

PRICE BID FOR ANASTHESIA DEPARTMENT EQUIPMENTS

EarnestMoneyRs...../-enclosed
NSC/FDR/CDRNo.

Security money 10% of the cost
Of the article.

Department-ANASTHESIA

Sl.No.	Name of the article& Technical Specification	Cost of the article per unit
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Technical Specification:-**1. Specification for Advanced Anaesthesia Workstation**

An integrated Anaesthesia workstation for advanced surgical setup, comprising of anaesthesia delivery system, compact re-breathing system, agent specific vaporizers and ICU quality ventilator for adult and children with advance modes.

It should have ergonomic design with a min 6 inches or more coloured graphic user interface, and data port with Oxygen, Gas flow and ventilator information available in electronic form.

Anaesthesia Machine:

- Unit should have primary connection for Central gas supply with pressure gauges indicating inlet line pressure of all three gases i.e. Air, Oxygen and Nitrous Oxide. As a backup machine should also have provision for connecting oxygen and nitrous oxide pin index cylinders.
- Machine should have Electronic fresh Gas control / monitoring of flows. Audio - visual alarm for failure of Oxygen. The machine should have virtual flow meters towards electronic monitoring of gases.
- Control of minimum 21% Oxygen in fresh gas up to Flow > 1L/min. and at least 250 ml of Oxygen concentration for minimal flow application (fresh gas flow < 1L/min). No basal flow.
- Integrated Oxygen flush with self returning valve.
- Machine should also have an independent fresh gas outlet for connection to Bain's or Magill circuit.
- The Anaesthesia Machine, Vaporiser, anaesthesia ventilator must be from same manufacturer for integration ease and serviceability.
- Fresh gas flow setting from 50ml/min to 12 Ltr./min
- The machine should have Desflurane compensation.
- Quoted model must be US FDA approved.

Breathing System:

- Compact breathing system suitable for minimal flow anaesthesia, with least patient circuit volume including absorber etc. approx. 3 L (excluding bag) for fast response to change in fresh gas composition.
- Fresh gas decoupled breathing system for adult and children with possibilities to mount the breathing system on left or right side.
- APL valve with direct setting of release pressure.
- The machine should have inbuilt breathing system warmer.

Integrated Ventilator:

Amey *Saharshi* *Chari* *Panna*

- Ventilator suitable for adult and children without changing of bellow. Automatic breathing circuit Compliance correction. Light weight bellow should not offer any constant PEEP.
- Spont. Breathing
- Manual Ventilation
- IPPV with Plateau adjustment from 0 to 50% of Ti
- PLV with decelerating flow
- Pressure controlled ventilation PCV
- Pressure Support & SIMV
- High peak inspiratory flow upto 70 LPM,
- Tidal volume adjustment range 20ml to 1400 ml
- PEEP from 0 to 20 mbar Electronically adjustable
- Resp frequency from 6 to 60 per min.
- I:E from 1:4 to 4:1
- The ventilator should be electrically driven and electronically controlled so as to reduce the gas and drug cost.
- Single step changeover of mode. Ventilator should have standard PVO (Airway pressures, Volumes and Oxygen) monitoring. Easy to start with auto set alarms and a central colour graphic display for settings and monitored values.

Vaporizers:

- Temperature / pressure compensated and flow independent Sevoflurane & Isoflurane vaporizer. Vaporizer should have extended delivery range from 0 to 6 Vol. %. Vaporizer should have transport lock to provide hermetic sealing of agent chamber during transport & storage.
- The vaporiser design should be maintenance free. Should not require periodic overhaul etc, as per manufacturer recommendation.

Scope of Supply:

- Three gas Anaesthesia workstation
- Trolley with three drawers and locking
- Full length side GCX rails for mounting of accessories
- Yokes - 2 X Oxygen & 1 X N2O, besides central supply connections
- Integrated ventilator and semi-closed breathing system
- Specific vaporisers for Sevoflurane / Isoflurane
- Reusable silicon Adult and Pediatric patient tubings separately.

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Saharshi

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- Central gas supply hoses

Specifications for Anaesthesia Monitor

1. Should be suitable for adult, paediatric neonatal patients monitoring.
2. Should monitor ECG, Respiration, NIBP, SpO2, Dual Temperature, Dual IBP as standard
3. Should have ST analysis, Arrhythmia detection, pacer spike detection, Drug Dose Calculation and OxyCRG as standard in every monitor
4. Should have integrated 15" or above TFT-LCD colour touch screen display (resolution min 1024*768) with minimum 10 channels of waveforms.
5. Defibrillation and ESU protection should be present.
6. Should have monitoring, surgery and diagnostic mode of monitoring.
7. Should have Advance Arrhythmia monitoring for Asystole, Vfib/Vtac, VT>2, Couplet, Bigeminy, Trigeminy, R on T, PVC, Tachy, Brady, Missed Beats, IRR, PNC, Vbrady.
8. Monitor access should be with Touch screen, rotary knob and fast access key for quick function.
9. 120 hrs of trend and 60 events with waveform as standard in all monitors
10. Colour or position of waveforms or parameters should be able to be adjusted based on users preferences. Big font on screen format should be present.
11. Nurse call, VGA output port should be standard in every monitor.
12. Monitor should have USB port for software upgrade
13. Should have inbuilt three channel recorder as standard in every monitor
14. Should have 2hrs (typically) of battery backup as standard in every monitor



15. Should be European CE complying with European Directive 93/42/EEC for both Monitor and software to control physiologic monitoring systems.
16. Should display automatic Agent identification Anesthesia Gas monitoring module with MAC value along with capnography through side stream monitoring.
17. Should be provided with appropriate mountings system to mount patient monitor on anaesthesia machine.

Should have following parameters

ECG

- Monitor should have capability for display upto 7 Lead.
- ST Analysis
- Waveform Freeze option with review of 120 sec
- Range: 15 to 350bpm

RESPIRATION

- Through impedance pneumography method or EtCO₂

SpO₂

- Should provide value for arterial oxygen saturation as well as plethysmographic pulse waveform

NIBP

- By oscillometric principle of measurement.
- Should display Systolic, diastolic, mean pressure in large easy to read display
- Range: 10 to 270mmHg

Dual Temperature – core & skin. Range: 0 to 50 Deg C

Dual IBP – Should include Starter kit and simultaneous monitoring of dual temp and dual IBP should be possible. Range: -50 to 300mmHg

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Scope of supply must include:

- Basic unit with ECG, Respiration, SpO2, Dual Temp, NIBP, Dual IBP, EtCO2, Anaesthetic Gas Monitoring, inbuilt battery, Inbuilt three channel recorder – 1 no
- 5 lead ECG Cable – 1 no
- ECG disposable electrodes – 50 nos.
- SpO2 finger sensor (Adult & Neonatal) – 3 each
- Skin temperature probe – 2 no
- NIBP Hose - 1no per monitor
- Adult, Paediatric & Neonatal cuff - 5 each
- Should be supplied with intermediate IBP cable– 5 each
- Disposable transducers – 10 nos.
- Water trap – 10 nos.
- Sampling lines - 50 nos.
- Paper rolls- 4 no
- Instruction for Use per monitor

1-SHOUTABLEUPS/CVT

2-Warranty/CMCDATEDONINTALLATION5YEARS.

Signature of Tenderer

Signature of Witness:

Name:

Full Address:

Name of the Tenderer:

Address of Firm

With stamp