



Republic of the Philippines  
Department of Health  
**METRO MANILA CENTER FOR HEALTH DEVELOPMENT**

**SUPPLEMENTAL/ BID BULLETIN NO. 1**

**IB 2022 – 049E  
PROCUREMENT OF 1 SET ANESTHESIA MACHINE**

This Supplemental/Bid Bulletin No. 1 is being issued to revise provisions/specifications in the Bidding Documents for a forecited project:

<b>Revision and clarification to provisions/specifications in the Bidding Documents:</b>	
Recipient: Health Facilities in Paranaque City	
<b>From</b>	<b>To</b>
<b>ANAESTHESIA MACHINE</b>	<b>ANESTHESIA MACHINE</b>
The machine should be capable of delivering Low flow and Minimal flow anaesthesia	The machine should be capable of delivering Low flow and Minimal flow anesthesia
The anaesthesia machine with circle absorber, Ventilator and Vaporizer should be CE and FDA approved.	The anesthesia machine with circle absorber, Ventilator and Vaporizer should be CE and FDA approved.
Anaesthesia machine frame shall be manufactured in strong but lightweight material. Aluminum or composite material is preferential over steel frame construction.	Anesthesia machine frame shall be manufactured in strong but lightweight material. Aluminum or composite material is preferential over steel frame construction.
Should have at least three non-lockable drawers for storing accessories.	Should have at least one to three non-lockable drawers for storing accessories.
Frame shall accommodate up to four (4) backup cylinders with the options of: <ul style="list-style-type: none"> <li>o O2, N2O, Air</li> <li>o O2, O2, N2O, Air</li> <li>o O2, N2O, Air, Air</li> <li>o O2, O2, N2O, N2O</li> <li>o O2, N2O, N2O, Air</li> </ul>	Frame shall accommodate up to three (3) backup cylinders with the options of:  If three back up cylinders is approved <ul style="list-style-type: none"> <li>o O2, N2O, Air</li> </ul>
Should have auxiliary gas outlets (2 nos for each Oxygen and Air)	Should have auxiliary gas outlets (at least 1 for each Oxygen and Air)
The unit should have a battery back-up facility for the ventilator in the event of power loss. (Minimum of 60 mins operation)	The unit should have a battery back-up facility for the ventilator in the event of power loss. (Minimum of 30 mins operation)
Flow range: 50 ml - 10 lpm	Flow range: Manufacturer's Standard
The mechanical anti-hypoxic system must limit minimum Oxygen levels to 30% ±3% (of total O2 and N2O flow)	The mechanical anti-hypoxic system must limit minimum Oxygen levels to 20% ±3% (of total O2 and N2O flow)
In case of power loss, it shall be possible to set the fresh gas flow accurately for each gas and manually ventilate adding anaesthetic agent.	In case of power loss, it shall be possible to set the fresh gas flow accurately for each gas and manually ventilate adding anesthetic agent.
The unit should accommodate at least three vaporizers for Anaesthetic agent delivery	The unit should accommodate at least two vaporizers for Anesthetic agent delivery.
<i>Synchronized Intermittent Mandatory Ventilation (SIMV)</i>	<i>Synchronized Mandatory Minute Ventilation (SMMV) or its equivalent</i>



Republic of the Philippines  
Department of Health  
**METRO MANILA CENTER FOR HEALTH DEVELOPMENT**

Tidal Volume: 20 ml - 1600 ml	Tidal Volume: 20 ml - 1500 ml
1 Vaporizer (For Sevoflurane, Isoflurane, Halothane)	1 Vaporizer (For Sevoflurane, Isoflurane, Vaporizer should be compatible with the available Sevoflurane at OSPAR I.
1. <b>Completion Period:</b> The delivery, installation, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff must be completed within <b>30</b> calendar days upon receipt of Notice to Proceed	1. <b>Completion Period:</b> The delivery, installation, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff must be completed within <b>30 - 60</b> calendar days upon receipt of Notice to Proceed

Bidders are advised to use the following attached forms and submit together with all required documents for the submission of bids on 18<sup>th</sup> day of April 2022, 9:00 AM:

This Supplemental/Bid Bulletin No. 1 shall form an integral part of the Bidding Documents. All other provisions indicated in the bidding documents which are not affected by this Supplemental/Bid Bulletin No. 1 shall remain in effect.

