

Statement of Work: X-Ray Machine
PR22-08-021

Delivery Location: Mother & Child Health Center, al-Turbah City, beside al-Wahada School, ash-Shamayatayn District, Taiz Governorate

X-Ray Machine

X-Ray Specifications:

X-Ray High voltage generator

- Generator high frequency inverter system.
- Rating at least 30 - 50kW
- Radiography tube voltage : 90 - 150 kV
- Tube current : 200 - 500mA
- Anatomical program memory – User programmable – 50 Programs or more.
- LED/LCD readout for parameter display

X-Ray tube

- Rotating anode with rhenium-tungsten alloy
- High speed rotating anode tube (9000 rpm or more)
- Anode heat capacity – 200kHU or more.
- Focal spot size – small focus – 0.6 mm or better.
- Large focus – 0.9 mm or better
- Collimator: Multileaf collimator should have halogen lamp with auto shut off.
- Field lamp with automatic switch off function.
- Power rating at 0.1s: 30kW
- Tube support : Floor mounted tube stand

Examination Stand

- Focus film distance (FFD) 140cm
- Arm rotation: $\pm 120^\circ$ from vertical direction.
- Electromagnetic brakes for vertical and rotational movements.
- Light beam collimator, continuously variable from 18x18cm to 43x43cm
- Cassette size: 18x24 to 43x43cm, longitudinally and transversally.
- Grid, using AI as interspacing material: ratio 10:1, 40 lines/cm (103 lines/inch) focused at 140cm.
- Film to skin distance in cassette holder: 2.6cm

X ray table (compatible with Digital Radiation (DR) system)

- X ray table with minimum patient capacity of 110 Kg or more.
- Should be provided with bucky which can hold all standard sizes of cassettes as mentioned in DR system.
- Vertical Bucky

- Vertical Bucky with grid ratio of 10:1
- Bucky should travel entire length of the table.

Main Supply

- 220-230V 16A (slow fuse), 50, single phase 60Hz (alternative 400V, possible).
- Independence for full power output: 0.3ohm (larger impedance possible with small reduction at nominal power output).

Other Mandatory Requirements:

- The whole systems should have USFDA and CE approval and the entire system and model should have AERB approval.
- The major components (flat panel detector, x-ray generator and X-ray tube) must be from the same manufacturer and bidder.
- Bidder should have proven track record in government sector and should have installed similar DR system during last two years. Please provide customer satisfaction report.
- If the bidder is not the manufacturer of detectors, warranty support documents should be made available in the form of undertaking from detector manufacturer.
- Availability of trained technical engineers to maintain and support the system and for consultation (open request)
- Technical training of the health workers of the medical equipment with explaining of the User manual and catalog upon installation.
- All specifications to be provided with original product data sheet.
- Offered system should have a two-year warranty from the date of installation.
- Installation: vendor is responsible for complete installation, and onsite training on the use of the digital x-Ray equipment. The vendor should also provide information on service, repair and spares where applicable. If there are any special tools or test, equipment required it must be specified during the bidding stage. For parts of the x-Ray machine in which training is mandatory before a competent technical staff in the health center can use the equipment, the vendor should clearly indicate at the bid stage with information of who will provide this training.
- To order spare parts always indicate the serial and reference numbers indicated in the user and maintenance manual.
- Expected delivery time from the supplier: 4-6 weeks.

Packaging:

Unit presentation: complete unit with operating instructions. The following information should appear on the outside packaging:

- Designation of item, multilingual.
- Serial number.
- Name and address of supplier (manufacturer).

Quote Requirements: Bidder should submit bid in the RFQ template provided

*Check if submitted

- Item description (item name, Model, company name, Year and country of manufacture, technical specifications)

- Unit of Measure (for quoting purposes and which equals the lowest dispensable unit, i.e. a single device, a single pic, etc.)
- Warranty duration: 2 years from date of installation
- Clear photos for all requested equipment
- User manual and catalog
- Supreme Counsel of Drug Permit (for medical equipment)
- Delivery Timeline

It is preferred for the bidder's quotation to be submitted using the RFQ Annex C document provided. As an alternative, the bidder may use their own form so long all data in the Quotation Template is included and as defined below. Information required with Quotation submission:

Bid Submission Requirements:

- Item description: The quotation must be for the exact item as described. **No substitutes of the item itself will be accepted; however, an alternative model is acceptable if matching the requested specifications.** Any alternatives must be quoted at the bottom of the Quotation Template and noted as such.
- Unit of Measure and Price: The quotation must include a price per single unit of measure, as in the price for a single pic.
- Packaged Unit of Measure and Price: The quotation must also include how the item is packaged and its respective price.
- Warranty: 2 years warranty is required from date of installation.
- Manufactured: must state where the equipment was manufactured. Manufacturer Preference (Level 1 being most preferred to Level 4 being least preferred). Please supply quotations accordingly. This is an advisory guide to be considered before each medical equipment order.

<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>
Europe	Jordan	India	Yemen
USA	UAE	Egypt	Pakistan
Australia	KSA	Syria	China
Canada	Oman	Algeria	Bangladesh
Japan	Russia	South America	
	Eastern Europe		
	South Korea		

- FDA and CE Certificates for medical devices.
- Certificates of Authenticity (CoAs): CoAs are required for equipment awarded. The quotation must include the bidder's acknowledgement that the CoA is available and will be provided at time of shipment.
- Availability: Committed lead-time for product to ship after receipt of order (in calendar days). Please note the RFQ Terms and Condition requiring a single shipment.
- If chosen, must supply a sample of all equipment. Those samples must be the same as the final equipment delivered after purchase. This includes manufacturer name, expiry date, country of origin, type and name of equipment.

Required Documentation on Delivery:

Invoice must include:

1. a.) Item description and quantities as per the Purchase order
b.) Item batch number, manufacturing and warranty duration of each item
2. Certificate of origin
3. Certificate of Authenticity
4. Item Description, Lot Number, Manufacture Date, specification
5. Product user manual and catalog included with product shipped. Those must include:
 - a. The name of the product; brand and generic/ INN
 - b. Description appearance, dimension and weight.
 - c. Qualitative and quantitative composition of its parts.
 - d. Directions for use
 - e. Power supply
 - f. Handling and storage instructions,
 - g. Package quantity, technical directions for use
 - h. Name and address of manufacturer
 - i. Technical specifications



Stamp