



Running Contract Details	
Equipment Name	Heart Lung Machine with Heater cooling Unit
Running Contract Valid Till	14-10-2020
Tender Ref No	KMSCL/EP/T288/1170/2018(R1)
Tendered Quantity	10
Supplier Name	M/s Medibright Surgicals
GST No	32ABHFM4368D1ZF
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
Room No.23/326/54 Np Tower Poothole P. O Thrissur	Contact Person	Brighten P F
	Phone	
	Mobile No	9744002907
	Email	medibrightsurgicals@gmail.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>Heart Lung Machine with Heater cooling Unit</b> - Heart Lung Machine <i>Model &amp; Make : S 5 with 3T/ Livanova Deutschiland GMBH</i>	5936000 Incl.GST :12%	437780	6373780
2	<b>Heater Cooling Unit</b> <i>Model &amp; Make : Livanova deutschland GMBH</i>	2464000 Incl.GST :12%	181720	2645720
		<b>8400000</b>	<b>619500</b>	<b>9019500</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>Heart Lung Machine with Heater cooling Unit</b>							
Labour	1,87,500.00	1,87,500.00	1,87,500.00	1,87,500.00	1,87,500.00	1,87,500.00	1,87,500.00
Comprehensive	3,50,000.00	3,50,000.00	3,50,000.00	3,50,000.00	3,50,000.00	3,50,000.00	3,50,000.00

## **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

## **Technical Specification**

### **Equipment :Heart Lung Machine with Heater cooling Unit**

#### **I. Heart Lung Machine**

1. Should have 4 pump console:3 single roller pumps and 1 twin roller pump module.
2. Twin roller pump should have selectable ratio of blood and cardioplegia from 1:1 to 1:20
3. Should have direct drive pumps and touch screen technology on pump heads
4. Console should be compatible to integrate an additional centrifugal pump module
5. Air-oxygen blender with hoses and flow meter should be provided
6. Each pump should have programmable modes of operation as :Arterial, Arterial pulsatile, cardioplegia, slave-1, slave -2,pump sucker, auxillary and free
7. Pumps should be operable in clockwise and counterclockwise direction
8. It should have a precise and lockable central occlusion knob
9. Should have a separate cardioplegia monitor unit below the system control panel
10. Cardioplegia monitoring unit should display cardioplegia data including volumes, ratio, time, pressure and temperature
11. Each roller pump should be capable of running on 24 V supply with a transformer in the console
12. Roller pumps should be easy to remove and reassemble
13. The heart lung machines should have an emergency battery back up for atleast 90min for all the pumps with all necessary safety systems and accessories.
14. Transitioning from mains to back up power should not require any action from the user
15. Level and bubble detector should be provided with the unit
16. Bubble detector should detect bubbles of minimum 5mm diameter
17. Unit should have the following parameters monitoring facility:pressure(for 4 pressure display), Time(3 resettable timers with 1 real time display), Temperature monitor(temperature display), cardioplegia delivery(Total volume, actual volume, time, pressure of delivery), Temperature control of heater cooler unit
18. Should work with 220-240v/ 50-60Hz
19. Should be compact
20. Should be transportable with castor wheels that are 360 degree turnable
21. Should have an flexible LED lamp, which is water resistant and provide natural white light
22. Should have fixed height shelf along with the machine
23. Should have a multipositional system control panel
24. All alarms and errors should be acoustically represented
25. A single button to silence and alarm should be incorporated
26. Remote control for the heater cooler unit to allow control the patient temperature
27. Should have safety certificate from a competent authority CE/FDA (US). Other equivalent certificates will not be accepted. Should have valid detailed electrical and functional safety test report from ERTL. Copy of the certificate/test report shall be produced along with the technical bid
28. Should have the accessories

- a. Standard venous clamp
- b. drawer which can be fixed below the console
- c. height adjustable slide guard which can be fixed to the right or the left side to the console

## **II. Heater Cooling Unit**

1. Should have two Tank & two circuit system:

1st circuit should be for blood heat exchanger of the oxygenator and/or blanket (Patient circuit) and the 2nd circuit should be for the cardioplegia heat exchanger (Cardioplegia circuit)

2. Water temperature should be regulated independently.
3. Main and cardioplegia ice should be separated in two tanks to ensure fast temperature adjustments of the two circuits and allow the availability of cold cardioplegia
4. Should be modern design and the outer housing should be in polished stainless steel
5. Should be compact
6. Should be easy to manoeuvre (very good running, 180 degrees turnable wheels with foot-lever operated brakes)
7. The data of the user interface should be transferrable to the Device via CAN.
8. The Control Unit should be individually positioned on the machine or the mast of any heart-lung machine. No second remote control is necessary.
9. There should be provision to connect two external temperature sensors to the cooling warming therapy units and to the HCU device
10. The interior design should include an automatically controlled mixing valve.
11. Only the circulated water should be heated (not the tank water).
12. The rapid switching of temperatures should be applicable to both, the patient water circuit and the cardioplegia water circuit.
13. Only the circulated water should be heated (not the tank water).
14. The rapid switching of temperatures should be applicable to both, the patient water circuit and the cardioplegia water circuit.
15. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid