

**दररेट उपलब्ध गराउने सूचना**  
**वेवसाईटमा प्रकाशित मिति: २०८२/०३/०८**

आ. व. २०८२/०८३ का लागि यस अस्पतालको नयाँ सेवा डेन्टल सेवामा आवश्यक पर्ने देहाय वमोजिमको Technical Specifications अनुसार तपशिलको मेसिन औजार तथा Consumables हरूको वोलपत्र माध्यमबाट खरिद गर्नुपर्ने भएकाले आवश्यक कागजातहरू समेत संलग्न गरि आफुले सप्लाई गर्ने अस्पतालजन्य देहाय वमोजिमका मालसमानहरूको विवरण खुलाई यस कार्यालयमा सोझै वा [bpkmchprocurement@gmail.com/](mailto:bpkmchprocurement@gmail.com) [bpkmchhospital@gmail.com/](mailto:bpkmchhospital@gmail.com) [directorbpkmch@gmail.com](mailto:directorbpkmch@gmail.com) ईमेल ठेगानामा तपशिलमा उल्लेखित वमोजिमका प्रति एकाई दररेट सहित यो सूचना प्रकाशित गरिएको मितिले ७(सात) दिन भित्र दररेट पेश गर्नुहुन सम्बन्धित ईच्छुक सप्लायर्सहरूमा जानकारीको लागि यो सूचना प्रकाशित गरिएको छ ।

**Technical Specifications for Dental Unit**

S.N.	Hospital proposed Specifications	Bidder's Offer	Remarks
	<b>Dental Unit</b>		
	<b>Manufacturer</b>		
	<b>Brand</b>		
	<b>Type / Model</b>		
	<b>Country of Origin</b>		
<b>1</b>	<b>Description of Function</b>		
1.1	The dental chair and unit is required for dental examination and surgery.		
<b>2</b>	<b>Operational Requirements</b>		
2.1	The complete unit with dental chair and hand-pieces is required.		
2.2	Complete unit with Micro motor, Air Rotor, Air motor, Ultrasonic Scaler, Micro motor (approx 2500 to 4000-rpm range) and Motorized suction.		
<b>3</b>	<b>System Configuration</b>		
3.1	Dental Chair-High End complete unit and with complete accessories.		
<b>4</b>	<b>Technical Specifications</b>		
4.1	<b>Dental Chair Specifications: 1 unit</b> <ul style="list-style-type: none"> <li>• Fully motorized hydraulically self-adjusting Chair with lifting capacity of minimum 150 Kg.</li> <li>• Corrosion free construction and durable scratch resistant epoxy paint finish</li> <li>• Must have seamless ultra-thin upholstery to facilitate easy cleaning/disinfecting</li> <li>• Double articulating headrest for comfortable support. Must have flip head rest to be used on patients on wheelchairs.</li> </ul>		

S.N.	Hospital proposed Specifications	Bidder's Offer	Remarks
	<ul style="list-style-type: none"> <li>Foot switch with multifunction. It must provide all chair movements, adjustable and programmable position, movement of return to zero and emergency stop.</li> <li>The hand-rests must be fully adjustable and must rotate out of the way of the patient when he steps off.</li> </ul>		
4.2	<p><b>Dental Unit Specifications: 1 unit</b></p> <ul style="list-style-type: none"> <li>Must be attached to the chair with overhead delivery system to accommodate up to following 4 modules:               <ol style="list-style-type: none"> <li>One Turbine connections with hand-piece</li> <li>One air-motor connection with air-motor and hand-pieces (straight &amp; contra)</li> <li>One fibre optic air rotor connection with quick disconnect coupling and light cure unit to be attached to the same coupling</li> <li>One 6way-syringe with removable tip for sterilization.</li> <li>All the controls of the chair must be touch pad on doctor's and assistant's sides.</li> </ol> </li> <li>The design must be such that it can be simply cleaned and disinfected to reduce the possibility of cross infection. Autoclaveable pad must be provided on the Unit where the hand pieces are placed.</li> <li>Must have to reservoirs of water and disinfectant with automatic pressurization</li> <li>Must have a non-retraction valve to avoid the reflux of contaminated materials</li> <li>Automatic hand pieces selection through sensitive pneumatic valves</li> <li>Integrated 17 inches LCD/TFT Monitor must be provided for RVG.</li> </ul>		
4.3	<p><b>Spittoon/Water Unit Specifications: 1 unit</b></p> <ul style="list-style-type: none"> <li>Removable porcelain bowl, cup filler and spittoon nozzles which can be cleaned easily.</li> <li>Water must get ON in the spittoon automatically as soon as the patient gets up for spitting.</li> <li>Adjustable Timer up-to 15 seconds must be there to adjust timings of the</li> </ul>		

