



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340308/319

E mail: procurement@wbmsc.gov.in / mp@wbmsc.gov.in

SUPPLY AND COMMISSIONING OF MEDICAL EQUIPMENTS FOR BLOOD COMPONENT SEPARATION UNIT FOR THE HOSPITALS AND MEDICAL COLLEGES OF THE GOVT. OF WEST BENGAL.

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT- 76 /2018

Dated-25.04.2018

The following amendments have been made in the tender document,

Amendment-XXIV **(Applicable for Schedule VI)**

TECHNICAL SPECIFICATION

Deep freezer -40 degree

1. TECHNICAL CHARACTERISTICS:

- Compression freezer with CFC free refrigerant.
- Internal: Stainless steel (min. 22g).
- Mounted on Lockable Castor wheels.
- External: Solid outer Corrosion Resistant (at least 1mm thickness).
- CFC free insulation.
- Design: Upright Type. 350-400 Lit capacity.

- Door does not project at side when opened.
- Insulation and gasket should Polyurethane/ Silicon insulation should be minimum of 80mm.
- Internal Temperature Control: Electronic temperature control. Operating temperature reachable lowest up to -40° C with setting accuracy of ± 1 deg C whatever the load.
- Manual defrost within safe temperature range.
- Casing & door should have insulation panel with silicon / polyurethane foam & 70 to 100 mm thickness.
- Refrigerant CFC free/ green gas.
- **External Ambient temperature:** Performs in an ambient temperature of + 10 deg C to + 30 deg C.
- **Hold over time:** 2 hrs ambient temperature.
- **Cooling Down time:** A full load of plasma packs at + 25 deg C takes a maximum of 5 hrs for all the packs to reach below 5 deg C.
- **Temperature Monitoring:** Digital temperature (LED) display with 0.1 deg C graduation.
- **Capacity:** As required by the blood bank (e.g. atleast 400 plasma bags of 200 mL each)
- **Settings:** Manual
- **User's Interface:** Manual
- **Alarm:** Power failure, High Temperature, Low Temperature, Power Failure, Remote alarm facility (provision)

2. PHYSICAL CHARACTERISTICS:

2.1. **Noise (in dBA):** Noise factor should not exceed 60 decibels

3. ENERGY SOURCE (electricity, UPS solar, gas, water, CO2.....):

3.1. **Power requirement:** Input voltage 220/240V 50 Hz alongwith a line voltage corrector of appropriate rating

3.2. Battery operated display, chart recorder & thermograph.

4. ACCESSORIES, SPARE PARTS, CONSUMABLES:

4.1. **Accessories & spare parts:** Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer. The make, rating, model, description, specification, price, quantity or each item shall be furnished separately.

4.2. 100 pieces of thermograph paper should be supplied at the time of delivery with supportive ink of 12 marking ink pen (if inkless thermograph, pen is not required)

5. **ENVIRONMENTAL & DEPARTMENTAL CONSIDERATIONS:**

5.1. **Atmosphere / Ambiance (air conditioning, humidity, dust...):** Capable of operating continuously in ambient temperature of 10 to 30 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 30 deg C and relative humidity of 15 to 90 %.

5.2. **Additional requirement:** All equipments should specify design qualifications, installation qualifications, operational qualification and performance qualifications, validation and calibration reports should have traceability towards applicable national/ international standards. Performance, efficiency, other factors such as distortions etc as applicable be also furnished. Complete construction details in respect of manual specification, thickness, finish etc are to be furnished.

6. **STANDARDS & SAFETY:**

6.1. **Product Certification:** CE ("Conformite Europeene") Class II A certificate from European Union notified body having 4 digit identification number

OR

The product must be enlisted under US FDA and the quoted model must have US FDA certification to market in US

6.2. **Quality Certification:** ISO Certified

6.3. Supporting documents to be provided for protection of electrical safety.

7. **WARRANTY & MAINTENANCE:**

7.1. **Warranty:** 2 years

7.2. **CMC:** 5 years



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340308/319

E mail: procurement@wbmsc.gov.in / mp@wbmsc.gov.in

SUPPLY AND COMMISSIONING OF MEDICAL EQUIPMENTS FOR BLOOD COMPONENT SEPARATION UNIT FOR THE HOSPITALS AND MEDICAL COLLEGES OF THE GOVT. OF WEST BENGAL.

