



Date: - 03<sup>rd</sup> October, 2019

Corrigendum  
for  
Tender  
for  
Advanced Dental Units with Storage Solutions on  
Turnkey Basis for the Department of Dentistry

NIT Issue Date	: 07 <sup>th</sup> August, 2019
NIT No.	: Admn/Tender/37/2019-AIIMS.JDH
Pre-Bid Meeting	: 19 <sup>th</sup> August, 2019 at 05:45 PM
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Last Date of Submission	: 15 <sup>th</sup> October, 2019 at 03:00 PM
Bid opening	: 16 <sup>th</sup> October, 2019 at 03:15 P.M

**The following revised and additional specification will be added:-**

**1. Page No.10 Point No.1(g)**

**For:**

- ii) Piezo scaler with 4 scaling tips with frequency 18- 36 Khz
- iii) Modular (LED) light cure system, low profile head with intensity above or 1500 mW/cm<sup>2</sup>

**Read As:**

- ii) Piezo scaler with 4 scaling tips with frequency 20- 36 Khz
- iii) Modular (LED) light cure system, cordless, low profile head, capable to cure adequate depth of composite with intensity 900 to 1500 mW/cm<sup>2</sup> or above

**2. Page No.10 Point No.1(o)**

**For:**

All the outlet & inlet for the services to the chair should be hidden in the box to be at the foot area of the chair, as an infection control measure.

**Read As:**

All the outlet & inlet for the services to the chair should be concealed in the box to be at the foot area of the chair, as an infection control measure.

**3. Page No.11-13, Point No. B (1-27) AND Point No. C (1-14)**

**For:**

**B. CENTRALIZED COMPRESSOR UNIT – 1 & C. CENTRALIZED SUCTION UNIT-01**

**Read As:**

## **B Compressor & Suction Unit (Combined)- 01**

**For:**

### **B. CENTRALIZED COMPRESSOR UNIT – 1 & C Centralized Suction Unit OILFREE DRY AIR COMPRESSOR**

#### Technical specifications:

1. The compressor should be suitable to be used in a minimum of 8-10 workstations simultaneously.
2. The compressor should be based on reciprocating technology to deliver 100% oil free moisture free air with membrane drying unit and air filter.
3. Should have one corrosion protected tank with anti-bacterial coating of silver nano particles.
4. Absolutely Oil free, Dry, Hygienic compressed Medical/ Dental Grade Air system including membrane dryer and sterile of approx. 5.9-6 Horse Power
5. It should have at least 2 motors (Horse power — 5.9 HP), 8 cylinders and facility of 2 dry air systems
6. It should be fitted with suitable air filter (sterilization filter), electric control switches, starters, air inlet and outlet, air vent provision and also provided with suitable gauges, indicators etc.
7. It should have an electronic panel facility
8. Should have integrated dry air system in which the drying process is accomplished via the osmosis of air through many membrane filters.
9. The sterilization filter should be able to eliminate any additional contamination caused by microorganisms such as bacteria, fungus spores and viruses which may be present in the ambient atmosphere.
10. It should have a valve unit with pressure switch
11. The electric motor should be suitable for operation on 3/400 V, 50-60 Hz
12. The working pressure should be between 6-8kg/cm<sup>2</sup> (5.5-8.0 bar)
13. The tank holding capacity should not be more than 90 liters
14. The air displacement should not be less than 600 liters per minute
15. The pressure output at 5 bar should be at least 450 liters / minute
16. Electrical requirements should run on 3 phase power supply, voltage at 400 V (3"), frequency 50-60 Hz, electrical output 3-4Kv and current consumption 5-6 A.
17. The compressor must be designed and constructed in such a way that hazards occurring when using the machine for the intended purpose are ruled out to the fullest extent possible.
18. The noise level of the compressor should be less than 80 dB
19. It should be heat resistant
20. The crank case should not be oil filled and no internal/external greasing to be required at any time during maintenance
21. The new system to be installed and connected to all the dental chairs and unit (existing- 5 chairs and new — 5 chairs). The installation work would include all civil (supply and laying of appropriate connection pipes from the compressor unit up to the individual chair) and electrical works if required. Company should also provide layout plan diagram. The pipelines should be made of durable materials. All required civil and electrical works to be done by the supplier and the vendor may visit the site for inspection on any working day between 9 am 5 pm before quoting
22. The system should work in all types of environment, i.e temperature between 10 deg. to 45 deg. and in relative humidity max 80 %.
23. The supplier should provide service on regular interval and must set the pressure reducer at least once in every year, draining of condensed water once in every 6 months, safety valve checks in every 6 months and filter replacement once in a year,
24. Warranty: 5 years
25. CMC (comprehensive maintenance contract) for 5 years after Warranty period. Rates should be quoted separately per year in the price bid and the rate for each major part to be mentioned separately.
26. The equipment must bear CE and/or USFDA conformity marking.

