | | |
| | Nominal focal spot: | | | | | | | |
| | Small focus: $\leq 0.8\text{mm}$ | | | | | | | |
| | Large focus: $\leq 1.3\text{mm}''$ | | | | | | | |
| | Total filtration $\geq 2.5\text{mm Al}$ | | | | | | | |
| | Anode Heat Capacity: Atleast 105kHU or better | | | | | | | |
| | | | | | | | | |
| | D. Collimation System: | | | | | | | |
| | Manually or automatically controlled | | | | | | | |
| | With field lamp and cross-hair centering | | | | | | | |
| | With SID measuring device and preferably SID indicator | | | | | | | |
| | Pivot: minimum of $\pm 45^\circ$ | | | | | | | |
| | Tube Head Rotation: | | | | | | | |
| | Rotation angle: $+180^\circ$ to -180° | | | | | | | |
| | With tube angle indicator | | | | | | | |
| | X-Ray Tube Axis Rotation: atleast 90° | | | | | | | |
| | Tube Arm Movement: | | | | | | | |
| | Lateral/Column rotation atleast $+90^\circ$ to -90° | | | | | | | |
| | Horizontal travel: at least 700mm | | | | | | | |
| | Vertical travel: at least 2000mm | | | | | | | |
| | Locking Mechanism: Electromagnetic or manual | | | | | | | |
| | | | | | | | | |
| | E. Control Unit | | | | | | | |
| | Overload protection indicator: Visual/audible | | | | | | | |
| | <u>Technique selector:</u> | | | | | | | |
| | Kilovoltage (kV) | | | | | | | |
| | Milliamperage (mA) | | | | | | | |
| | Time (sec or msec and/or pulse) or milliampere second (mAs) | | | | | | | |
| | With programmable APR of atleast 100 slots | | | | | | | |

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| | • Operator Interface: Microcontroller touch screen display for all operating parameters | | | | | | | |
| | <u>Radiography Exposure Control:</u> | | | | | | | |
| | Double click exposure button with extension cable" | | | | | | | |
| | • Automatic Closedown: An automatic closedown system after 30 minutes of not being used | | | | | | | |
| | • Safety devices: Temperature monoblock | | | | | | | |
| | | | | | | | | |
| | F. Display: | | | | | | | |
| | • Kilovoltage (kV) | | | | | | | |
| | • Milliamperage (mA) | | | | | | | |
| | • Time (sec or msec and/or pulse) or milliampere second (mAs)" | | | | | | | |
| | • Exposure Switch: Dead-man type hand switch with cable (atleast 2m) and push button | | | | | | | |
| | • Ready and X-Ray Exposure Indicator: Audible and/or visible | | | | | | | |
| | | | | | | | | |
| | G. Accessories | | | | | | | |
| | • Radiation Protection Device: | | | | | | | |
| | o 3pcs lead rubber aprons of atleast 0.35mm Pb equivalence | | | | | | | |
| | o 3pcs lead rubber thyroid shields of atleast 0.35mm Pb equivalence | | | | | | | |
| | • 1 pc measuring caliper, sliding, double sided, scaled in cm, with blunt edges and parallel arm | | | | | | | |
| | | | | | | | | |
| | Power Requirements: | | | | | | | |
| | • Power Supply Voltage: - Single phase, 220-240VAC; 60Hz; Three-pronged plug | | | | | | | |
| | | | | | | | | |
| | Others Terms and Conditions: | | | | | | | |

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| | • Equipment must pass the acceptance testing of the CSL, FDA-DOH. The transportation expenses and per diem of the CSL Medical Physics Team shall be shouldered by the bidder as provided in the DOH AO No. 21, s. 1996 dated 4 June 1996. | | | | | | | |
| | • Must comply with the applicable requirements under the DOH Administrative Order (A.O.) No. 35, s. 1994. | | | | | | | |
| | • Three (3) years warranty for parts and service after the acceptance testing of the Common Services Laboratory (CSL) of the Food and Drug Administration (FDA) – Department of Health (DOH). | | | | | | | |
| | | | | | | | | |
| | Certification from the Manufacturer: | | | | | | | |
| | • That the bidder has the capability for corrective and preventive maintenance of the unit. | | | | | | | |
| | • That the bidder/supplier has the engineer/s trained and capable for corrective and preventive maintenance for the model bid. Service engineer should be presently employed by the bidder/supplier or authorized by the manufacturer. | | | | | | | |
| | • Guaranteeing the availability of all spare parts for the next ten (10) years duly authenticated by the Philippine Embassy in the country of origin. | | | | | | | |
| | • That the equipment is a brand-new unit and not a discontinued model and has no history of product recall. | | | | | | | |
| | • That the terms and conditions stated in the contract shall be honored by the manufacturer in the event that a change of exclusive distributorship will occur during the duration of the said contract. | | | | | | | |
| | • Certificate of exclusive distributorship from the unit manufacturer mentioning the name of the Philippine representative. | | | | | | | |
| | | | | | | | | |

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| | • Supplier engineers shall perform comprehensive quarterly preventive maintenance service on the machine at no cost to the end user for a period of three years after the acceptance testing of the CSL of the FDA-DOH. The supplier shall submit a document stating this particular requirement with the schedule of visits. | | | | | | | |
| | • The bidder must provide training on the applications/operations, and basic maintenance for users (radiologists, medical physicists and radiologic technologists and maintenance personnel of the hospital-Biomed). | | | | | | | |
| | • Certification from the bidder of 95% uptime guarantee for the equipment offered within the warranty period. Accumulated downtime in excess of 5% shall be added to the warranty period. | | | | | | | |
| | • The bidder must submit the original brochure with technical specifications in English language. | | | | | | | |
| | • The machine should conform to the International Electrotechnical Commission (IEC) standard or its equivalent national standard. The bidder must provide Certificate of Declaration of Conformity. | | | | | | | |
| | • The equipment shall be either Health Level (HL) 7 Compliant, Integrating Healthcare Enterprise (IHE) Compliant, or US FDA/European CE Compliant. | | | | | | | |
| | • Inventory of spare parts for the unit/model offered duly signed by the manufacturer. | | | | | | | |
| | • The bidder shall specify post warranty comprehensive preventive maintenance costs including list and price of major spare parts for the next five years after warranty. | | | | | | | |
| | • The bidder must have a track record of at least 10 years as distributor in the radiology field. | | | | | | | |
| | • The bidder must provide and install dedicated grounding system for the machine. | | | | | | | |

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| | • All shielding requirements for the Stationary Chest Stand Thorax room for COVID-19 patients shall be delivered and installed by the supplier. | | | | | | | |
| | • The supplier shall shoulder installation costs including architectural, electrical, civil works, and magnification of the end-user's existing room (Stationary Chest Stand Thorax room) to meet the applicable regulatory standards and manufacturer's room requirements. | | | | | | | |