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	<p>water flow in the spittoon</p> <ul style="list-style-type: none"> <li>• One 3 way syringe must be there on the assistant side</li> <li>• Must have Hi/Lo suction with easy reach filters. The high suction must be powered through a motorized unit.</li> <li>• Swivel spittoon must be provided.</li> </ul>		
4.4	<p><b>Operating Light Specifications: 1 unit</b></p> <ul style="list-style-type: none"> <li>• With luminosity adjustable from approx. 20000 to 30000 lux with 180 degrees of rotation of light arm movements.</li> <li>• Must get ON and OFF with No-touch system for maintaining proper sterilization while working.</li> <li>• Light must allow Vertical, Horizontal, and Axial &amp; Diagonal Movements for proper focusing.</li> </ul>		
4.5	<p><b>Oil Free Air Compressor(Medical Grade): 1 unit</b></p> <ul style="list-style-type: none"> <li>• It must have Air moisture filter</li> <li>• It must have Non-retraction valve</li> <li>• It must have Pressure gage</li> <li>• It must have Air tank (capacity of approx. 30 Lt. Or more)</li> <li>• It must have Auto cut-off switch</li> <li>• It must give medical grade Air which is absolutely oil free</li> </ul>		
4.6	<p><b>LED Light Cure Unit / Modular Light Cure Unit Specifications: 2 units</b></p> <ul style="list-style-type: none"> <li>• Advances in the power output of light emitting diodes (LEDS) have allowed a LED light curing unit (LCU) with an approx. 8 mm diameter light guide tip to achieve a similar depth of cure in a camphorquinone photo initiated composite, as a halogen LCU. .</li> <li>• Blue LEDs can be used as photo detectors and may be of future use in dental radiometers.</li> <li>• When assessing the output from an LCU it is not only important to know the spectrum and irradiance, but also whether the emission is pulsed or continuous.</li> </ul>		
4.7	<p><b>Dental Scaler Specifications: 2 sets</b></p> <ul style="list-style-type: none"> <li>• Microprocessor/microcontroller based system having piezoelectric technology</li> <li>• Having torque, tool for tightening of the tip.</li> <li>• High power turbo mode and low power perio mode</li> </ul>		



S.N.	Hospital proposed Specifications	Bidder's Offer	Remarks
	<ul style="list-style-type: none"> <li>• Having titanium tip adapter</li> <li>• Basic vibration frequency of 25-50 KHZ</li> <li>• Separate control for water and tip vibration.</li> <li>• Autoclaveable hand piece.</li> <li>• Ten tips for scaler and one endodontic kit with ten sets of Ni Ti reamer and files, spreaders, pluggers with each set</li> </ul>		
4.8	Foot Control: Single foot control for all instruments with variable speed control		
4.9	Mounted Dental X-ray box (OPG film size).- LED Generated		
4.10	Preferably have Provision for Remote Diagnostics through RS-232C serial interface or equivalent.		
4.11	Shall be supplied with inbuilt/external dental suction machine		
<b>5</b>	<b>Accessories, spares and consumables</b>		
5.1	<p><b>Accessories:</b></p> <ul style="list-style-type: none"> <li>• Dental Stool: Stable with 5-castor base, with load stabilizing gas spring. - 4 Nos. (two for Dental surgeon and two for Assistant)</li> <li>• Dental UV sterilizer cabinet of capacity approx 30 L. It shall be USFDA/CE certified product-1 unit</li> <li>• Filling Instrument- 10 sets</li> <li>• Hand scaler (manual scaler)- 2 sets</li> <li>• Kidney tray- 15 set</li> <li>• Extraction forceps (Primary teeth extraction forceps -25 sets and permanent teeth extraction forceps- 15 sets)</li> <li>• Cement spatula -5 sets</li> <li>• Periosteal elevator- 12 sets</li> <li>• Straight elevator – 5 sets</li> <li>• Crier Elevator(right and left)- 3 sets</li> <li>• Slow and high speed hand piece- 2sets</li> <li>• Impression trays – 3 sets</li> <li>• Diagnostic instrument with trays for Instrument- 20 sets</li> <li>• Apexo Elevator-4 sets</li> <li>• Third molar forceps (upper and lower)- 4 sets</li> <li>• Bianote(root extraction forceps)- 4 sets</li> <li>• Hockey stick/warmicjames stick – 2 sets(right and left)</li> <li>• Impaction set to remove impacted teeth- 2 sets</li> </ul>		

S.N.	Hospital proposed Specifications	Bidder's Offer	Remarks
	<ul style="list-style-type: none"> <li>• 245 bur – 5 pcs</li> <li>• Round bur(S/M/L)- 5 pcs each</li> <li>• Articulation paper- 10 pcs</li> <li>• Reamer and file upto number 80 file - 5 pcs each</li> <li>• Suction tips- 500 pcs</li> <li>• Composite finishing bur- 2 sets</li> <li>• Crown cutting bur- 2 sets</li> <li>• High speed and low speed bur-2</li> <li>• Prefabricated crown for primary teeth- 2</li> <li>• Rubber cup- 2 sets</li> </ul>		
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).		
<b>6</b>	<b>Operating Environment</b>		
6.1	The system offered shall be designed to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.		
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.		
<b>7</b>	<b>Standards and Safety Requirements</b>		
7.1	Must submit ISO certificate Medical Devices <b>AND</b>		
7.2	CE or USFDA approved product certificate.		
<b>8</b>	<b>Training</b>		
8.1	Must provide user training to user and Biomedical staffs (including how to use and maintain the equipment).		
<b>9</b>	<b>Warranty</b>		
9.1	Comprehensive warranty for 5 years from acceptance.		
<b>10</b>	<b>Maintenance Service During Warranty Period</b>		
10.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) in at least every six month and corrective/breakdown maintenance whenever required.		
<b>11</b>	<b>Installation and Commissioning</b>		
11.1	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for		



