October 29, 2012

"REPLY TO BIDDERS QUERIES AND AMENDMENT TO TENDER":-

Sub. Supply Installation Testing & Commissioning of Oxygen Concentrator Module & Medical Gas Manifold System at Yangon Children Hospital, Myanmar

&

Oxygen Concentrator Module with Pipeline system for 4 OTs at Sittwe General Hospital, Myanmar

. **Tender No : HSCC/PUR/MEA-Myanmar/OCM/2012** **Date : 01.10.2012**

AMENDMENT No. – (IV)

Turnkey Works as indicated in the Technical Specification, have been included in the Bill of Quantity (BOQ) of Price Bids for both the project Yangon Children Hospital and Sittwe General Hospital, Myanmar

All other terms and conditions of the tender documents shall remain same.

Encl. Volume-V, Price Bid

Jt. Secretary (DPA-III)

MEA, New Delhi

MINISTRY OF EXTERNAL AFFAIRS

(GOVT. OF INDIA)

YANGON CHILDREN HOSPITAL
&
SITTWE GENERAL HOSPITAL
MYANMAR

Tender

for

Supply Installation Testing & Commissioning of

Oxygen Concentrator Module & Medical Gas Manifold System at Yangon Children Hospital, Myanmar
&
Oxygen Concentrator Module with Pipeline system for 4 OTs at Sittwe General Hospital, Myanmar

VOLUME –V

PRICE BID

October 2012

(Consultants & Engineers for Mega Hospitals & Laboratories)

E - 6 (A), Sector - I, NOIDA (U.P.) - 201 301 (INDIA)

PHONE : 91-2542436, 2542440 FAX : 91-11-91-2542447

91-2542443, 2542445 E- mail : www.hsccltd.co.in

Tender No. HSCC/PUR/MEA-Myanmar/OCM/2012

BILL OF QUANTITIES (BOQ)

IFB No.-HSCC/PUR/MEA-Myanmar/OCM/2012

	Package - Supply, installation & commissioning of Oxygen Concetrator Module and Medical Gas Pipeline system for Yangon Children Hospital with 2 years Defect liability Period					
	Quality Standards of the equipment should be as indicated in the technical specifications					
Item No. 1	**Description 2**	**Unit 3**	**Qty 4**	**Unit Rate In Rs (in Figure) 5**	**Unit Rate in Rs (in Words) 6**	**Amount (Rs.) (In Figure) 7**
	The prices are to be quoted in the below mentioned form and shall include the supply, installation, testing , commissioning of all the equipments, ancillary materials at site and all such items what so ever which may be required to fulfill the intent and purpose as laid down in the specifications and or the drawings.					
	The tenderer shall quote rates in figures and in words under column 5&6 and extend amount to column 7					
	Oxygen Concentrator Module					
1.0	Fully Automated system Microprocessor based Oxygen Concentrator Module **(Imported)**, **Duplex System with PSA technology**. Each Module should be to produce 350 LPM or 21 Cubic Meter Per hour with purity of 94% ±1%. The Oxygen should be medical grade and shall be supplied through oxygen outlet at 4 Bar pressure. The Oxygen Concentrator system shall supply Oxygen to the outlet points of the Wards directly in addition to filling of cylinders with Booster.The Oxygen concentrator should have Zirconium sensor with Oxygen Analyser.Oxygen Concentrator module should be CE marked, meeting ISO-10083 standards complete with Air Compressor, Filtration system, Refrigerated Air Dryer, Air Receiver, Oxygen Surge Tank and Inter connecting pipes, valves, regulators etc. all accessories as required as per specifications.	Set	1			
	High Pressure Booster					
2.0	The high pressure booster oxygen compressor for refilling the various type of Oxygen cylinder. HPB should be compact mounted on a Mild Steel frame fitted with electric motor 3-phase, 1420 RPM, 4KW, 50 Hz. And should be able to run on the incoming voltage of 380 Volts. HPB System should be provided with stainless steel diaphragm type of compressor, 2-stage, coolant (1:1 ratio) cooled using close loop for re-circulation of coolant with an output capacity of 9 cubic metre and should be capable of filling cylinders at a pressure gauge visible on the top front complete with all accessories as required as per specifications	Nos	1			
	Digitally Controlled Fully Automatic Servo Voltage Stabilizer					
3.0	The Voltage Stabiliser of 30 KVA capacity should work on minimum input voltage of 340V with output voltage of 440±5%. The Voltage stabilizer should be 3 phase, oil cooled, 50hzcomplete with all accessories as required as per specifications	Nos	1			
	Oxygen System					
3.0	Supply, Installation, testing and commissioning of Oxygen manifold of 8+8 Cylinders. The Oxygen Manifold should be hydraullicaly tested at 3500 psig pressure. The Oxygen Manifold shall be complete with all accessories etc as required complete as per specifications	Set	1			
4.0	Supply, Installation, testing and commissioning of Fully Automatic Control Panel for the Oxygen Manifold System complete with all accessories etc.as per specification	Nos	1			
5.0	Supply, Installation, testing and commissioning of 3 Cylinder configuration Emergency Oxygen Manifold with high flow regulator with gauges and safety valves complete with all accessories etc.as per specification	Set	1			
6.0	Supply, Installation, testing and commissioning of terminal outlets of Oxygen with Adapter complete as per specification.	Nos.	134			

