OFFICE OF THE MANAGING DIRECTOR
ASSAM MEDICAL SERVICES CORPORATION LIMITED
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ECF No.: 298482/I/179197/2023

CORRIGENDUM NO.1

e-TENDER FOR SUPPLY OF ANESTHESIA WORKSTATION.

This has reference to the e-tender No: AMSCL/PROC-EQUIP/2023-24/0467/1421, Dated: 04/ 05 /2023 invited from manufacturers or authorized distributors / dealers for entering into one financial year rate contract for "**SUPPLY OF ANESTHESIA WORKSTATION"**. Technical specification amendments have been incorporated in the tender as detailed in **Annexure-I.** The details of amendments can be obtained from the website http://assamtenders.gov.in.

All other terms & conditions of the tender referred to above shall remain unchanged.

-Sd/-

Managing Director, AMSCL

Annexure-I

Technical Corrigendum-1

Tender No: AMSCL/PROC-EQUIP/2023-24/0467/1421, dated:04/ 05 /2023 for Supply of Anaesthesia Workstation.

Note: Amended Technical Specifications are in Bold italic letters.

SN	AMSCL Technical Specifications	Technical Specifications quoted by Bidder	Deviation (If Any)	If YES: How the quoted specifications is superior or inferior to the quoted specifications
	1.Anaesthesia Workstation-Type A			
1	Description of Anaesthesia workstation:-			
A	***Anaesthesia Workstation with Inbuilt Anaesthesia Ventilator with Inbuilt/Integrated Multipara Monitor with Anaesthetic Gas Module.***			
B	Compact and modular, three gas Anaesthesia workstation with an integrated ventilator for adult to infants and integrated airway monitor for airway pressures and volume.			
C	Should be movable on antistatic castor wheels with lock system.			
D	It should be capable of providing low-flow anaesthesia to minimize gas and anesthetic agent consumption for economical day to day operation.			
E	***Anaesthesia workstation should have inbuilt Ventilator with Colored touch screen 10 inch or more display.***			

F	The trolley should be made of ABS/FRP /Steel with 4 wheels & 02 Drawers or more and front wheels should have locking system.				
G	The system should have upto 1 Hr. or more battery backup.				
2	Gas Delivery System				
A	Should have pin index yokes one for oxygen and one nitrous oxide besides separate connection for central gas supply for Oxygen, Nitrous oxide and Air.				
B	The machine should have pressure gauges for central supply lines mounted on front of Anaesthesia machine for better visibility. The gas connections should be non-interchangeable. The pressure gauge for cylinder line mounted on front/side or back.				
C	Automatic cutoff of N2O / oxygen pressure failure.				
D	Hypoxic guard for liner regulation of minimum oxygen concentration at 21% volume and must ensure a minimum oxygen flow of 200ml at low fresh gas flow setting even below total 500 ml fresh gas flow.				
E	Audio-visual oxygen failure alarm.				
F	Emergency oxygen flush at 30-70L/min bypassing the vaporizer				
G	The machine should have auxiliary oxygen flow meter for supply of oxygen to patients in the postoperative period or to patient who is being operated under regional anaesthesia.				
3	Flow meter				

A	*Dual cascade type flow meter tubes for Oxygen, N2O and Air upto 10 Lit/min or more.*			
4	Vaporizer			
A	Machine should have facility to mount two quick mount type selectatec vaporizer for easy interchangeability and safety.			
B	Should be provided with a temperature / pressure compensated and flow independent vaporizer for Isoflourane, Sevoflourane.			
C	Vaporizer should have extended delivery range with standard marking.			
D	The vaporizer design should be maintenance free.			
5	Breathing System			
A	Should have circle absorber system			
B	Should have adjustable pressure relief valve from 5 to 60m bar or more.			
C	Should have change over from Spontaneous to Bag ventilation with single step			
D	*Should have optimized absorber canister approx. 1.5 Ltr. The CO2 absorber should be reusable and autoclavable and Canister should be easily detachable from the system without interrupting during active ventilation.*			
E	Should have an integrated/ external fresh gas outlet for connecting Magill, Bain's circuit & paediatric circuit.			
6	Anaesthesia Ventilator			
A	Electronically controlled electrically / pneumatically driven ventilator.			

B	Should not require changing of bellows for adult & infants.			
C	*Modes: Volume controlled, manual / spont, pressure controlled mode, SIMV-PC, SIMV-VC, PSV with apnea backup.*			
D	*Tidal volume : Minimum 10 ml or less, maximum 1400 ml or more.*			
E	*PEEP : Off, 4-20 cm H2O*			
F	Breathing Frequency : 4 to 60 BPM or more.			
G	IE Ratio : 2:1 to 1:3			
H	Inspiratory pause : 0 – 50% of Ti			
I	*Pressure/Flow Trigger-1 to-10 cm H2O or more /Flow:1 to 60 L/min or more*			
j	Should automatically compensate for compliance of breathing system .			
k	Should be provided with Desflurane vaporizers.			
M	*Should have oxygen sensor, flow sensor calibration option when the ventilator is switch on.*			
N	Manual ventilation should be possible if the ventilator fails.			
7	Multipara Monitor			
A	Screen size should be 12"inch or more.			
B	*Should be able to measure 7 Parameters: ECG, SPO2, NIBP, TEMP, RR, ETCO2(Main stream or side stream or micro stream), IBP with AGM . AGM can be either with Anaesthesia machine or patient monitor.*			
8	Airway Monitoring			

A	*Integrated monitor (10" or more color display) for electronic monitoring and display of following set and measured values :Expiratory Tidal Volume, Expiratory Minute volume, PEEP, Peak and Mean and Plateau airway pressure, Frequency, Waveform display for Airway pressure, flow and volume.*			
9	Alarm limits & alarms			
A	Adjustable high / low limits with audio and visual alarms for the following:-Minute volume, airway pressure (incl stenosis and disconnect), Insp oxygen concentration, audio power supply fail alarm, Fail to cycle warning.			
10	Machine should have RS 232 /USB connectivity port.			
11	Certifications			
A	*System should be European CE with a four digit notified body number/US FDA/BIS certified and certificate to be submitted.*			
B	Manufacturer should be ISO 13485 Certified and certificate to be submitted.			
12	*Anaesthesia machine with Inbuilt/integrated ventilator, Multipara Monitor and Anaesthetic Gas Module should be from same manufacturer.*			
13	Warranty and CMC			
A	Warranty: 03 Years.			
B	CMC:05 Years post Warranty.			
14	Scope for supply with each machine:-			
A	3 gas anaesthesia machine			

B	Trolley with 2 or more drawers.			
C	Writing surface			
D	Pin Index yokes for O2 and N2O			
E	Pipe line connections for all three gases			
F	Integrated Ventilator and Multipara Monitor along with 1 set of all required accessories.			
G	Closed breathing system			
H	Adult & Paediatric autoclavable patient tubing (Silicon) - 2 each			
I	Anesthetic mask size-Adult & Pediatric -2 each			
J	Vaporizer for Isoflourance, Sevoflourance, Desflurane vaporizers.			
K	Central gas supply hoses (color coded)			

2.Anaesthesia Workstation-TYPE B				
SN	AMSCL Technical Specifications	Technical Specifications quoted by Bidder	Deviation (If Any)	If YES: How the quoted specifications is superior or inferior to the quoted specifications
1	Description of Anaesthesia workstation:-			
A	*Anaesthesia Workstation with Inbuilt/Integrated Anaesthesia Ventilator with Multipara Monitor with Anaesthetic Gas Module.*			
B	*Compact and modular, three gas Anaesthesia workstation with an inbuilt/integrated ventilator for adult to Pediatric and integrated*			

	airway monitor for airway pressures and volume			
C	Should be movable on antistatic castor wheels with lock system.			
D	It should be capable of providing low-flow anaesthesia to minimize gas and anesthetic agent consumption for economical day to day operation.			
E	*Anaesthesia workstation should have inbuilt Ventilator with Colored touch screen /Rotating Knob 08 inch or more display.*			
F	The trolley should be made of ABS/FRP /Steel with 4 wheels & 02 Drawers or more and front wheels should have locking system.			
G	The system should have upto 1 Hr. or more battery backup.			
2	Gas Delivery System			
A	Should have pin index yokes one for oxygen and one nitrous oxide besides separate connection for central gas supply for Oxygen, Nitrous oxide and Air.			
B	The machine should have pressure gauges for central supply lines mounted on front of Anaesthesia machine for better visibility. The gas connections should be non-interchangeable. The pressure gauge for cylinder line mounted on front/side or back.			
C	Automatic cutoff of N2O / oxygen pressure failure.			
D	Hypoxic guard for liner regulation of minimum oxygen concentration at 21% volume and must ensure a minimum oxygen flow of 200ml at			