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT- 76 /2018

Dated-25.04.2018

The following amendments have been made in the tender document,

Amendment-XXIV **(Applicable for Schedule VII)**

TECHNICAL SPECIFICATION

Deep freezer -80 degree

1. **TECHNICAL CHARACTERISTICS:**

- Compression freezer with CFC free refrigerant.
- **Construction:** Internal: Stainless steel (min 22g).
- External: Solid outer Corrosion Resistant (at least 1mm thickness).
- CFC free insulation.
- Mounted on Lockable Castor wheels.
- **Design:** Upright Type, 350-400 Lit capacity.

- Door does not project at side when opened.
- **Internal Temperature Control:** Electronic temperature control. Operating temperature reachable lowest up to -80°C with setting accuracy of $\pm 1^{\circ}\text{C}$ whatever the load.
- Manual defrost within safe temperature range.
- Casing & door should have insulation panel with silicon / polyurethane foam & 70 to 100 mm thickness.
- **External Ambient temperature:** Performs in an ambient temperature of $+10^{\circ}\text{C}$ to $+30^{\circ}\text{C}$.
- **Hold over time:** 2 hrs ambient temperature.
- **Cooling Down time:** A full load of plasma packs at $+25^{\circ}\text{C}$ takes a maximum of 5 hrs for all the packs to reach below 5°C .
- **Temperature Monitoring:** Digital temperature (LED) display with 0.1°C graduation.
- **Capacity:** As required by the blood bank (e.g. atleast 400 plasma bags of 200 mL each)
- **Settings:** Manual
- **User's Interface:** Manual
- **Alarm:** Power failure, High Temperature, Low Temperature, Power Failure, Remote alarm facility (provision)

2. PHYSICAL CHARACTERISTICS:

2.1. **Noise (in dBA):** Noise factor should not exceed 60 decibels

3. ENERGY SOURCE (electricity, UPS solar, gas, water, CO2.....):

3.1. **Power requirement:** Input voltage 220/240V 50 Hz along with a line voltage corrector of appropriate rating

3.2. Battery operated display, chart recorder & thermograph.

4. ACCESSORIES, SPARE PARTS, CONSUMABLES:

4.1. **Accessories & spare parts:** Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer. The make, rating, model, description, specification, price, quantity or each item shall be furnished separately.

4.2. 100 pieces of thermograph paper should be supplied at the time of delivery with supportive ink of 12 marking ink pen (if inkless thermograph, pen is not required)

5. ENVIRONMENTAL & DEPARTMENTAL CONSIDERATIONS:

- 5.1. **Atmosphere / Ambiance (air conditioning, humidity, dust...):** Capable of operating continuously in ambient temperature of 0 to 50° C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 30° C and relative humidity of 15 to 90 %.
- 5.2. **Additional requirement:** All equipments should specify design qualifications, installation qualifications, operational qualification and performance qualifications, validation and calibration reports should have traceability towards applicable national/ international standards. Performance, efficiency, other factors such as distortions etc as applicable be also furnished. Complete construction details in respect of manual specification, thickness, finish etc are to be furnished.

6. STANDARDS & SAFETY:

- 6.1. **Product Certification:** CE ("Conformite Europeene") Class II A certificate from European Union notified body having 4 digit identification number
OR
The product must be enlisted under US FDA and the quoted model must have US FDA certification to market in US
- 6.2. **Quality Certification:** ISO Certified
- 6.3. Supporting documents to be provided for protection of electrical safety.

7. WARRANTY & MAINTENANCE:

- 7.1. **Warranty:** 2 years
- 7.2. **CMC:** 5 years



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340308/319

E mail: procurement@wbmsc.gov.in / mp@wbmsc.gov.in

SUPPLY AND COMMISSIONING OF MEDICAL EQUIPMENTS FOR BLOOD COMPONENT SEPARATION UNIT FOR THE HOSPITALS AND MEDICAL COLLEGES OF THE GOVT. OF WEST BENGAL.

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT- 76 /2018

Dated-25.04.2018

The following amendments have been made in the tender document,

Amendment-XXIII **(Applicable for Schedule X)**

TECHNICAL SPECIFICATION

BLOOD BANK REFRIGERATOR

1. **Purpose of Equipment:** A refrigerator for storing whole blood or red cell packs in a blood bank.
2. **Type of Equipment:** Compression type refrigerator that uses CFC-free refrigerant gas/ green gas.
3. **Capacity:** 600 Ltrs /350 bags.
4. **Type:** Vertical
5. **Construction:**
 - Internal: Stainless steel (min. 22g).
 - External: Corrosion Resistant (CR at least 1mm thickness).

