



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

SUPPLEMENTAL/ BID BULLETIN NO. 1

IB NO. 2023-079E
PROCUREMENT OF 1 UNIT ANESTHESIA MACHINE

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

Revision and clarification to provisions/specifications in the Bidding Documents:	
ORIGINAL TECHNICAL SPECIFICATIONS	AMENDED
> Anesthesia 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.
> Display: At least 15 inches color TFT	> - Display: At least 10 inches 15 inches color TFT - RETAIN
> Display has Daytime and Nighttime color schemes	> Display has Daytime and Nighttime color schemes or adjustable brightness - RETAIN
> Tidal Volume: 10 ml - 1500 ml during Volume Control Modes	> Tidal Volume: 15 ml 10ml - 1500ml during Volume Control Modes - RETAIN
> I:E Ratio: 50:1 to 1:50	> I:E Ratio: 4:1 to 1:10 50:1 to 1:50- RETAIN
1. Completion Period: The delivery, installation, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff must be completed with 60 calendar days upon receipt of Notice to Proceed.	1. Completion Period: The delivery, installation, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff must be completed with 60-90 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 June 15, 2023, 10:00 AM

This Supplemental/Bid Bulletin No. 1 shall form part of the Bidding Documents. Any provisions in the Bidding Documents inconsistent herewith is hereby amended, modified and superseded accordingly.

For guidance and information of all concerned.

Issued this 9th day of June, 2023 in MMCHD.

Approved by:

SGD.
PRETCHELL P. TOLENTISNO, MD, MCHM
Director III / BAC Chairperson

Section VII. Technical Specifications

Republic of the Philippines Department of Health Metro Manila Center for Health Development TECHNICAL SPECIFICATIONS			
Item No. 1	ANESTHESIA MACHINE	Qty./Unit	1 UNIT
Name of Manufacturer:			Country of Origin
Brand:			Model: (if applicable)
ABC: 2,000,000.00			
PURCHASER'S SPECIFICATION			STATEMENT OF COMPLIANCE
Technical Specifications: <ul style="list-style-type: none"> • General - Should have provision for delivery of Oxygen, Nitrous oxide and medical air - The machine should be capable of delivering Low flow and Minimal flow anesthesia - The anesthesia machine with circle absorber, Ventilator and Vaporizer should be CE and FDA approved. - Should have independent attachments for connecting central gas supply 			

and pin indexed cylinders.

- Should have non-interchangeable pipeline hose inlet connection to pipelines for medical Oxygen, Nitrous Oxide and medical Air
- Should have large size pressure gauges, for easy visibility, color coded, two each for Oxygen, Nitrous Oxide and Air
- Anesthesia machine frame shall be manufactured in strong but lightweight material. Aluminum or composite material
- The machine shall have at least four castors/wheels (Has a Central brake with at least two castor brakes) for maneuverability.
- Should have at least one to three non-lockable drawers for storing accessories.
- Frame shall accommodate at least two backup cylinders for O₂, N₂O and Air.
- The common gas outlet shall be easily accessible in the event of an emergency and for use of alternate breathing circuits.
- Should have auxiliary gas outlets (at least 1 for each Oxygen and Air)
- Should have sufficient table top work space.
- Should have illumination for the writing table/work surface.
- The frame should have integrated power outlets to supply a minimum of Four (4) external devices
- Should have a top shelf, maneuvering handle and foot rest
- The unit should have a battery back-up facility for the ventilator in the event of power loss. (Up to 120 mins operation)
- Power Supply: 220V, 50/60Hz

• **Gas Flow**

- With Antistatic and Cascaded dual flow tubes for all gases (O₂, N₂O and Air)
- Flow range: Manufacturer's Standard
- With audible and visual alarm for oxygen failure.
- With N₂O cut-off facility if O₂ supply fails.
- With Oxygen flush facility (non-lockable) bypassing Vaporizer.
- The unit should have a mechanical anti-hypoxic device system to control the ratio of Oxygen and Nitrous Oxide.
- The mechanical anti-hypoxic system must limit minimum Oxygen levels to 20% ±3% (of total O₂ and N₂O flow)
- With visual display of individual gas flows.
- 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.