S.N.	Hospital proposed Specifications	Bidder's Offer	Remarks
	installation to be communicated to the purchaser in advance, in detail.		
<b>12</b>	<b>Documentation</b>		
12.1	User (Operating) manual in English		
12.2	Service (Technical / Maintenance) manual in English		
12.3	List of important spare parts and accessories with their part number and costing.		
12.4	Certificate of calibration and inspection from factory.		
	<b>Note: Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number in the original catalogue of all the required parameters must be clearly mentioned and highlighted. Failure in doing so may lead to rejection of bid from technical committee.</b>		

*(Handwritten signature)*

डा. उमेश नेपाल  
उप-निर्देशक





### Technical Specifications for Dental X-ray System

S.N.	Hospital proposed Specifications	Bidder's offer	Remarks
	<b>Dental X-ray system</b>		
	<b>Manufacturer</b>		
	<b>Brand</b>		
	<b>Type / Model</b>		
	<b>Country of Origin</b>		
<b>1</b>	<b>Description of Function</b>		
1.1	A method for X-ray imaging of mouth with intra oral imaging, method comprising placing at least one image sensor inside the mouth, radiating from outside of the mouth with X-ray source, receiving X-ray radiation to form image		
<b>2</b>	<b>Operational Requirements</b>		
2.1	Mobile dental x-ray machine with intra-oral sensor, complete unit.		
<b>3</b>	<b>System Configuration</b>		
3.1	Dental X-ray Machine with intra-oral sensor, image transfer system (PC) and other complete accessories.		
<b>4</b>	<b>Technical Specifications</b>		
<b>4.1</b>	<b>Dental X-ray Machine</b>		
4.1.1	X-ray machine must be portable/ handheld.		
4.1.2	X-ray tube current: Current - 2.5 mA or Below		
4.1.3	Tube voltage: approx 60-70KV		
4.1.4	Focal spot: 0.4 mm or Below		
4.1.5	Exposure Time Range - 0.05 sec-0.5 sec or more Selectable		
4.1.6	Total Filtration - Min. 1.5 mm Al		
<b>4.2</b>	<b>Intra- Oral sensor(RVG sensor)</b>		
4.2.1	Technology- CMOS		
4.2.2	Active Area: Approx 24 x 33mm		
4.2.3	Sensor Size: approx 1.5''		
4.2.4	Sensor thickness- less than 5 mm		
4.2.5	Shall be water and dust proof		
4.2.6	Theoretical Resolution: 16.8 lp/mm or more		
<b>4.3</b>	Should be supplied with branded PC having minimum I 7 Processor,min.8GB RAM,1 TB HDD , min 1 Gb graphics card, windows 10 (genuine),min 19 inch Monitor		
<b>5</b>	<b>Accessories, spares and consumables</b>		

S.N.	Hospital proposed Specifications	Bidder's offer	Remarks
5.1	<b>Accessories:</b> <ul style="list-style-type: none"> <li>Lead apron, 0.50 mm lead equivalence with - 01 no.</li> <li>Thyroid guard/protection collar for adult &amp; paediatric: 01 set each.</li> <li>Gonadal sheath, paediatric (male/female): 01 set each.</li> <li>Lead goggles for eye protection.</li> </ul>		
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).		
<b>6</b>	<b>Operating Environment</b>		
6.1	The system offered shall be designed to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.		
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metre in length.		
<b>7</b>	<b>Standards and Safety Requirements</b>		
7.1	Must submit ISO certificate AND		
7.2	CE or USFDA approved product certificate.		
<b>8</b>	<b>User Training</b>		
8.1	Must provide user training (including how to use and maintain the equipment).		
<b>9</b>	<b>Warranty</b>		
9.1	Comprehensive warranty for 5 years after acceptance.		
<b>10</b>	<b>Maintenance Service During Warranty Period</b>		
10.1	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.		
<b>11</b>	<b>Installation and Commissioning</b>		
11.1	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.		
<b>12</b>	<b>Documentation</b>		
12.1	User (Operating) manual in English		
12.2	Service (Technical / Maintenance) manual in English		
12.3	List of important spare parts and accessories with their part number and costing.		
12.4	Certificate of calibration and inspection from factory.		
	<b>Note: Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number in the original catalogue of all the required parameters must be clearly mentioned and highlighted. Failure in doing so may lead to rejection of bid from technical committee.</b>		

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