## **C. CENTRALIZED SUCTION UNIT- 1**

### **CENTRALISED WET LINE SUCTION UNIT**

#### Technical specification:

1. The Wet line suction system should be capable for up to 16 workplaces and for 8-10 operators working simultaneously
2. It should have a flow rate of at least in the range of 2400 litre /min (when unobstructed)
3. There should be a stainless steel separator connected to the suction unit on the vacuum side which should separate liquid and air. Liquid should be drained to the sewage line through the drain pump. There should be an auxiliary air valve for the condensate separator to protect the suction unit from overheating and to provide constant and even suction power.
4. There should be a muffler for exhaust air.
5. There should be an exhaust air bacterial filter and the supplier must change the filter in every 2 years.
6. Hoses for waste water systems and suction lines must be of CPVC/PPR hoses or hoses of a comparable quality
7. The system should work in all type of environment i.e temperature between 10 deg. To 45 deg. Celsius and in relative humidity max 80%
8. Electrical requirements should run on 3 phase supply voltage at 400 V, and frequency 50 Hz-60Hz, electrical output 3-4 KV and current consumption 5-6 A
9. The weight should be not more than 80 Kg
10. The new system to be installed and connected to all the dental chairs and unit (existing- 5 chairs and new — 5 chairs). The installation work would include all civil (supply and laying of appropriate connection pipes from individual chair to the centralized suction) *and* electrical works if required, Company should also provide layout plan diagram. The plumbing lines should *be* made of either polypropylene (PP) or chlorinated polyvinyl chloride (PVC-C) or unplasticized polyvinyl chloride (PVC-U) or polyethylene (PEh), There should not be any 90-degree bend in the pipe (no T connection in the pipe), only 2 x 45-degree bends (Y connection) should be there in the pipes. The vendor may visit the site for inspection on any working day between 9 am 5 pm before quoting the price.
11. Warranty: 5 years
12. The equipment must carry 5 years warranty and subsequently 5 years of comprehensive maintenance contract (CMC). The price for each part must be quoted separately
13. The equipment must bear CE and/or USFDA conformity marking.
14. All dismantling work will be done by agency and repair of the same after completion of work will be done by agency

## **Read As:**

### **B. COMPRESSOR AND SUCTION UNIT (COMBINED)**

#### Technical specifications:

1. Modular Medical grade Durr Compressor and Suction combined in a Single Housing.
2. Combined Noiseless Single Unit Should be able to operate 05 Dental Chairs simultaneously.
3. High and low vacuum motorized continuous wet line suction fitted with anti-retraction valve.
4. Automatic self-cleaning and filters for in-built system to allow continuous draining and disinfect.
5. Absolutely 100 % Oil free, dry, hygienic compressed air with membrane drying System.
6. Should have air moisture filter
7. Should have non retraction valve
8. Should have auto cut off switch
9. Should be noise less not more than 58 db
10. Dust filter, microbial filter
11. The new system to be installed and connected to all the five dental chairs. The installation work would include all civil (supply and laying of appropriate connection pipes from the

compressor unit up to the individual chair), sanitary and electrical works. The pipelines should be made of durable materials. The plumbing lines should *be* made of either polypropylene (PP) or chlorinated polyvinyl chloride (PVC-C) or unplasticized polyvinyl chloride (PVC-U) or polyethylene (PEh). All required civil, sanitary and electrical works to be done by the supplier.

12. The vendor must provide for shifting and reinstallation of the existing chairs from the specified area to the new location within the Department.
13. Vendor may visit the site for inspection on any working day between 9 am 5 pm before quoting
14. The supplier should provide service on regular interval once in every 6 months and filter replacement once in a year,
15. Warranty: 5 years
16. CMC (comprehensive maintenance contract) for 5 years after Warranty period. Rates should be quoted separately per year in the price bid and the rate for each major part to be mentioned separately.
17. The equipment must bear CE and/or USFDA conformity marking.

**4. Page No.13 Point No. D**

**For:**

D. DENTAL OPERATING WORK STATIONS- 5 Nos.

**Read As:**

C. DENTAL OPERATING WORK STATIONS- 5 Nos.

**5. Page No.13 Title. D, Point No 2**

**For:**

2. Stainless Steel Sinks of SS304 of overall size of 520x440x200mm (Bowl size: 465x390mm) without border, appearance in matt finish and with strainer & bottle trap. Each sink to be fitted with SS tap. Punched design door for better ventilation.