	low fresh gas flow setting even below total 500 ml fresh gas flow.			
E	Audio-visual oxygen failure alarm.			
F	Emergency oxygen flush at 30-70L/min bypassing the vaporizer			
G	The machine should have auxiliary oxygen flow meter for supply of oxygen to patients in the postoperative period or to patient who is being operated under regional anaesthesia.			
3	Flow meter			
A	Dual cascade type flow meter tubes for oxygen and N2O upto 10 Lit/min or more.			
4	Vaporizer			
A	Machine should have facility to mount two quick mount type selectatec vaporizer for easy interchangeability and safety.			
B	Should be provided with a temperature / pressure compensated and flow independent vaporizer for Isoflourane, Sevoflourane.			
C	Vaporizer should have extended delivery range with standard marking.			
D	The vaporizer design should be maintenance free.			
5	Breathing System			
A	Should have circle absorber system			
B	Should have adjustable pressure relief valve from 5 to 60m bar or more.			

C	Should have change over from Spontaneous to Bag ventilation with single step			
D	*Should have optimized absorber canister approx. 1.5 Ltr.The CO2 absorber should be reusable and autoclavable and Canister should be easily detachable from the system without interrupting during active ventilation.*			
E	Should have an integrated/ external fresh gas outlet for connecting Magill or Bain's circuit or paediatric circuit.			
6	Anaesthesia Ventilator			
A	Electronically controlled electrically / pneumatically driven ventilator .			
B	Should not require changing of bellows for adult & infants.			
C	*Modes: Volume controlled, manual / spont, pressure controlled mode, SIMV-PC, SIMV-VC, PSV with apnea backup.*			
D	Tidal volume : Mnimum 20 ml or less,maximum 1400 ml or more.			
E	*PEEP: Off, 4- 20 cm H2O*			
F	Breathing Frequency: 4 to 60 BPM or more.			
G	IE Ratio : 2:1 to 1:3			
H	Inspiratory pause : 0 – 50% of Ti			
I	*Pressure/Flow Trigger -1 to -10 cm H2O or more/Flow : 1 to 60 L/min or more*			
j	Should automatically compensate for compliance of breathing system .			
k	*Deleted*			

M	*Should have oxygen sensor, flow sensor calibration option when the ventilator is switch on*				
N	Manual ventilation should be possible if the ventilator fails.				
7	Multipara Monitor				
A	Screen size should be 12"inch or more				
B	*Should be able to measure 6 Parameters: ECG, SPO2, NIBP, TEMP, RR, ETCO2(Main stream or side stream or micro stream)*				
8	Airway Monitoring				
A	Integrated monitor (8" or more color display) for electronic monitoring and display of following set and measured values :Expiratory Tidal Volume, Expiratory Minute volume, PEEP, Peak and Mean and Plateau airway pressure, Frequency, Waveform display for Airway pressure, flow and volume.				
9	Alarm limits & alarms				
A	Adjustable high / low limits with audio and visual alarms for the following:-Minute volume, airway pressure (incl stenosis and disconnect), Insp oxygen concentration, audio power supply fail alarm,Fail to cycle warning.				
10	Machine should have RS 232 /USB connectivity port.				
11	Certifications				
A	*System should be European CE with a four digit notified body number/US FDA/BIS certified and certificate to be submitted*.				

B	Manufacturer should be ISO 13485 Certified and certificate to be submitted.			
12	*Anaesthesia machine with Inbuilt/integrated ventilator, Multipara Monitor and Anaesthetic Gas Module should be from same manufacturer.*			
13	Warranty and CMC			
A	Warranty: 03 Years.			
B	CMC:05 Years post Warranty.			
14	Scope for supply with each machine:-			
A	3 gas anaesthesia machine			
B	Trolley with 2 or more drawers.			
C	Writing surface			
D	Pin Index yokes for O2 and N2O			
E	Pipe line connections for all three gases			
F	Integrated Ventilator and Multipara Monitor along with 1 set of all required accessories.			
G	Closed breathing system			
H	Adult & Paediatric autoclavable patient tubing (Silicon) - 2 each			
I	Anesthetic mask size-Adult & Pediatric -2 each			
J	Vaporizer for Isoflourance, Sevoflourance.			
K	Central gas supply hoses (color coded)			