



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications For Dental Equipments

Item Description: Dental Unit
Item No.(1)

Class No. (18-597)
Quantity:(15)

No.	Technical Specifications	Min MOH Requirement	Bidder Offer
1.	Manufacturer	Please specify manufacturer and country of origin & country of manufacturer	
2.	Model number	Please specify model number	
3.	Safety standard	FDA Approval or CE marking	
4.	Unit construction and design	Frame should be made of metal covered with plastic covers or equivalent • Heavy duty • Compact design • High level of hygiene	
5.	Dental chair	• Electro-mechanical type , maintenance free • Microprocessor-controlled with all safety features • Seamless and removable upholstery high level of hygiene • Lifting capacity not less than 140 kg , • All movements should be controlled from a control panel from the dentist element • At least 3 programmable positions (zero position , automatic return, last position) • Two arm rests, at least one can be swiveled or removed. • High level of safety system sensitive to obstacles when lowering the chair or backrest • Articulating head rest	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Location :

م. صحي الربابعة (1), م. صحي عين الباشا (6), م. صحي الكرامة (2), م. صحي الديسة الأولى (1), م. صحي شفا بدران (2), م. صحي النصر (2), م. صحي النزهة (1)

Cont. ... *Dental Unit*

No.	Technical Specifications	Min MOH Requirement	Bidder Offer
6.	Dentist element / instrument table	- Whip arm type minimum 5 instruments positions including syringe position 4-Holes high speed turbine connected directly to the hose socket or with metal type adaptor, max. speed within (250,000 – 350,000) rpm approx. (Bien Air, Kavo, W&H or Sirona) - Electrical micro motor, max. speed not less than 30,000 rpm with one contra angle hand piece (Bien Air, Kavo, W&H, anthos or Sirona) - Ultrasonic scalar (piezo-electric) with three tips and key changer 3-Way syringe system hand piece - Light cure in instrument table or at the assistants element - X-Ray film viewer originally mounted - All hand pieces should be of high quality and with an-anti retraction system (Hygiene protection system) - Hand piece should be priced separately from the dental unit for comparison purposes including one year warranty - Removable Instrument tray holder - Tray : Double	
7.	Assistant element	- Control touch panel to cup filler and cuspidor rinsing flush system - Moveable Cuspidor bowel made of ceramic or equivalent easy to clean and disinfect - Low and high volume suction , flexible tubing easy to clean and disinfect - Time controlled cup filler and bowel rinsing flush system - Distilled water tank - Automatic separator with solid collector	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Location :

م. صحي الربابعة (1), م. صحي عين الباشا (6), م. صحي الكرامة (2), م. صحي الديسة الأولى (1), م. صحي شفا بدران (2), م. صحي النصر (2), م. صحي النزهة (1)

Cont. ... Dental Unit

No.	Technical Specifications	Min MOH Requirement	Bidder Offer
8.	Multifunction Foot control system	To activate and regulate the operation of all dynamic movements of instrument, control and chair movements	
9.	Dental light	Cold light shadow-less intensity control , not less than 20,000 LUX	
10.	Automatic Disinfection System	Included	
11.	Doctor's and assistants stools	Working stools same color of the chair upholstery, 5 castors can be adjusted, in hight and backrest inclination.	
12.	Medical air compressor	Oil free with dryer ,power ≥ 1.5 HP, capacity ≥ 100 L/min, tank size ≥ 20 L, original sound proofing cabinet for the whole unit including filters , noise level ≤ 60 dB .	
13.	Dry suction unit	Heavy duty maintenance free, noiseless original cabinet Including filters	
14.	Power supply	220 V / 50 Hz	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Location :

م. صحي الربابعة (1), م. صحي عين الباشا (6), م. صحي الكرامة (2), م. صحي الديسة الأولى (1), م. صحي شفا بدران (2), م. صحي النصر (2), م. صحي النزهة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications For Dental Equipment

Item Description: Dental Instrument Cabinet
Item No.(2)

Class No. (01-101)
Quantity:(14)

No.	Technical Specifications	Min MOH Requirement	Bidders Offer
1.	Manufacturer	Please specify manufacturer and country of origin & country of manufacturer	
2.	Model number	Please specify model number	
3.	Safety standard	FDA Approval or CE marking	
4.	Design :	Heavy duty & compact design	
5.	Description :	Set of 4 separate cabinets composed from : 1- Two with 5 drawers (3 small & 2 large) 2- One with one door with at least 2shelves 3- The fourth one is to fit under cover on mobile castors with at least 4 drawers and with anti-chemical granite cover. 4- All cabinets should be covered by anti-chemical granite for easy cleaning and disinfection.	
6.	Construction :	- the cabinets should be made from high quality steel & painted with high quality paint or epoxy powdered from the inside and outside - all exposed & semi exposed edges should be sealed	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:

م. صحي الربابعة، م. صحي عين الباشا (6)، م. صحي الكرامة (2)، م. صحي الديسة الأولى، م. صحي شفا بدران (1)، م. صحي النصر (2)، م. صحي النهضة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications for Dental Equipments



Item Description: Amalgamator
Item No: (3)

Class No(10-082)
Quantity : (13)

No.	Technical Specifications	Min MOH Requirement	Bidder offer
1.	Manufacturer	Please specify manufacturer and country of origin	
2.	Model number	Please specify model number	
3.	Safety standard	FDA Approval or CE marking	
4.	Design	Heavy duty & compact design	
5.	Speed	4000 rpm approx.	
6.	Timer	- Variable (1-25) sec. - Digital setting & digital display	
7.	Catchers	- Included with two spare catchers - Accepts standard capsules - Covered with safety cover	
8.	Power supply	220 V / 50 Hz	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:

م. صحي الربابعة (1) م. صحي عين الباشا (6) م. صحي الكرامة (2) م. صحي الديسة الأولي م. صحي شفا بدران (1) م. صحي النصر
(2) م. صحي النزهة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications for Radiology Equipments



Item Description: Dental X-Ray Unit
Item NO: (4)

Class No: (18-056)
Quantity : (10)

No.	Technical Specifications	Min MOH Requirement	Bidder offer
1.	Manufacturer	Please Specify Manufacturer And Country Of Origin	
2.	Model number	Please Specify Model Number	
3.	Safety Standard	FDA Approval or CE Marking	
4.	System type	Wall Mounted	
5.	X-Ray tube anode : - type - min. total filtration, mm Al	- Stationary or Cylindrical - 2.5	
6.	X-Ray generator : • type • KV range • exposure current range , mA • exposure time, sec.	• Microprocessor Controlled • 60-70 approx. • 8 approx. • 0.02- 3 approx.	
7.	SID , mm (source - to -image distance)	200- 300 approx.	
8.	Available film sizes	Standard intraoral	
9.	Patient Types	Adult , Pediatric, Seated, Standing	
10	Control Panel	Digital Display	
11.	Protection EPRON	Frontal wear, not less than 0.5 Pb for each unit	
12.	Power Supply	220 V / 50 Hz	

Note : Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:

م. صحي الرابعة، م. صحي عين الباشا (3)، م. صحي الكرامة (1)، م. صحي الديسة الأولى (1)، م. صحي شفا بدران (1)، م. صحي النصر (2)، م. صحي النزهة (1)



Ministry of Health

Directorate of Biomedical Engineering

Technical Specifications For Radiographic Equipments

Item Description: DIGITAL DENTAL INTRAORAL RADIOGRAPHY DETECTOR
Item NO : (5) **Class No. :** (13-267) **Quantity:** (10)

No.	Technical Specifications	Min MOH Requirement	Bidder Offer
1.	Manufacturer	Please specify manufacturer and country of origin	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking USA brands must have FDA	
4.	Detector type	CCD or CMOS	
5.	Time to process and display	3 sec. or less	
6.	Bit depth	12 or more	
7.	Image sizes, mm approx Number of pixels approx. Resolution Connection Cable length (wireless connection is preferred)	(20 X 28) 1025 X 1600 26 lp/mm approx. USB 2.0 or better 3 meters or more Please specify	
8.	Personal computer Monitor Processor Ram Display card HDD Optical drive Network Interfaces	A well-known manufacturer Laptop 17 inch Minimum I 7 Min 8GB AGP 2GB 1 TB or more Super DVD Ethernet GbE network connection RJ-45 USB 2.0 X2 or higher , HDMI	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:

م. صحي الرابعة (1), م. صحي عين الباشا (3), م. صحي الكرامة (1), م. صحي الديسة الأولى (1), م. صحي شفا بدران (1), م. صحي النصر (2), م. صحي النزهة (1)

