

<b>MINISTRY OF NATIONAL DEFENSE ARMY MILITARY HEALTHCARE MEDICAL SUPPLY CORPS</b>	<b>TECHNICAL SPECIFICATIONS FOR COMPLETE DENTAL UNIT</b> عيادة أسنان كاملة	<b>SPECIFICATION №: AHC19EQU-DENT-001-1</b>
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## INSTRUCTIONS TO TENDERERS

### **(1)- GENERAL SPECIFICATIONS:**

- A- The present specifications shall be interpreted as guidelines for the type and quality of the equipment required. The specification texts are therefore covering a wide range of equipment types and ancillaries. In some cases, specific figures and limits have been given. However the tenderer is invited to submit the equipment that meets or exceeds these specifications.
- B- The tenderer is required to fill out the empty column with the specifications of the equipment offered. This information along with the detailed offer, the commercial brochure and the technical brochure will be used by the evaluating committee in order to assess the level of responsiveness to the specification. Bidders must meet or exceed the specifications of the items described in the shaded rows. Failure to do so will cause the bid to fail technically and the financial offer will be rejected.
- C- The tenderers shall provide each item that is listed in the specifications, as a complete, fully functional unit, with all ancillaries and accessories necessary for its normal and safe use. All ancillaries that are needed beyond normal operation and all additional accessories are to be listed and priced, with the item offered as optional.
- D- When in the specifications, “a complete set of – “is mentioned, then the tenderer shall list, specify and price all the items included in the set offered.
- E- It is important that the tenderer specifies and prices the application software and hardware that will be provided with the total system for its normal operation, and any other software and hardware that will be offered only as options.
- F- The warranty period shall be of two years from the date of issuance of the preliminary handing over certificate.
- G- Tenders will not be accepted unless they include total and fixed unit rates. No consideration will be given to tenders submitted on the basis of a certain percentage.
- H- If the tenderer finds any ambiguities in the documents or discrepancies between documents or any other matters that are unclear, he shall inform the ARMY GENERAL DIRECTORATE of ADMINISTRATION in writing of his requested clarifications not later than three (3) weeks before the last date permitted for the submittal of tenders.
- I- At any time prior to the original or extended date for submission of tenders, the ARMY GENERAL DIRECTORATE of ADMINISTRATION may, whether at his own initiative or in response to a clarification requested by a tenderer, modify the tender documents by the issue of addenda.
- J- The addenda will be in writing and will be sent to all tenderers and will be binding upon them and will be considered an integral part of the tender document. Tenderers shall promptly acknowledge receipt thereof in writing to the ARMY GENERAL DIRECTORATE of ADMINISTRATION.

- K- The tenderer shall examine the tender documents before submitting his tender and shall become fully informed as to the extent, quality, type and character of operations involved in the works, and has visited and acquainted himself with the site of the works.
- L- No consideration or compensation will be given for any alleged misunderstanding of the articles to be furnished, it's being understood that the submission of a tender carries with it the agreement to all clauses and conditions referred to herein or indicated in the tender documents.
- M- The period of completion is three (3) months calculated from the date of notification of contract.

**(2)- STANDARDS:**

- A- All medical electric and electronic equipment and others shall comply with all relevant standards IEC 601-1 (General Requirements for safety) and IEC 601-1-2 (EMC / Electromagnetic Compatibility), CE (European), FDA (USA), and Japanese standards.
- B- All relevant documentation and certificates of conformity to the standards shall be presented in the Tender.

**(3)-ORIGIN:**

The accepted origins of the items previously mentioned are:

- A- Northern America
- B- European Union
- C- Australia
- D- Japan
- E- United Kingdom

**(4)-TRAINING:**

- A- The Bidder shall provide:
  - (1)- Procedures adopted by the tenderer for maintenance in detail.
  - (2)- Disposables needed for the functioning of the equipment during the training.
- B- The bidder shall provide the proper trainings completely at his cost including accommodation, to assure the proper functionality of the equipment (a letter should be submitted) to the following:
  - (1)- 1 doctor training at the manufacturer's facilities outside Lebanon
  - (2)- 2 biomedical engineers (service training) at the manufacturer's facilities outside Lebanon
  - (3)- 2 biomedical technicians, training in Lebanon.

**(5)- EXPERIENCE AND REFERENCE OF THE BIDDER, THE ORIGINAL MANUFACTURE AND DOCUMENTS TO SUPPLY:**

Every bidder shall provide with his tender the following information:

- A- The bidder will indicate clearly the warranty period in a letter.

B- The bidder shall provide a local trainer for training required personnel on the use of instruments including cleaning, preparation and sterilization. Schedule and duration of training shall be provided.

C- The bidder shall submit a list of all the consumable prices.