For guidance and information of all concerned.

Issued this 9<sup>th</sup> day of April, 2022 in MMCHD

Approved by:

**ALELI ANNIE GRACE P. SUDIACAL, MD, MPH**  
Director III / BAC Chairperson *yg*



**METRO MANILA CENTER FOR HEALTH DEVELOPMENT**

Republic of the Philippines Department of Health Metro Manila Center for Health Development  <b>TECHNICAL SPECIFICATIONS</b>				
<b>Item No. 1</b>	<b>ANESTHESIA MACHINE</b>	Qty./Unit	<b>1 Set</b>	
Name of Manufacturer:			Country of Origin	
Brand:			Model: (if applicable)	
ABC: <b>2,400,000.00</b>				
PURCHASER'S SPECIFICATION			STATEMENT OF COMPLIANCE	
A. Technical Specifications: <ul style="list-style-type: none"> <li>• <b>General</b></li> <li>- Should have provision for delivery of Oxygen, Nitrous oxide and medical air</li> <li>- The machine should be capable of delivering Low flow and Minimal flow anesthesia</li> <li>- The anesthesia machine with circle absorber, Ventilator and Vaporizer should be CE and FDA approved.</li> <li>- Should have independent attachments for connecting central gas supply and pin indexed cylinders.</li> <li>- Should have non-interchangeable pipeline hose inlet connection to pipelines for medical Oxygen, Nitrous Oxide and medical Air</li> <li>- Should have large size pressure gauges, for easy visibility, color coded, two each for Oxygen, Nitrous Oxide and Air</li> <li>- Anesthesia machine frame shall be manufactured in strong but lightweight material. Aluminum or composite material is preferential over steel frame construction.</li> <li>- The machine shall have a maximum of four castors/wheels (with brakes) for maneuverability.</li> <li>- Should have at least one to three non-lockable drawers for storing accessories.</li> </ul>				



<p>- Frame shall accommodate up to three (3) backup cylinders with the options of:</p> <p>If three back up cylinders is approved</p> <ul style="list-style-type: none"><li>o O2, N2O, Air</li></ul> <p>- The common gas outlet shall be easily accessible in the event of an emergency and for use of alternate breathing circuits.</p> <p>- Should have auxiliary gas outlets (at least 1 for each Oxygen and Air)</p> <p>- Should have sufficient table top work space.</p> <p>- Should have illumination for the writing table/work surface.</p> <p>- The frame should have integrated power outlets to supply a minimum of Four (4) external devices</p> <p>- Should have a top shelf, maneuvering handle and foot rest</p> <p>- The unit should have a battery back-up facility for the ventilator in the event of power loss. (Minimum of 30 mins operation)</p> <p>- Power Supply: 220V, 50/60Hz</p> <p><b>• Gas Flow</b></p> <ul style="list-style-type: none"><li>- With Antistatic and Cascaded dual flow tubes for all gases (O2, N2O and Air)</li><li>- Flow range: Manufacturer's Standard</li><li>- With audible and visual alarm for oxygen failure.</li><li>- With N2O cut-off facility if O2 supply fails.</li><li>- With Oxygen flush facility (non-lockable) bypassing Vaporizer.</li><li>- The unit should have a mechanical anti-hypoxic device system to control the ratio of Oxygen and Nitrous Oxide.</li><li>- The mechanical anti-hypoxic system must limit minimum Oxygen levels to 20% <math>\pm</math>3% (of total O2 and N2O flow)</li><li>- With visual display of individual gas flows.</li><li>- In case of power loss, it shall be possible to set the fresh gas flow accurately for each gas and manually ventilate adding anesthetic agent.</li></ul> <p><b>• Vaporizers</b></p> <ul style="list-style-type: none"><li>- The unit should accommodate at least two vaporizers for Anesthetic agent delivery.</li><li>- Maintenance free.</li></ul>		
---	--	--