Cont. ... DIGITAL DENTAL INTRAORAL RADIOGRAPHY DETECTOR

No.	Technical Specifications	Min MOH Requirement	Bidder Offer
9.	Software	Please specify (upgradeable & latest)	
10.	Image processing features	Multiple display modes Contrast, brightness Resolution filters, zoom and measurement Analyses tools	
11.	Power supply	230Volts 50Hz $\pm$ 10%	
12.	Documentation	- User & service manuals in English. - Certificate of calibration & inspection from factory. - Log book with instruction for daily, weekly, monthly & yearly maintenance checklist	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:

م. صحي الربابعة (1), م. صحي عين الباشا (3), م. صحي الكرامة (1), م. صحي الديسة الأولى (1), م. صحي شفا بدران (1), م. صحي النصر (2), م. صحي النزهة (1)



Ministry of Health

Directorate of Biomedical Engineering

Technical Specifications



Item Description: Table Top Steam sterilizer
Item No (6)

Class No.: (16-142)
Quantity (11)

No.	Technical Specifications	Min. MOH Requirement	Bidder offers
1	Manufacturer	Please specify manufacturer and country of origin	
2	Model Number	Please specify model number of the offered equipment	
3	Safety Standards	FDA approval or CE marking	
4	Application & Programs	- Steam sterilizer (autoclave) for clinical use with cycle programs for medical and surgical instruments and porous loads as fabrics, textiles & linens, rubber materials, packed and wrapped materials. - Flash cycle programs & customized cycles included - Specify all available cycle programs	
5	Chamber capacity approx. (litters)	☐ 28 L	
6	Loading capacity, Kg	Not less than 7 Kg	
7	Type and class	Class "B"	
8	Temperature of sterilization	121°C & 134°C	
9	Cycle Stages	- Air removing, Steam admission, Sterilization, Drying and Air admission. - Automatic cycle shut off.	
10	Test Cycles	- Bowie & Dick test. - Vacuum leak test.	
11	Air Removal System	- Vacuum pump.	
12	Steam Generation	- Separate electrical steam generator. - Automatic water filling from reservoir tank. - Automatic water drainage (from chamber) to reservoir tank - Over heat shut off & Over Pressure Safety Valve	
13	Doors operation	SINGLE front door, with safety interlocks and alarms. - Ability to (safe manual) open door after power failure and errors.	
14	Controller	- Fully automatic control (microprocessor, microcomputer), multi programs, programmable parameters.	
15	Front Panel & Indicators	- LCD display - Controlling, Process status, temperature, pressure, time, complete cycle, door status and fault. - Ability to stop cycle any time. - water proof buttons (membrane or equivalent)	

Note: Bidder must answer with YES or NO in the "BIDDERS OFFER" Field

Equipment Distribution Location

م. صحي الربابعة (1)، م. صحي عين الباشا (2)، م. صحي الكرامة (2)، م. صحي الديسة الأولى (2)، م. صحي النصر (1)، م. صحي مؤته (2)، م. صحي النزهة (1)

Cont.....Table Top Steam sterilizer

16	Technical Specifications	Min. MOH Requirement	Bidder offers
17	Alarms & Errors	Included for any failure with (code or description on LCD).	
18	Service software	To allow access and modify of control settings and menus by authorized persons (MOH) including service keys & passwords, Quantity (2) for the whole required quantity	
19	Printer	Included, external type , please price separately	
20	Water Supply & Reservoir Tanks	- Included, with manual and automatic water filling. - Water level indicator and alarm, included.	
21	Water quality (conductivity) sensor	- Included (built-in) as safety device - For protection and make sterilizer to block from water filling and cycle not start in case bad water conductivity (as recommended from the manufacturer), with indicators and alarms. - Outlet connection for water drainage (included)	
22	Water supply system	- Treated, purified or distilled water as recommended by manufacturer - Specify price separately and running costs - Data sheets and catalogues should be included.	
23	Materials & construction:-		
	- Chamber, Door and Steam generator:	- Stainless steel 316L (or higher quality) with adequate thickness according international standards (specify).	
	- Pipes and connections:	- High quality s/s, copper and temperature & pressure resistant hoses.	
	- Insulation:	- Must be for chamber	
	Machine dimensions	Compact size to fit on typical clinics counter (specify dimensions)	
	- Service access:	- Easy service access for all parts of machine from any side with independency of each part (screwing/unscrewing) and adequate spaces in-between for repair or replacement. - Include in offer documents: actual clear images and pictures for inside and outside of machine from all sides and locations.	
24	Accessories for each sterilizer	- S/S or Aluminum Instrument trays [Qty: as a capacity of chamber]. - Paper printer: Qty: 25 rolls. - Hoses for filling and drain reservoirs.	
25	Power Supply	Single phase 220V/50Hz (Specify Power & Amps)	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Location