Item No.	Description 2	Unit 3	Qty 4	Unit Rate In Rs (in Figure) 5	Unit Rate in Rs (in Words) 6	Amount (Rs.) (In Figure) 7
7.0	Supply, Installation, testing and commissioning of Oxygen Cylinder (D-Type) complete as per specification	Nos	19			
8.0	Supply, Installation, testing and commissioning of High Pressure Antistatic Tube for Oxygen as per specification	Nos	402			
	Vacuum System					
9.0	Supply, Installation, testing and commissioning of Vacuum System Triplex(Two working and One standby) of 110 CFM capacity, 7.5hp each with 2000 Ltrs. storage tank capacity along with Bacteria filter complete as per specification. Ingersolrand/Anesta Iawata/Equivalent make	Nos	1			
10.0	Supply, Installation, testing and commissioning of Electrical Control Panel for the Vacuum system complete with Single Phase Preventors, Starters, Controls, Voltmeters, Ammeters, Gauges, Hour Meter, Fuses, Switchgears, MCCB and Main switch etc. The panel shall be complete in all respects and as per specifications.	lot	1			
11.0	Supply, Installation, testing and commissioning of terminal outlets of Vacuum with Adapter complete as per specification .	Nos	134			
12.0	Supply, Installation, testing and commissioning of High Pressure Antistatic Tube for Vacuum as per specification	Nos	402			
	Alarm					
13.0	Supply, Installation, testing and commissioning of **Main Alarm** Panel to indicate any abnormality of gas pressures and other failures of the system. The alarm syatem shall be complete with digital display, sensor module and power supply. The alarm system shall be complete with all indications controls, wirings, accessories etc. complete as required and as per specifications.	Nos	1			
14.0	Supply, Installation, testing and commissioning of **Area Alarms** for areas shall be complete with pressure sensors, indications, alarms etc. and with all accessories as per specifications.					
a	2-Gas	Nos	4			
	Copper pipe					
15.0	Supply, Installation, testing and commissioning of Copper piping of different sizes for distribution and supply of O2 and vacuum to various areas in the hopsital. The Copper pipes shall be solid drawn, seamless, deoxidised, nonarsenical, half hard, tempered and degreased material conforming to BS-6017/1981, Table-2 (Cu-DHP) and manufactured as per BS-2871/1971 Part-I, Table-X. The Copper pipe shall be supplied with Lloyd's test certificate and installed as per HTM -22 of UK specifications with utmost clenliness. After installation the pipes shall be painted with 2-coats of synthetic enamel paint and colour codification as per IS-2379 of 1963. The piping shall be complete with all fittings conforming to BS-864 and as per specifications					
a	54 mm	Metre	113			
b	28 mm	Metre	552			
c	22 mm	Metre	1002			
d	15 mm	Metre	562			
e	12 mm	Metre	462			
16.0	**Valve Box**					
	Supply, Installation, testing and commissioning of Valve Box complete with Isolation Valves of different sizes complete with all accessories as required as per specifications :					
a	Valve Box - 2 services	Nos	4			

	Isolation Valve					
17.0	Supply, Installation, testing and commissioning of Isolation Valves of different sizes suitable for the pipe dia. The valves shall be non-lubricated type, stainless hard chrome brass with PTFE seat having opening by quarter turn of handly. The valves shall be pneumatically tested and degreased for medical gas service complete as per specifications					
a	54 mm	Nos	8			
c	22 mm	Nos	81			
d	15 mm	Nos	84			
18.0	**Bed Head Panel**					
	High Strength Anodised Aluminium Extrusions with inbuilt single railing, Chamber of Medical Gas Outlets has been made of anodized aluminium, Powder coated as per the customer's choice. complete as per specifications.	Nos	134			
	Oxygen Flowmeter with Humidifier					
19.0	Supply, Installation, testing and commissioning of Oxygen Flowmeter with Humidifier (0 -15 ltrs./min) with adapter, tubing etc. The humidifier bottle shall be made of unbreakable & reusable polycarbonate material and autoclavable at 134 deg. C. The oxygen flowmeter with humidifier shall be complete with all the required accessories and shall be complete as per specifications	Nos	134			
	Ward Vacuum Unit					
20.0	Supply, Installation, testing and commissioning of Ward Vacuum unit wall mounted type with suction controller/regulator (digital/Analogue) and collection bottle of 2000 ml. with mounting arrangement. The collection bottle shall be made of polycarbonate material and fully autoclavable at 134 deg.C. The unit shall be complete with all accessoreies as required and as per specifications.	Nos	134			
21.0	**Turnkey Works**	1 lot				
					Grand Total Amount (in Figures) Rs.	
	In words : Rupees					