<p><b>• Ventilator</b></p> <ul style="list-style-type: none"> <li>- Should be able to cater a diverse range of patient groups from neonates to adult patients.</li> <li>- Display: At least 12 inches color TFT</li> <li>- Ventilation Modes             <ul style="list-style-type: none"> <li>◦ Volume Control Ventilation (VCV)</li> <li>◦ Pressure Control Ventilation (PCV)</li> <li>◦ Synchronized Intermittent Mandatory Ventilation (SIMV)</li> <li>◦ Synchronized Mandatory Minute Ventilation (SMMV) or its equivalent</li> <li>◦ Pressure Support Ventilation (PSV)</li> <li>◦ Spontaneous</li> </ul> </li> <li>- Should have a leak and compliance test</li> <li>- Should have the ability to display Patient Spirometry loop</li> <li>- Should be able to display waveforms for flow and airway pressure</li> <li>- Volume measurement shall be by separate flow sensors.</li> <li>- The volume measurement flow sensors/transducers shall be housed completely within the breathing system absorber and not removed via tubes or channels.</li> <li>- Volume measurement sensors should not be disposable.</li> <li>- Ventilator Parameters             <ul style="list-style-type: none"> <li>◦ Tidal Volume: 20 ml - 1500 ml</li> <li>◦ Frequency: 4 - 100 bpm</li> <li>◦ I:E Ratio: 1:0.2 to 1:8</li> <li>◦ Inspiratory Pause: 0-60%</li> <li>◦ PEEP: Off, 4 - 20 cmH<sub>2</sub>O</li> <li>◦ Pressure Limit: 5 - 70 cm H<sub>2</sub>O</li> <li>◦ Minute Volume: 2 to 50 lpm</li> <li>◦ Inspiratory Flow: 2 - 70 lpm</li> </ul> </li> <li><b>• Breathing System</b></li> <li>- All parts of the system that are in contact with the patient gas shall be latex free and Autoclavable except for non-autoclavable parts.</li> <li>- Should have a heater system to avoid water condensation.</li> <li>- Should have a quick release canister for sodalime</li> </ul>		
--	--	--



**METRO MANILA CENTER FOR HEALTH DEVELOPMENT**

<p>with minimum capacity of 1500 ml</p> <ul style="list-style-type: none"> <li>- Should have a provision for FiO2 monitoring cell and FiO2 value should be monitored on the main screen.</li> <li>- Should come with a bag arm with height and positional adjustment as a standard</li> </ul> <p>• <b>Accessories</b></p> <ul style="list-style-type: none"> <li>- High pressure hoses for (O2, N2O and Air)</li> <li>- Adult patient circuit (Reusable or Disposable)</li> <li>- Face Mask (Reusable or Disposable)</li> <li>- 2 Liter Breathing bags (2 pcs)</li> <li>- Power Cord</li> <li>- 1 Vaporizer (For Sevoflurane, Isoflurane)</li> <li>- Vaporizer should be compatible with the available Sevoflurane at OSPAR I.</li> <li>- Galvanic Type FiO2 Cell</li> </ul>		
<p><b><u>B. REQUIREMENTS IF AWARDED THE CONTRACT:</u></b></p> <p><b>1. Completion Period:</b> The delivery, installation, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff must be completed within <b>30-60</b> calendar days upon receipt of Notice to Proceed.</p> <p><b>2; Testing:</b> Prior to acceptance, the end user shall conduct a physical inspection and functionality test. The equipment must be functioning and must have no physical damage and defect.</p> <p><b>3. Training:</b> The supplier shall provide a training on the proper use and maintenance of the equipment to the end-users and to the hospital maintenance staff within 3 days upon delivery of the equipment.</p> <p><b>4.Warranty:</b> Warranty certificate for two (2) years on parts and service. The supplier shall either repair or replace any item or part in the equipment that is found to be defective in material or in workmanship under normal use. The warranty period shall commence from the date of acceptance by the end-user after testing and commissioning.</p>		

