

STATE OF DELAWARE



*DELAWARE HEALTH
AND SOCIAL SERVICES*

DIVISION OF MANAGEMENT SERVICES

Specifications and Contract Documents No. 7226
for
iVent 201 IC+AB Intensive Care and Non-Invasive Ventilation with
Adaptive Bi-Level Mode
15 Each

Required for Use By

Division of Public Health
Division of Public Health, Preparedness Section
100 Sunnyside Road
Smyrna, DE 19977

Deposit
Performance Bond

WAIVED
WAIVED
Date Due: 05/29/08
10:00 A.M. Local Time

Delaware Health and Social Services
Division of Management Services
Procurement Branch
Herman M. Holloway Sr. Health and Social Services Campus
1901 N. DuPont Highway
New Castle, Delaware 19720

INVITATION TO BID # 7226

Sealed bids for **iVent 201 IC+AB Intensive Care and Non-Invasive Ventilation with Adaptive Bi-Level Mode 15 each** for the Division of Public Health Preparedness Section.

Delaware Health & Social Services, Procurement Branch, Main Administration Building, Second Floor, Room #254, 1901 North DuPont Highway, (South Loop) Herman M. Holloway Sr., Health & Social Service Campus, New Castle, Delaware 19720, until **10:00 A.M. local time on 05/29/08** which time they will be opened, read and recorded.

Specifications may be obtained at the above office. Phone: (302)255-9292.

Please Note: The following paragraphs hereby become part of the General Requirements of this bid.

1, 2, 3, 4.1, 5.1, 6.1, 7.1, 9.1, 10.1, 11.1, 12.1, 13.1, 14.2, 15, 16.1, 17.1, 18.1, 19.1, 20.2, 20.3, 23.1, 24.1 and 25.

Please review the General Rules and Conditions and the General Requirements, (Non-Food Only), which appear on the DHSS website. The following forms must be included with your bid: 1) the Bidder Signature Form, 2) the Vendor Certification Form and 3) the Office of Minority and Women Business Enterprise Forms. All of these documents can be accessed on the DHSS website:

<http://www/dhss.delaware.gov/dhss/rfp/dhssrfp.htm>

Contact Person: **Debbie Donovan (302) 255-9292**

Note to Vendors: Your bid **must be signed** and all information on the signature page completed. If you do not intend to submit a bid and you wish to be kept on our mailing list you are required to return the face sheet with **"NO BID"** stated on the front with your **company's name, address and signature.**

Delivery Instruction:

All bids must be delivered to the address on the bid envelope: Under no circumstances will a bid be accepted that is late, delivered to the wrong building and/or signed for by a person other than a member of the Procurement staff. To ensure that your bid is in the Procurement Office on the date and time specified, there are three (3) recommended methods of delivering bid proposals: **Hand deliver, Federal Express and/or UPS.**

Ordering Procedure:

Successful contractors are required to have either a local telephone number with the area code or a toll free number to accept collect calls. All agencies are responsible for placing their orders and may be accomplished by written purchase order, telephone, fax or computer on line systems. The contractor or vendor must accept full payment by procurement (credit card) and/or conventional check or other electronic means at the State's option, without imposing any additional fees, cost or conditions.

For further bidding information please contact:

Buyer: **Debbie Donovan**
Delaware Health and Social Services
Main Administration Building-South Loop
Division of Management Services
Procurement Branch-Room 262

1901 North DuPont Highway
New Castle, Delaware 19720

Additional Terms and Conditions

Billing:

The successful vendor is required to "Bill as Shipped" to respective ordering Agency(s). Ordering Agencies shall provide at a minimum the contract number, ship to and bill to address, contract name and phone number.

Payment:

The Agencies or School districts involved will authorize and process for payment each invoice within thirty (30) days after the date of receipt. The contractor or vendor must accept full payment by procurement (credit) card and or conventional check and/or other electronic means at the State's option, without imposing any additional fees, costs or conditions.

Hold Harmless:

The contractor agrees that it shall indemnify and hold the State of Delaware and all its agencies harmless from and against all claims for injury, loss of life or damage to or loss of use of property cause or alleged to be caused by acts or omissions of the contractor, its employees and invitees on or about the premises and which arise out of the contractor's performance or failure to perform as specified in the Agreement.

Force Majeure:

Neither the contractor nor the ordering Agency shall be held liable for non-performance under the terms and conditions of this contract due, but not limited to, government restriction, strike, flood, fire or unforeseen catastrophe beyond either party's control. Each party shall notify the other in writing of any situation that may prevent performance under the terms and conditions of this contract.