Date

Signature, Name & seal of the Bidder

1 **The above format of Bill of Quantity(BOQ) should be neatly hand written.**
2 The BOQ other than the aboveformat or typed written shall be rejected.
3 The above quoted rates will be inclusive of all taxes, duties and other charges.
4 **Cutting and overwriting should be avoided. Correction should be countersigned always.**
5 **Incase any error between Unit rate in figure and unit rate in words, the unit rate in words shall be cosidered**

BILL OF QUANTITIES (BOQ)

IFB No. HSCC/PUR/MEA-MYANMAR/Equipment/2012-13

	Package - Supply, installation & commissioning of Oxygen Concetrator Module with Pipeline system for 4 Ots for Sittwe General Hospital with 2 years Defect Liability Period					
	Quality Standards of the equipment should be as indicated in the technical specification					
Item No. 1	**Description 2**	**Unit 3**	**Qty 4**	**Unit Rate In Rs (in Figure) 5**	**Unit Rate in Rs (in Words) 6**	**Amount (Rs.) (In Figure) 7**
	The prices are to be quoted in the below mentioned form and shall include the supply, installation, testing , commissioning of all the equipments, ancillary materials at site and all such items what so ever which may be required to fulfill the intent and purpose as laid down in the specifications and or the drawings.					
	The tenderer shall quote rates in figures and in words under column 5&6 and extend amount to column 7					
	Oxygen Concentrator Module					
1.0	Fully Automated system Microprocessor based Oxygen Concentrator Module **(Imported)**, Simp**lex System with PSA technology**. Each Module should be to produce 100 LPM or 6 Cubic Meter Per hour to the extent of maximum Oxygen flow 7 Cubic m/hr. with purity of 94% ±1%. The Oxygen should be medical grade and shall be supplied through oxygen outlet at 4 Bar pressure. The Oxygen Concentrator system should have facility of direct supply to the outlet points in addition to filling of cylinders.The Oxygen concentrator should have Zirconium sensor with Oxygen Analyser.Oxygen Concentrator module should be CE marked, meeting ISO-10083 standards complete with Air Compressor, Filtration system, Refrigerated Air Dryer, Air Receiver, Oxygen Surge Tank and Inter connecting pipes, valves, regulators etc. all accessories as required as per specifications.	Set	1			
	Digitally Controlled Fully Automatic Voltage Stabilizer					
2.0	The Voltage Stabiliser of 15 KVA capacity should work on minimum input voltage of 340V with output voltage of 440±5%. The Voltage stabilizer should be 3 phase, oil cooled, 50hzcomplete with all accessories as required as per specifications	Nos	1			
	Oxygen Outlet					
3.0	Supply, Installation, testing and commissioning of terminal outlets of Oxygen with Adapter complete as per specification .	Nos.	8			
	High Pressure Tube					
4.0	Supply, Installation, testing and commissioning of High Pressure Antistatic Tube for Oxygen as per specification	Nos	24			
	Alarm					
5.0	Supply, Installation, testing and commissioning of **Area Alarms** for areas shall be complete with pressure sensors, indications, alarms etc. and with all accessories as per specifications					
a	2-Gas	Nos	4			

	Copper pipe					
6.0	Supply, Installation, testing and commissioning of Copper piping of different sizes for distribution and supply of O2 and vacuum to various areas in the hopsital. The Copper pipes shall be solid drawn, seamless, deoxidised, nonarsenical, half hard, tempered and degreased material conforming to BS-6017/1981, Table-2 (Cu-DHP) and manufactured as per BS-2871/1971 Part-I, Table-X. The Copper pipe shall be supplied with Lloyd's test certificate and installed as per HTM -22 of UK specifications with utmost clenliness. After installation the pipes shall be painted with 2-coats of synthetic enamel paint and colour codification as per IS-2379 of 1963. The piping shall be complete with all fittings conforming to BS-864 and as per specifications.	Nos.	1lot			
a	28 mm	metre	100			
b	15 mm	metre	30			
c	12 mm	metre	12			
	Isolation Valve					
7.0	Supply, Installation, testing and commissioning of Isolation Valves of different sizes suitable for the pipe dia. The valves shall be non-lubricated type, stainless hard chrome brass with PTFE seat having opening by quarter turn of handly. The valves shall be pneumatically tested and degreased for medical gas service complete as per specifications					
a	15 mm	Nos	8			
	Accessories					
8.0	**Oxygen Flowmeter with Humidifier**					
	Supply, Installation, testing and commissioning of Oxygen Flowmeter with Humidifier (0 -15 ltrs./min) with adapter, tubing etc. The humidifier bottle shall be made of unbreakable & reusable polycarbonate material and autoclavable at 121 deg. C. The oxygen flowmeter with humidifier shall be complete with all the required accessories and shall be complete as per specifications	Nos	4			
9.0	**Turnkey Works**	1 lot				
					Grand Total Amount (in Figures) Rs.	
	In words : Rupees					

Date

Signature, Name & seal of the Bidder

1 The above format of Bill of Quantity(BOQ) should be neatly hand written.
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