D- The supplier is to submit a maintenance contract fixed in value for a period of five years after the warranty period has expired for labor parts and glass ware. The cost of this contract will be used in the evaluation of the financial score.

E- Replacement policies: the bidder should have a replacement police in which he will exchange the damage items in exchange of a certain percentage of the original price. The bidder is required to supply the ARMY GENERAL DIRECTORATE of ADMINISTRATION this policy at this time specifying the percent that would be applied.

F- The bidder is required to supply the ARMY GENERAL DIRECTORATE of ADMINISTRATION with its total annual sales turn for the past 5 years. Also he is required to submit the annual sales for the last year for the brands of the instruments he is offering.

G- Company profile and organizational chart:  
Including name and address of local representatives or agents.

H- The bidder is to submit a list of all projects in Lebanon, for the past 3 years, involving the same type of equipment. The list must indicate the following:

- (1) Location and Description.
- (2) Client and Contact Person.
- (3) Value of Contract.
- (4) Date of Completion.

I- Service manual must be supplied if ordered by the service department.

**(6)- BID SUBMISSION AND EVALUATION:**

- (1)- All bids shall be submitted to ARMY GENERAL DIRECTORATE of ADMINISTRATION.
- (2)- A two stage point scoring procedure, as indicated below, will be adopted for the review and evaluation of the tender proposals.

**A- TECHNICAL EVALUATION:**

Prior to the opening of the price proposals, only the envelopes containing the technical proposals will be opened and will be evaluated for the following qualifications:

- (1) For Manufacturer 10% divided as following:
  - (a)- World market share: 7%
  - (b)- Annual sales: 3%

(2)For Equipment 80% divided as following:

- (a)- Presentation of technical specification of proposed instruments: 2%
- (b)- Replacement policies: 2%
- (c)- A priced list of most recommended parts and their rate of failure with in first seven (7) years of use :1%
- (d)- Mean time between failure: 1%
- (e)- List of preventive maintenance kits with prices and frequency of change for the first 7 years of use 1%
- (f)- Date of first introduction of the model in the market 1%
- (g)- Warranty period 3%
- (h)- Country of origin and of manufacturing 2%
- (i)- Technical superiority 4%
- (j)- Quality certificates 1%
- (k)- Compliance with specifications 62%

(3)For Supplier 10% divided as following:

- (a)Annual sales: 2%
- (b)Technical assistance (after sales services): 4%
- (c)Training program: 2%
- (d)Training personal: 1%
- (e)Experience and references in other Hospitals: 1%
  - Technical evaluation will comprise minimum qualification / passing point scoring. To qualify and pass the stage 1 – Technical evaluation- , a proposal must achieve scores which satisfies both of the following requirements:
  - A minimum score of 60% of the total points available in each of the criteria categories and sub criteria mentioned above, and a minimum score of 75% of the total points available from all the criteria categories taken together.
  - A technical proposal which fails to score the minimum qualification / passing points requirements will eliminate that offer from any further consideration, and the corresponding price proposal will not be considered, and will be left unopened at the disposal of unsuccessful tenderer following a decision of ARMY GENERAL DIRECTORATE of ADMINISTRATION.

**B- FINANCIAL EVALUATION:**

- (1) The Financial offer of the bid (**F**) will be generated by adding the cost of the equipment, the maintenance contract and the cost of consumable.
- (2) A Financial Score (FS) will be generated following this formula:  
- FS (Financial Score) =  $100 \times F_m / F$  where  $F_m$  being the lowest financial offer that passed the technical evaluation and  $F$  being the financial offer of the proposal under consideration.

**C- FINAL SCORE:**

- (1) The **Final score** for every bidder will be generated by adding its **Technical Score (over 70%)** and it's **Financial Score (over 30%)**.
- (2) The weights given to the Technical and Financial proposals are:  
**Technical Score = 70% & Financial Score = 30 %**

**(7)-TENDER AWARD:**

The bidder which has the highest **Final Score** will be awarded the tender under the condition that the bidder will correct all deviations from the specifications (for peripherals and additional equipment only) as required by the ARMY GENERAL DIRECTORATE of ADMINISTRATION by providing alternative equipment that meets the specifications as at no extra cost, provided that the value of these equipment does not exceed 10% of the total value of the offer. You are kindly requested to fill out the following table with the specification of the equipment proposed in your bid. This document is to be returned filled out signed and sealed and placed in the technical envelope.

**(8)-TECHNICAL SPECIFICATIONS:**

**A- GENERAL :**

The chair, Stool, Unit (except rotary instruments) and assistant side must be of the same brand. Frame color in harmony with the whole.  
The color of the stool is the same as that of the chair.