- External Paint: Heat resistant, minimum 7 tanks process (Duly certified by the manufacturer).
- CFC - free insulation.
- Drawers: Roll out type, Stainless steel scratch resistant material, perforated on the bottom for perfect and homogeneous distribution of cold air. The separators, if provided in the drawers, should be such that blood bags are held in a vertical position with the label side visible. There should not be any obstruction while rolling out the drawers for loading or unloading purpose.
- Door:
 - Glass door, opening angle should be minimum 90° or more.
 - Insulation and gasket should be silicone/rubber.
 - Good quality Polyurethane Insulation should be minimum 50 mm.
 - Door opening audio and visual display alarm.

6. **Temperature range:**

- 2°C to 6°C adjustable / factory set temperature with setting accuracy of $\pm 0.5^\circ\text{C}$ (or better).
- User Parameter settings: set point, high alarm point, low alarm point, buzzer off time, C/F Temperature choice.

7. **Electrical Characteristics:** Input voltage: 220/240V 50Hz.

- A line voltage corrector of appropriate rating will form part of standard configuration.
The servo voltage corrector should be capable to correct input voltage range from 160 – 280 V AC to 220/240 VAC , 50Hz.

8. **Minimum Compressor Starting Voltage:** 22% below nominal voltage.

9. **Internal Temperature Control:**

- Electronic temperature control, range +2 °C to +6 °C with setting accuracy of $\pm 1^\circ\text{C}$ whatever the load.
- Fan air cooling.

10. **External Ambient Temperature:** Performs in an ambient temperature of +10 to +33°C

11. **Hold-Over Time:** A full load of blood packs at +4 °C ($\pm 1^\circ\text{C}$) takes at least 30 minutes to rise to above +6 °C

12. Internal temperature hold over time in case of power failure should be at least 1.5 hours, if door not opened.

13. **Cooling Down Time:** A full load of blood packs at +25 °C takes a maximum of 1 to 3 hrs for all the packs to reach below +6 °C.

14. **Temperature Monitoring:**

- Digital temperature (LED) display with 0.5°C or lower gradation.

- Microprocessor based temperature controller with integrated audio visual temperature and power alarm function with digital monitoring display.
- Independent safety thermostat to avoid negative temperatures.
- At least 2 Temperature Sensors: Sensor for temperature monitoring shown on front display, Sensor for managing use of compressor.

15. Temperature recording device

- Visual and audible alarm system indicating unsafe temperatures.
- Battery backup for alarm and temperature recording device.
- Facility for remote alarm.
- Seven days circular chart recorder.
- Seven days graphic temperature recorder with range of -5°C to $+20^{\circ}\text{C}$ (at least) with data logger & program reader, with supply of free circular charts for a period of warranty.
- Ideal compressor running time of 27% at room temperature.
- Door locks should be available.
- Audio and visual alarm for variation in temperature.
- Interior lighting.
- External ambient temperature $+10^{\circ}\text{C}$ to $+40^{\circ}\text{C}$.
- Auto defrosting.
- Cooling time – Maximum 1 to 3 hours for all the packs to reach below $+6^{\circ}\text{C}$.

16. Certifications:

- **Product certification:** CE (“Conformite Europeene”) Class II A certificate from European Union notified body having 4 digit identification number
OR
 The product must be enlisted under US FDA and the quoted model must have US FDA certification to market in US
- **Quality Certification:** ISO certified.



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340308/319

E mail: procurement@wbmsc.gov.in / mp@wbmsc.gov.in

SUPPLY AND COMMISSIONING OF MEDICAL EQUIPMENTS FOR BLOOD COMPONENT SEPARATION UNIT FOR THE HOSPITALS AND MEDICAL COLLEGES OF THE GOVT. OF WEST BENGAL.

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT- 76 /2018

Dated-25.04.2018

The following amendments have been made in the tender document,

Amendment-XXIV **(Applicable for Schedule XVIII)**

TECHNICAL SPECIFICATION

Refrigerated Centrifuge (Cryo Centrifuge)

Purpose: For separation of blood components like packed cells, platelet rich plasma, platelet concentrate, Plasma, Cryoprecipitate etc.