Vendor Emergency Response Point of Contact:

The awarded vendor's shall provide the names, telephone number or cell phone numbers of those individuals who can be contacted twenty-four (24) hours a day seven (7) days a week where there is a critical need or commodities or services when the Governor of the State of Delaware declares a State of Emergency under the Delaware Emergency operations plan of April 2005. Failure to provide this information could render the bid as non-responsive.

Contact Person:

Address:

Phone Number:

Cell Phone Number:

Please Note:

1. Only one bid will be accepted by a bidder.
2. Specified written responses detailed response on each item.
3. Please specify if vendor is unable to meet any of the specified items.
4. All bid totals must include delivery, warranty, service agreement, training and/or upgrades, or your bid will not be accepted.
5. Agency will review all bid proposals and evaluate same.

SPECIFICATIONS:

- a.** A fully featured ventilator with Pressure Control mode Assisted Control (A/C) or Synchronized Intermittent Mandatory Ventilation (SIMV)
- b.** Volume Control mode (A/C or SIMV)
- c.** Continuous Positive Airway Pressure (CPAP) / Pressure Support Ventilation (PSV) and Adaptive Bi-Level (non-invasive or invasive ventilation).
- d.** Software packages must include:
 1. Pressure
 2. Flow and Volume Waveforms
 3. Trending
 4. Respiratory Diagnostics
 5. Internal Oxygen Mixer with Sensor, High and Low Pressure Oxygen
- e.** Computer Controlled Ventilator Control Principle: Closed Loop Flow & Pressure Controller
- f.** Ventilation Modes:
 1. Assist Control (A/C):
 2. Volume Controlled A/C or Pressure Controlled A/C
 3. Synchronized Intermittent Mandatory Ventilation (SIMV):
 4. Volume Controlled SIMV or Pressure Controlled SIMV
 5. Adaptive Bi-Level
 6. Continuous Positive Airway Pressure (CPAP)
 7. Pressure Support Ventilation (PSV)
- g.** Special Modes of Operation:
 1. Adjustable Rise Time
 2. 100% O2 Suction
 3. Easy Exhale
 4. Sigh Breath Preset Parameters by Patient Weight
 5. Adaptive Flow™
 6. Adaptive Time™
 7. Backup Apnea Ventilation

h. Ventilation Performance and Controlled Parameters:

1. Respiratory Rate - 1 to 80 BPM
2. Tidal Volume - 50 to 2,000 ml
3. Inspiratory Pressure Limit - 5 to 80 cm H₂O
4. Inspiratory Time - Adaptive Time TM, or 0.3 to 3 seconds
5. Peak Flow - Adaptive Flow TM or 1 to 120 L/min
 - i.** Spontaneous up to 180 L/min
6. Oxygen Mix - (FIO₂)21% to 100%
7. PEEP - 0 to 20 cm H₂O
8. Trigger Sensitivity - 1 to 20 L/min Flow Sensitivity + off
 - i.** -0.5 to -20 cm H₂O Pressure Sensitivity + off
9. PSV - 0 to 60 cm H₂O
10. Positive Pressure Relief Valve 80 cm H₂O

i. Monitoring and Displayed Parameters:

1. Airway Pressure (analog bar graph & numerical)
2. Total Breath Rate
3. I:E Ratio
4. Exhaled Tidal Volume
5. Exhaled Minute Volume
6. Peak Flow
7. Inspiratory Time
8. Electrical Power Source (external / internal)
9. Battery Level

j. Pressure, Flow and Volume Waveforms Software Package:

1. Real Time Pressure and Flow Waveforms
2. Waveform History Browse
3. Trending of Monitored Data

k. Respiratory Diagnostics Software Package:

1. Pressure, Flow and Volume Loops

2. Lung Mechanics (Static and Dynamic C, R, MAP, RSBI(RR/Vt), Time constant)

l. User Adjustable Alarms:

1. Respiratory Rate (high / low) Apnea (0 to 120 seconds)
2. Minute Volume (high / low) FIO2 (high / low)
3. Pressure (high / low) Leak (0 to 100%)
4. Low Vt (15%-85%)

m. Additional Alarms and Indicators:

Alarms:	Indicators:
1. Inverse I:E Ratio	- Alarm Silence Icon & Timer
2. Low O2 Pressure	- Breath Type Icon
3. AC Disconnect	- Internal Battery Use
4. Low Battery	- Date and Time
5. Over Temperature	- Hour Meter
6. Service Notice	- Battery Charge Level
7. Patient Disconnect	- Need Calibration
8. Check Sensor	- LED: On, Charge, Alarm

n. Size and Weight:

1. Dimensions:
 - i. Height 13" / 33 cm
 - ii. Width 9.5" / 24 cm
 - iii. Depth 10.3" / 26 cm
 - iv. Screen 8.4" diagonal
 - v. Weight 15.4 lb / 7 kg (without battery)
 - vi. Battery Weight 6.5 lb / 3 kg
 - vii. Overall Weight 22 lb / 10 kg

o. Power Supply

1. External AC - 100 to 240 V, 50 to 60 Hz, Max 2.0 A
2. External DC -12 to 15 V (Optional: 10 to 30 V), Max 8.5 A

3. Internal Battery Sealed Lead-Acid 12 V (7.8 Ah) (rechargeable)

i. Operating Time - Up to 2 hours depending on ventilation parameters optional 4 hour battery available

p. Oxygen (enrichment) Supply:

1. High Pressure Supply 40 to 60 psi (2.8 to 4.2 bar)

2. Low Pressure Max 80 L/min or 0.5 psi

q. External Interface:

1. Remote Monitor (VGA)

2. DIN Keyboard Connector

3. RS-232 Serial Port, 9 Pin

4. RJ11 Remote Alarm Connector

r. Environmental Specifications:

1. Operating Temperature - 0 to 50° C / 32 to 120° F

2. Storage Temperature - -15 to 70° C / -4 to 140° F

3. Relative Humidity - 15 to 95% at 30°C / 85°F

4. Water / Dust Resistance - IP54 (Splash Proof)

5. Atmospheric Pressure - 430 to 825 mm Hg (15,000 feet)

6. Vibration - IEC 68-2-6 and IEC 68-2-34

i. MIL-STD-810E

7. Shock - IEC 68-2-27 (100g)

i. MIL-STD-810E

8. Total External Sound Level - 40-45 dBa at one meter

s. Parts, Accessories and Quantity per units:

1. Disposable Breathing Circuit - 3 per unit

2. Air filters - 3 per unit

3. Low Pressure Oxygen Adaptor & Filter - 3 per unit

4. Roll Stand and Mounting Bracket - 1 per unit

5. External Battery Assembly - 1 per unit

6. Remote Alarm Interface - 1 per unit

7. Adaptor for Bio/Chemical Filter - 3 per unit

- 8. iVent201 Wheelchair Holder - 1 per unit
- 9. Humidifier Systems - 1 per unit

t. Standards and Safety Requirements:

- i.** ASTM F1100-90
- ii.** CSA C22.2 No. 601.1 / 601.2
- iii.** IEC 60601-1
- iv.** IEC 60601-1-2
- v.** EN 60601-2-12
- vi.** EN 794-1 / 2 / 3
- vii.** ISO 10651-1 / 2 / 3
- viii.** UL 2601.1

Special Criteria:

1. Warranty

The vendor will ensure telephone and on-site support availability seven (7) days a week, twenty four (24) hours a day.
All parts will be covered by a manufacturer's warranty of at least one (1) year.
The vendor will offer a warranty of at least one (1) year on all labor.
The vendor will provide detailed maintenance and service dates for the unit if applicable.

2. Delivery

Delivery and installation of all necessary equipment must be guaranteed to occur no later than ninety (90) days after submission of purchase order or earlier by specific arrangement.
Delivery Truck with lift gate will be provided for off-loading of product and assistance from driver will be expected.

3. Training

The vendor will provide training on any active parts and demonstrate setup/disassemble of the unit(s) described within the specifications above.

Remark: Please adhere to the above specifications as listed in this competitive sealed bid. Deviations from these specifications will not be accepted.

Total Cost Page must be all inclusive:

Delivery, service agreement, training, warranty and upgrades must be included in total cost.

Delivery Cost:	\$ _____
Service Agreement:	\$ _____
Training:	\$ _____
Warranty:	\$ _____
Upgrades:	\$ _____
Total Cost:	\$ _____

All Bidders:

Please include 2 Originals and 4 Copies of each of your bids. This should include any pamphlets, or additional materials you want to be taken into consideration. For directions to the bid meeting view web link: Use <http://www.mapquest.com> or <http://maps.yahoo.com> to search 1575 McKee Road, Suite 6, Dover, DE 19901 for directions.