**Read As**

Title C, Point No 2

2. One Large high quality (Quality A) modular ceramic wash basin with high quality stainless steel pillar cock tap with concealed drain pipes to be installed between the work stations.

**6. Page No.14 Point No.E**

**For:**

E (Sterilization Unit-1)

**Read as:**

D. Sterilization Unit-1

**7. Page no.14, Point no. E**

**For:**

**E Sterilization Unit-1**

Sterilization unit to be developed in area of 60-65 sq ft.

L shaped wall available for construction of stainless steel storage cabinets with granite top for placement of autoclaves, UV cleaners and other heavy equipment. SS cabinets to be placed both overhead and underneath granite top. (Rough drawing of the same is attached as ANNEXURE 2)

SS SHOULD BE RUST AND CORROSION RESISTANT CRCA (COLD ROLLED CLOSE ANNEALED) MS SHEET/ STAINLESS STEEL AS PER THE SPECIFICATIONS OF WORK STATION ABOVE

Unit a- 7 feet(Length)x 2.5 feet(Depth) X 2.5 feet(Height) granite top and stainless steel cabinets with doors and drawers for stacking surgical instruments

Overhead unit size 7 ft(L)x 1 ft(D) X 2 ft(Ht)

Unit b- To provide washing area with stainless steel sink (3 ftX1.5 ft approx.) with

SS tap with cabinets below with punched door design for ventilation

Overhead unit of size according to drawing with shelves

1. **Note:** The vendor visit of the site is recommended for inspection on any working day between 9 am and 5 pm before quoting the price.

**Read As:**

#### **D. Sterilization Unit-1**

##### **Unit - X**

- 1) Sterilization unit to be developed in two L-shaped areas:
  - a) 35 sq. ft (7 feet x 5 feet) and
  - b) 25 sq ft. (5feet x 5 feet)
- 2) Two L- shaped wall available for construction of modular stainless steel/MS sheet storage cabinets with granite top for placement of autoclaves, UV cleaners and other heavy equipments
- 3) Modular SS cabinets to be placed underneath granite top at the entire length of two L-shape sterilization area (**1 (a & b)**). Granite top should be placed at appropriate height.
- 4) Wall mounted storage cabinets of two feet height with full length of two L-shaped areas (**1 (a & b)** ).
- 5) SS should be rust and corrosion resistant CRCA (cold rolled close annealed) ms sheet/ stainless steel as per the specifications of work station above
- 6) Modular switches and plug points {15-16 Ampere( 8 plugs)} of reputed brands for installations of autoclaves, UV cleaners and other heavy equipments of to be provided by the vendor
- 7) Electrical Accessories and fittings should consist of electrical trunking of 0.8mm thick CRCA MS sheet. It should have a high temperature withstanding capacity with excellent electrical insulation properties. The rear portion of above accessories which is in contact with live metal shall be made from thermo set material which should not melt on heating.

(Rough drawing and dimensions of the same is attached as **ANNEXURE 2**)

##### **Unit -X**

#### **DETAILED DIMENSIONS OF L SHAPED AREAS (1 (A & B)) & WALL MOUNTED STRAGE CABINET**

- i. {7 feet(Length) x 5 feet(width) L shaped area} x 2.5 feet(Depth) X 2.5 feet(Height) Granite top and stainless steel cabinets with doors and drawers for stacking instruments and storage of small accessories and equipments (Unit X, 1a).
- ii. {5 feet(Length) x 5 feet(width) L shaped area} x 2.5 feet(Depth) X 2.5 feet(Height) Granite top and stainless steel cabinets with doors and drawers for stacking instruments and storage of small accessories and equipments (Unit X, 1b).
- iii. Wall mounted modular storage cabinets of two feet height in full length of two L-shaped areas (**1 (a & b)** ) (Unit X, Point -4)  
Overhead unit size(Two)
  - a) {7 feet(Length) x 5 feet(width) L shaped area} x 1 feet(Depth) X 2 feet(Height)
  - b) {5 feet(Length) x 5 feet(width) L shaped area} x 1 feet(Depth) X 2 feet(Height)
  - c) Overhead unit of size according to drawing with shelves.

##### **Unit -Y**

#### **DIMENSIONS**

- i. To provide washing area with stainless steel sink (4 ft X1.5 ft approx.) with SS tap with cabinets below with punched door design for ventilation & in alignment with the installed, Unit X, 1b.

All the dimensions mentioned are indicative and approximate and may vary during Installations. Both the upper and lower storage area should be made of same material (modular stainless steel/MS sheet storage cabinets) and same outer finish should be provided.

All required civil and electrical works to be done by the supplier/vendor.

**Note:** The vendor visit of the site is recommended for inspection on any working day between 9 am and 5 pm before quoting the price