1. **TECHNICAL CHARACTERISTICS:**

1.1. Refrigerant Centrifuge with CFC free refrigerant.

1.1.1. Construction:

- Microprocessor controlled system to make operation automatic {displaying RPM and RCF (at least 700-5000g) and acceleration & deceleration & temperature}.
- Programmable memory: Memory with tamper proof facility.

- **Stainless steel chamber:** Should be of easy to clean, corrosion resistant type. The chamber preferably should come with provision of both drain and condensed water collection container. The chamber should be supplied with Removable plastic cups (2 sets of 12 plastic cups) to hold single/double/triple/quadruple/quintuple (soft filter) blood bags with partition in every bucket.
 - Insert with hook adapter to spin buffy coat or small volume of blood and balancing weights for inserts. Must be equipped with automatic lid lock system which means the lid cannot be opened manually and / or by any internal force during operation to prevent accidental incident.
 - Speed variation: Microprocessor controlled rotor speed to within 10 rpm of set value.
 - Adjustable acceleration and deceleration profiles & digital display must be available.
 - Microprocessor controlled chamber temperature within ± 1 deg C of set temperature regardless of the centrifuge speed.
 - Programmable time: 0-99 minutes or more with minimum resolution of 1 minute.
 - Digital display of temperature, speed and time with full resolution.
 - There should be Motor imbalance detection system and the Centrifuge should immediately shut down if such imbalance is detected. Should incorporate alarms for imbalance detection, lid interlock, over temperature, rotor over speed.
 - Temperature should reach 4 deg C with full load (accuracy ± 0.5 deg C)
- 1.2. **Capacity:** Swing bucket blood bank rotor: With metal buckets, 6 x 2000mL, with or without wind shielded, Suitable adaptors for 12 blood bags of 350mL & 450mL with soft filter, atleast 4 set of volume and weight compensate for maintenance of quality of the components.
 - 1.3. **Settings:** Manual
 - 1.4. **User's Interface:** Manual
 - 1.5. **Software and/or standard of communication:** required for the documentation purposes

PHYSICAL CHARACTERISTICS:

- 1.6. **Noise (in dBA):** Noise factor should not exceed 60 decibels
2. **ENERGY SOURCE (electricity, UPS, solar gas, water, CO₂...):**
 - 2.1. **Power Requirements:** Input voltage single phase / three phase along with a servo voltage stabilizer of appropriate rating with input voltage of 110 to 280 V / 200 to 400 V, 50 Hz and output voltage 220 V ± 10 and high low voltage auto cut.
3. **ACCESSORIES, SPARE PARTS, CONSUMABLES:**
 - 3.1. **Accessories & spare parts:** Complete with comprehensive set of spare parts. Volume & weight compensate accessories should be provided in adequate quantity to run full capacity.

4. ENVIRONMENTAL & DEPARTMENTAL CONSIDERATIONS):

- 4.1. **Atmosphere / Ambiance (air conditioning, humidity, dust...):** Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%
- 4.2. Additional requirement: All equipments should specify design qualifications, installation qualifications, operational qualification and performance qualifications; validation and calibration reports should have traceability towards applicable national/ international standards. Performance, efficiency, other factors such as distortions etc as applicable be also furnished. Complete construction details in respect of manual specification, thickness, finish etc are to be furnished.
- 4.3. Facility to remove the blood bags during power failure / emergency.
- 4.4. Provision for calibration window during intra-operative phase.

5. STANDARDS & SAFETY:

5.1. Product Certification:

CE ("Conformite Europeene") Class II A certification from European Union notified body having 4 digit identification number

OR

The product must be enlisted under US FDA and the quoted model must have US FDA certification to market in US

- 5.2. Quality Certification: ISO Certified
- 5.3. Supporting documents to be provided for protection of electrical safety that of IEC (Class I).
- 5.4. All the bidders or vendors to submit a validation / QC / process control data related to the components prepared on the quoted model at the time of bid submission.
 - i) FFP: PT, APTT, Fibrinogen
 - ii) Platelet concentrates: Platelet count / yield, WBC count, RBC count, Hct. (Both in PRP / PC & Buffy coat)
 - iii) Conc. RBC: Hct, Hb, Product volume, WBC count.

6. WARRANTY & MAINTENANCE:

- 6.1. **Warranty:** 2 years
- 6.2. **CMC:** 5 years