**B- CHAIR :**

- (1)- The weight of the chair must ensure its stability.
- (2)- Length between 180 and 190cm.
- (3)- Width between 50 and 60cm at the base.
- (4)- Electromechanical operating system.
- (5)- Electrical adjustment for at least the following positions:
  - (a)- Ascent and descent of the chair
  - (b)- Toggle front and back of the backrest.
  - (c)- Synchronizable movements at will.
  - (d)- Back to zero.
  - (e)- Trendelenburg movement.
  - (f)- Emergency function.

- (6)- In its lowest position the chair must be at most 30cm from the ground.
- (7)- Manual operating buttons accessible to the practitioner.
- (8)- Cushion of total thickness. (Chassis - coating) less than or equal to 7cm, which can arrive in a strictly horizontal position.
- (9)- The seat in relation to the horizontal must be inclined 5 degrees towards the rear. The knees being higher.
- (10)- Headrest articulating from 0 -15 ° forward and 45 ° backward.
- (11)- Armrest left side.
- (12)- Replaceable polyvinyl cover with protection at the feet.
- (13)- The motor must support more than the weight of the Armchair, unit, light, assistant side, at least 180 kg.
- (14)- Integrated hygiene systems.
- (15)- Integrated water reservoir (autonomous water supply/feed system), to supply distilled water (in case of malfunction of main water supply system) the system must have a capacity of 1.5-2L and built in the main dental unit.

**C- STOOL :**

- (1)- One medical stool for dentist and another for the assistant.
- (2)- Completely mobile and not attached to the chair.
- (3)- Maximum stability 5 wheels with foot support for the assistant and without support for the dentist.
- (4)- Seat wide (diameter at least 38cm), thickness between 5 and 10cm with notch (for dentist).
- (5)- Pneumatic system for height adjustment.
- (6)- Minimum height greater than or equal to 55cm.
- (7)- Minimum height less than or equal to 45cm.
- (8)- With backrest (for dentist) and armrest (for assistant).
- (9)- Polyvinyl cover easily replaceable.

**D- UNIT :**

- (1)- Attached to the chair, modular system with reflex arm lever with long tubing to reduce wrist strain.
- (2)- Have 5 modules: the water regulation is independent from one module to another; these modules are equipped with a non-return valve.
- (3)- The electrical system is adopted for the operation of rotary instruments (and not the pneumatic system).
- (4)- Trans-thoracic tablet:
  - (a)- Ascent and descent with the chair.
  - (b)- Possibility of horizontal and vertical adjustment independently of the chair.
  - (c)- It contains:
    - (aa)-A stainless steel tray.
    - (bb)-A negatoscope (Option)
    - (cc)- Keys to control: chair movements (2 work programs + return to zero), the Spittoon, the water dispenser (Goblet), the scialytic light, the negatoscope, etc.

- (dd)- Two modules for turbines
- (ee)- A module for electric micro-motor.
- (ff)- A module for a triple or six-function syringe.
- (gg)- A module for ultrasonic scaler.
- (hh)- Pedal not secured to the chair allowing progressive work, controlling the rotary instruments of the unit and preferably that of the movements of the chair.
- (ii)- Intra Oral camera with screen mounted on the unit.

**E- ASSISTANT SIDE:**

- (1)- Attached to the chair.
- (2)- Ascent and descent with the chair.
- (3)- Spit on in opaline or enameled metal or porcelain with rinse jet.
- (4)- Water dispenser.
- (5)- A tip for saliva pump.
- (6)- A tip for surgical suction.
- (7)- A triple function syringe.
- (8)- Control of chair movements.

**F- SCIALYTIC LIGHT:**

- (1)- Attached to the chair: up and down with the chair.
- (2)- LED light source.
- (3)- Adjustable intensity.
- (4)- Light intensity  $\geq 50,000$  LUX.

**G- TWO MULTIFLEX TURBINES WITH LED:**

- (1)- Ball bearing, push button (one mini head, one regular head).
- (2)- Speed between 300,000 and 400,000 rpm.
- (3)- With accessories: spray bottle, special oil bottle for turbine.
- (4)- 3 to 4 spray outlets and unifix system (rotoquick).
- (5)- Non-return valve.

**H- MICRO-MOTOR:**

- (1)- Electric, brushless, high torque.
- (2)- Progressive speed reaching 40,000 rpm, internal spray, push button with reverse rotation.
- (3)- LED.

**I- CONTRE-ANGLE :**

- (1)- Blue ring 1/1
- (2)- LED.
- (3)- Internal spray speed up to 40.000 rpm.

**J- HAND PIECE :**

- (1)- Blue ring 1/1
- (2)- Internal spray.
- (3)- Speed up to 40.000 rpm.