• **Vaporizers**

- The unit should accommodate at least two vaporizers for Anesthetic agent delivery.

- Maintenance free.

• **Ventilator**

- Machine must be able to ventilate patient using the preset settings provided by the End-user even presence of driving Gas is temporarily unavailable

- Should be able to cater a diverse range of patient groups from neonates to adult patients.

- There should be no changes in the Volume and Airway Pressure Delivery during Mechanical Ventilation when Fresh Gas settings is changed, or O2 Flush is Pressed

- Display: At least 15 inches color TFT

- Display has Daytime and Nighttime color schemes

- Ventilation Modes

◦ Volume Control Ventilation (VCV)

◦ Pressure Control Ventilation (PCV)

◦ Synchronized Intermittent Mandatory Ventilation (SIMV)

" ◦ Synchronized Mandatory Minute Ventilation (SMMV) or its equivalent "

◦ Pressure Support Ventilation (PSV)

◦ Spontaneous

◦ Has Cardiac Bypass Mode

- Pause mode for short-term interruptions of ventilation

"- Should have a leak and compliance test "

- Should be able to display waveforms for flow and airway pressure

- Volume measurement shall be by separate flow sensors.

- The volume measurement flow sensors/transducers shall be housed completely within the breathing system absorber and not remoted via tubes or channels.

"- Volume measurement sensors should not be disposable."

- Ventilator Parameters

◦ Tidal Volume: 10 ml - 1500 ml during Volume Control Modes

◦ Frequency: 4 - 100 bpm

" ◦ I:E Ratio: 50:1 to 1:50 "

◦ Inspiratory Pause: 5 to 80 %

◦ PEEP: Off, 4 - 20 cmH2O

◦ Pressure Limit: 10 - 70 cm H₂O

" ◦ Minute Volume: 2 to 50 lpm "

◦ Inspiratory Flow: 2 - 70 lpm

• **Breathing System**

- All parts of the system that are in contact with the patient gas shall be latex free and Autoclavable except for non-autoclavable parts.

- With fully integrated breathing system that can be detached from the main unit without tools required. Cleaning, disinfection, replaceable without tools, components during reprocessing, design optimized for easy and effective hygienic reprocessing.

- Should have a heater system to avoid water condensation.

"- Should have a quick release canister for sodalime with minimum capacity of 1500 ml "

- With pop off pressure release valve located at the APL valve

- Should have a provision for FiO₂ monitoring cell and FiO₂ value should be monitored on the main screen.

- Should come with a bag arm with height and positional adjustment as a standard

• **Compliance to Standards**

- ISO 5359/ ISO 32/ ISO 5360 for color coding identification of anesthetic agents and medical gases

- IEC 60601-1-2 for Electronic Medical Equipment Standards

- IEC 60601-1-8 for Alarm system standard

- IEC 60601-2-13 for safety standards of anaesthetic systems

- ISO 8835-2 for Anesthesia breathing systems

- ISO 8835-3 for Transfer and receiving systems of active anaesthesia gas systems standard

- ISO 8835-4 for Anesthesia vaporizers standards

- ISO 8835-5 for Anesthesia ventilators standards

- ISO 21647 for Safety and Essential performance standards of respiratory gas monitors

• **Accessories**

- High pressure hoses for (O₂, N₂O and air)

- Adult patient circuit (Reusable or Disposable)

- Face Mask (Reusable or Disposable)

- 2 Liter Breathing bags (2 pcs)

"- Power Cord "

- 1 Vaporizer (For Sevoflurane)

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Description	Quantity	Delivery Site	Delivery Period
ANESTHESIA MACHINE	1 UNIT	Ospital ng Muntinlupa	60-90 calendar days upon receipt of the Notice to Proceed.

Name of Company: _____
Address: _____
Signature Over Printed Name : _____
Telephone/Fax Number : _____
Email: _____