



## बी.पी. कोईराला स्वास्थ्य बिज्ञान प्रतिष्ठान, धरानको कोटेशन माग गरिएको सुचना

(सुचना प्रकाशित मिति: २०८०/०३/१८), (पुनः सुचना प्रकाशित मिति: २०८०/०३/२८),  
(पुनः सुचना प्रकाशित मिति: २०८०/०४/०९),

यस प्रतिष्ठानलाई आवश्यक तपशिलका उल्लेखित CBCT Machine खरिद गर्नुपर्ने भएकोले इजाजत प्राप्त प्रतिष्ठानमा सुचिकृत फर्म, संस्था, कम्पनीबाट अद्यावधिक फर्म दर्ता प्रमाणपत्र, मु.अ.कर दर्ता प्रमाणपत्र, आ.व.२०७८/०७९ को कर चुक्ताको प्रमाणपत्र, Manufacturing Authorization Letter, Catalogue, Broacher को प्रतिहरु संलग्न गरी यो सुचना प्रकाशित मितिले ६ दिन भित्र कोटेशन पेश गर्नुहुन सुचित गरिन्छ । माग गरिएको कोटेशन तोकिएको म्यादभित्र प्रतिष्ठानको दर्ता चलानी फांटमा खामबन्दी दर्ता गर्नुहुन वा [quotation.procurement@bpkihs.edu](mailto:quotation.procurement@bpkihs.edu) मा email मार्फत पेश गर्नुपर्नेछ ।

SN.	Product Name	Qty.	Unit
1	CBCT Machine	1	Nos

### Specifications for CBCT

1. The system should be of latest technology and a state of art product. Older versions of CBCT or reassembled unit are not acceptable.
2. A complete system of CBCT machine setup to produce 3D images useful for oral and maxillofacial pathology that can guide in diagnosis and assessment of disease severity, planning, delivery of treatment and follow-up.
3. Field of view (FOV) - 3D adjustable field of view, maximum of 17×16cm or higher (with stitching mode)
4. Imaging fields: Dentofacial, Maxillofacial, Crania-facial, ENT.
5. Detector: FPD system or CMOS
6. Patient positioning – standing and sitting, wheel chair accessible
- a. Imaging Software-User friendly, latest version with automatic upgradable software with 2D and 3D imaging systems. Software should be able to perform cephalometric analysis (include AP/PA, lateral view, cervical spines and carpus view), implant planning and 3D simulation, 3D volume rendering, 3D TMJ analysis, 3D face reconstruction, model scan, airway studies, endodontics mode, CAD CAM compatible and with 4D jaw motion. Software should have artifact removal software, noise optimizer, beam hardening reduction software, should be able to create DICOM images as well as other image formats such as, STL format for CAD/CAM and 3D printing and JPEG, TIFF etc (for sharing in common platforms), upgradable for integration with third party CAD/ CAM system.
7. Exposure and image acquisition parameters:
  - a. Scan mode- panoramic and continuous
  - b. Scan time- <40 seconds
  - c. Reconstruction time: <60 seconds
  - d. Exposure – pulse and continuous exposure, with minimum dose to patient with adjustable image field size
  - e. Gray scale-16bit or higher
  - f. Resolution: highest resolution, isotropic voxel size of 75 to 300 micrometer
  - g. Tube voltage: 50 KVP to 120 KVP, current 12-20 mA, focal spot 0.5 x 0.5 mm
8. Powered by Heavy duty UPS back up of 30 minutes or higher
9. Warranty period- Comprehensive warranty of five years must be provided for all the parts and spares excluding consumables. Preventive, breakdown maintenance and calibration must be done as per guideline during warranty period. The bidder must compulsorily provide the list of consumables which are not covered under warranty..
10. This equipment must be installed in turnkey basis which means institute will only provide site for installation and all required accessories, consumables and other items required to make the machine fully functional must be provided by the bidder. The installation room should be prepared according to AERB guidelines including lead linings and other mandatory requirements

11. The site should be inspected by the supplier for feasibility of installation before the machine is delivered.
12. Machine should be US FDA and/or European CE certified. Evidence of certification must be attached.
13. Permanent, latest, comprehensive, user-friendly software license for functioning of the CBCT and printer should be provided and renewal and update should be done by the supplier without any financial liability to the institute, the copy of the license should be submitted to institute.

**Essential Accessories:**

1. Heavy duty UPS should be of reputed brand
2. Computer and processor- The processor should be genuine and latest generation with I7 processor or higher, RAM 32 GB, Graphic card of 4 GB or above, drive internal 32 TB and additional external 64 GB (for back in case of system breakdown), 3.3 gigahertz with DVD drive. The monitor should be medical grade monitor, screen size of 27 inches or higher with high resolution. The computer and the processor should be genuine and of reputed company. Minimum of 3 work stations should be prepared by the supplier. Antivirus compatible with system with at least 3 year license.
3. Printer and printer software: latest and state of art technology printer must be provided along with latest DICOM software with permanent license installed and compatible with the CBCT unit for dry view printing of different image size (8 X 10, 6 X 12, 14 X 17 etc)
4. High quality and latest version of color laser jet printer with scanning facility for printing and scanning reports.

**Other compulsory conditions:**

1. The bidder must quote the system in such a way that the desired functionality of the equipment is achieved. Bidder must quote items, required to achieve the full functionality of the CBCT unit, even if it is mentioned or not mentioned in the specification. If the functionality is not achieved then the machine will be technically rejected during the time of installation.
2. Bidder and the principal company must assure spare parts availability for at least 15 years.
3. Supplier must have important spare parts and accessories in stock for minimal downtime. Spare parts and accessories must be available within 24 hours for stock item and within 7 days if not in stock.
4. The downtime of the machine should not be more than 10% of the total working days in a single fiscal year.
5. Bidder will be completely liable for complete installation of the products.
6. Quality assurance: Quality assurance tests for CBCT as per AERB norms to be provided by the supplier during warranty and comprehensive maintenance contract (CMC) period.
7. Supplier must ensure a local trained and certified engineer for prompt service support during warranty and comprehensive maintenance contract (CMC) period.
8. The bidder must quote the frozen rate of Comprehensive Maintenance Contract (CMC) for 5 years which should not exceed more than 5% of bid value, after expiry of warranty period.
9. All the accessories provided along with the machine by the manufacturing company as mentioned in the official website should be provided without any additional cost.
10. The bidder must compulsorily perform periodic preventive maintenance each year, as per the manufacturer's guidelines, during warranty and CMC period whose verified service report must be presented.
11. During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.
12. The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
13. Comprehensive training including reporting and all application to the faculties and radiographers till it's familiarity by an application specialist for at least 6 weeks onsite.
14. The bidder must arrange for advance level training including reporting in a reputed training center for at least 2 faculties at bidder's own cost for minimum of 15 days.
15. Documents to be provided: User (Operating) manual in English, Service (Technical / Maintenance) manual in English, List of important spare parts and accessories with their part numbers and costing available in stock with the supplier, Certificates of calibration and inspection from the manufacturer.