**K- X-RAY WITH DIGITAL SENSOR :**

- (1)- Long cone, 70kVp, DC, 220-240V, 50 Hz.
- (2)- Respecting the international security standards.
- (3)- Digital display.
- (4)- Ergonomic handle facilitating the positioning of the cone, several joints with a gentle and precise balancing system.
- (5)- Wall mounting or other (as required).
- (6)- The digital sensor must be:
  - (a)- Technology: CMOS > 18  $\mu$
  - (b)- Fiber optic.
  - (c)- Active area: standard
  - (d)- Gray scale : 12 bits
  - (e)- Resolution :  $\geq 15$  lp/mm
- (7)- Compatible laptop for the digital sensor (core i7 or better, software, License, free update....)
- (8)- Accessories for the sensor: positioners and mounting holders.

**L- COMPRESSOR WITHOUT OIL:**

- (1)- Monocylindrical with a sound level of 40-60db with silencer (same brand).
- (2)- Air tank: 20 - 25 L, with a maximum air pressure of 8 bar (or 120 psi)
- (3)- Single Phase Electric Motor: 1-2 HP, 220-240.50 HZ
- (4)- Equipped with a soundproofing cabinet that reduces compressor noise.
- (5)- Equipped with an air dryer and a series of filters to deliver clean dry air.

**M- METAL CUPBOARD:**

- (1)- Metal plastic, oven paint (color on request), removable shelves inside, drawers with ball bearings, with wrists.
- (2)- Approximate dimensions ( $\pm 10\%$ ), width 220cm, height 82 cm, depth 45cm
- (3)- With 4 leaves:
  - (a)- One of the wings has a basin that houses the sink.
  - (b)- A space designed to house the mobile cabinet which contains 4 to 6 drawers with approximate dimensions ( $\pm 10\%$ ): width 50cm, depth 40cm and height 75cm.
  - (c)- The third is equipped with a door covering 2 to 3 shelves.
  - (d)- The fourth contains 4 to 5 drawers

N.B: The top of the cabinet housing the sink, is formed of a substance hydrophobic, resistant to heat, scratches and especially chemical substances, such as resin or other.

**N- SMALL INSTRUMENTATION:**

(1)- Mirror: N: 4(22 mm); N: 5(24mm) + handles.	(24 pieces)
(2)- Explorer 6, 17 & 23	(24 pieces)
(3)- Tweezers : type Flagg, College or Meriam	(24 pieces)
(4)- Double headed excavators	(24 pieces)
(5)- Mixing Spatula	(6 pieces)
(6)- Composite Spatula	(12 pieces)
(7)- Universal Matrix holder	(6 pieces)
(8)- Periodontal probe	(6 pieces)

All of the above instruments should be stainless steel.

**O- AUTO-CLAVE:**

- (1)- Class B
- (2)- Automatic sterilization cycle with automatic pressure regulation and temperature between 121° & 134°.
- (3)- Independent drying cycle (10 to 15 min)
- (4)- Sterilization cycle time does not exceed 25 min.
- (5)- 3 perforated stainless steel plates.
- (6)- Chamber capacity 20-25 liters.
- (7)- Low water level sensor with indication.
- (8)- Voltage ratings 220-240V, 50 Hz.

**P- WATER DISTILLATION MACHINE (Optional-upon administration request) :**

- (1)- Grade 3.4 interior Stainless steel tank
- (2)- Electronically controlled
- (3)- Over-heat protection
- (4)- Distilling capacity minimum 1L/1hour
- (5)- voltage rating: 220-240V, 50Hz
- (6)- Power consumption less than 1000 Watts
- (7)- Tank capacity 3-5 liters

**Q- SURGICAL ASPIRATOR :**

- (1)- Monocylindrical with noise level between 20 & 30 dB
- (2)- Monophasic electric motor: 0.5-1 HP, 220-240, 50 HZ.
- (3)- Silent cabinet to reduce the noise level of the aspirator.
- (4)- Turbine fan polymer or hardened plastic (not aluminum).
- (5)- Wet suction with silencer (same brand) (flow rate 4 L/min)

**R- ULTRASOUND SCALER HAND PIECE :**

- (1)- Internal spray with 4 tips or more.
- (2)- Detachable and autoclavable.
- (3)- Ability to regulate power and water intensity.

**S- LIGHT CURING LED :**

- (1)- Fixed on assistant side.
- (2)- Luminous intensity 1800mW/cm<sup>2</sup> to 2200mW/cm<sup>2</sup>.
- (3)- Anodized aluminum (to reduce the heat).
- (4)- Five programs modes.

**T- AIR CLEANING DEVICE :**

- (1)- Sterizable handpiece,with multiflex connection
- (2)- 2 Tips (small, large)
- (3)- Air pressure 50 – 100 psi ( $\pm 10\%$ )
- (4)- price list of the powder
- (5)- 100 ml pack of Powder for free (qty: 50)