م. صحي الربابعة (1), م. صحي عين الباشا (2), م. صحي الكرامة (2), م. صحي الديسة الأولى (2), م. صحي النصر (1), م. صحي مؤته (2), م. صحي النهضة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications Dental Laboratory Equipments



Item Description: Dental Lab. Electrical Micro motor
Item No: (7)

Class No. : ()
Quantity :(5)

No.	Technical Specifications	Min MOH Requirement	Bidder offer
1.	Manufacturer	Please specify manufacturer and country of origin	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking	
4.	Max. Rotating speed, rpm	Max. 50,000 (adjustable)	
5.	Rotation	Clockwise & Anticlockwise	
6.	Rotation Reading Display	Digital	
7.	Diameter of Precision Chuck (Hand piece)	2.35 mm	
8.	Hand piece base	Included	
9.	Connection between power unit & hand piece	Spiral & Electrical	
10.	Control Type	Foot Switch & knee control	
11.	Power supply	220 V / 50 Hz	

Note : Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations: م. صحي عين الباشا (4), م. صحي النزهة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications Dental Laboratory Equipments

Item Description: Dental Laboratory Vibrator
Item No.(8)

Class No. : (14-369)
Quantity:(2)

No.	Technical Specifications	Min MOH Requirement	Bidders Offer
1.	Manufacturer	Please specify manufacturer and country of origin & country of manufacturer	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking	
4.	Vibration Control	• ON-OFF Switch • Speed Selector	
5.	Mounting Type	Table top mounted	
6.	Power supply	220 V / 50 Hz	

Note : Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations: م. صحي عين الباشا (1), م. صحي النزهة



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications Dental Laboratory Equipments

Item Description: Dental Laboratory Trimmer
Item No.(9)

Class No. : (02-006)
Quantity:(2)

No.	Technical Specifications	Min MOH Requirement	Bidders Offer
1.	Manufacturer	Please specify manufacturer and country of origin & country of manufacturer	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking	
4.	Rotating speed , rpm	≥ 2800	
5.	Disk cooling and washing system	Water flow	
6.	ON-OFF Switch Type	Water Proof	
7.	All Standard Accessories	- Included in addition to: - Two diamond disks - Aluminum work plate	
8.	Power supply	220 V / 50 Hz	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations: (1) م. صحي عين الباشا (1) م. صحي النزهة (1)



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications Dental Laboratory Equipments

Item Description: Laboratory Work Station (Double)
Item No.(10)

Class No. : ()
Quantity:(3)

No.	Technical Specifications	Min MOH Requirement	Bidders Offer
1.	Manufacturer	Please specify manufacturer and country of origin & country of manufacturer	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking	
4.	Design	- Made of epoxy powdered iron sheet - Corrosion, chemicals, & heat resistant	
5.	Work benches	Made of anti-chemical and anti- heat pressed laminate material made of granite or equivalent	
6.	Vacuum Pump	Included / Two Outlets	
7.	Vacuum control	Controllable slow and fast	
8.	Dimensions (H x L x W) ,mm	1700 x 1700 x 650 approx.	
9.	Accessories	- Dust collection bag - Air gun - Two electrical outlets (220V/50Hz) - Gas tap - Moveable cable - Arm support and deep drivers - Eye protector apparatus	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field

Equipment Distribution Locations:(1) م.صحي النزهة (2) م.صحي عين الباشا



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications Dental Laboratory Equipments

Item Description: Dental Laboratory Polishing Machine
Item No: (11)

Class No. : ()
Quantity : (2)

No .	Technical Specifications	Min MOH Requirement	Bidder offer
1.	Manufacturer	Please specify manufacturer and country of origin	
2.	Model Number	Please specify model number of the offered equipment	
3.	Safety standard	FDA approval or CE marking	
4.	Rotating speed , rpm	- Speed Selector Included - Two Speeds - Low not less than 1400 - High not less than 2800	
5.	Mounting Type	Table top mounted	
6.	All Standard Accessories	- Included in addition to: - Metal splash guarded and cone - Brush Holders	
7.	Power supply	220 V / 50 Hz	

Note: Bidder must answer with YES or NO in the “BIDDERS OFFER” Field.

(1) م. صحي عين الباشا (1), م. صحي النزهة: Equipment Distribution