

# Office of the Principal Nil Ratan Sircar Medical College

Kolkata - 700014; Phone: 033-2286-0033

Website: www.nrsmc.edu.in; e-mail: principalnrsmc@gmail.com

Memo No. NMC/STORE/ 5 2 00

Dated: 25/10/24

Re-E-TENDER NOTICE (NIT No: 32 / 24-25) FOR PURCHASE AND INSTALLATION OF
EQUIPMENTS FOR NEPHROLOGY OF
NIL RATAN SIRCAR MEDICAL COLLEGE, KOLKATA - 700014.
(Through Pre-qualification)
(Submission of Bid through NIC e- tender portal)

The Principal, Nil Ratan Sircar Medical College, Kolkata – 700014, is going for e-Tender on behalf of the Health & Family Welfare Department, Government of West Bengal for obtaining the rate of equipment as per list from bonafide Manufacturer/Direct Importer/Authorized Distributors. Necessary earnest money to be submitted for participation in the Tender is appended in the table below. Exemption of EMD is applicable to agencies having valid, item specific certificate issued by appropriate authority of Govt, of West Bengal.

1)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	BCM(Body Composition Monitor ) Machine	Nephrology	1 pc	Rs. 10000.00
2	Dialyzer Re-Processor Machine	Nephrology	1 pc	Rs. 15000.00
3	Hemodialysis Machine	Nephrology	3 pcs	Rs. 50000.00
4	Sodium Bicarbonate Solution Machine	Nephrology	1 pc	Rs. 5000.00

All bidders must complete their technical demonstration of their quoted items within ten (10) days from the date of opening of technical bid to the concern Department.

#### 1. General Instructions:

In the event of e-filing, intending bidder may download the tender documents free of cost from the website: http://wbtenders.gov.in directly with the help of Digital Signature Certificate or from the Health & Family Welfare Department's website <a href="www.wbhealth.gov.in">www.wbhealth.gov.in</a>.

#### 2. Submission of Bids:

Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed, in the website http://wbtenders.gov.in. All papers must be submitted in English language.

#### 3. Time Schedules:

The time schedule for obtaining the bid documents, pre bid meetings, registration with the tendering authorities, the submission of bids and other documents etc. will be as per the list provided in clause no 23 as given below. Bidder are instructed to wait for uploading any corrigendum arising during pre bid meeting, before submitting their bid online

#### 4. Eligibility for Quoting:

Only Manufacturers/direct Importers/Authorized Distributors are eligible for quoting. The price is to be quoted in Indian Rupees including cost of insurance, packing, forwarding, freight charges, clearing charges and installation of the new instrument and exclusive of GST and other taxes which are to be quoted separately in the BOQ. Agency commission is not permissible.

#### 5. Submission of Tender:

The tender is to be submitted in Two Bid System (Technical Bid or Bid A & Financial Bid or Bid B).

#### (A) Technical Bid or Bid A:

#### "BID A": PART I

File containing Technical Bid only - single file with multiple scanned pages containing Statutory and My documents separately.

#### (a) STATUTARY Cover containing the following documents:

(SINGLE FILE MULTIPLE PAGE SCANNED)

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

SI. No.		Page no
	Duly filled in CHECK LIST in the prescribed format. Page number of documents must be mentioned in the check list before uploading the same.	
1	Application in the prescribed format given in Annexure I	
2	Copy of agreement between the manufacturer and the Distributor in Annexure II	
3	No conviction certificate in the form of an Affidavit as per Annexure-III	
4	A Proof of submission of applicable EMD	

#### (b) NON STATUTORY/MY DOCUMENTS Cover Containing the following documents:

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

SL No.	Category	Sub Category	Sub Category Description	Page No
А	Certificates	A1. Certificates	PAN Card of the authorized signatory	
			Professional Tax Registration certificate	
			GST Registration certificate	
В			A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.	
		C2 : CREDENTIAL 2	List of purchaser in Govt. Institutions of repute, for last two years	
		PAYMENT CERTIFICATE 1	Income Tax Returns submitted for the last three years	
	FINANCIAL INFO	Audited P/L & BALANCE SHEET		
C.			P/L & Balance sheet of the last three years	

#### BID A": PART II

Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart). Improper filling &/or suppression of facts/false statement will lead to disqualification and penalty in the form of permanent black listing.

#### (B) Financial Bid B

COVER "B": Separate file containing financial document only.

(a) Financial Bid: BOQ in INR (in excel sheet)

The folder marked as "Financial Bid" shall contain ALL INCLUSIVE PRICE in INR only and should include base price along with the cost of allied works and services which are to be undertaken (like installation, commissioning of equipment or PC etc.), cost of insurance, packaging, forwarding, delivery charges, clearing charges of the new instrument to be purchased. GST and any other applicable tax. should be quoted separately. Three years CAMC rate (cell no. P13) should also be quoted separately in the template for Bill of Quantities (BOQ) just for reference for future.

However, the L1 will be determined on basic rate with cost of warranty period that is mentioned in the specification . GST quoted will be directly remitted to Government account as per existing norms of Finance Department.

While preparing BOQ, in basic rate column (cell no M13), company should quote basic rate with cost of warranty period that is mentioned in the specification.

If warranty period not mentioned in the specification, in that case warranty period will be treated as 01 (one) year only.

The Tenderers are not required to submit the hard copies of Cover A (Transaction document of EMD , General Documents and Technical Specifications) .

#### 6. Evaluation of Tender:

During tender evaluation process, "Bid A" will be opened first. Those tenderers who would qualify the Statutory & Non-Statutory requirements on the basis of technical and commercial documents will be identified and "Bid B" i.e. financial bid of only those qualified bidders will be opened. Verification of hard copies of the audited balance sheet and Profit & Loss Accounts of the Tenderers for the last three years will be made if deemed necessary before opening the Financial Bid (Bid B) of the technically qualified bidders. If found suitable on the basis of above pre-qualification, the tenderer quoting the lowest rate, will be considered as successful.

#### 7. Earnest Money:

The earnest money of the tenderer is liable to be forfeited if the tenderer withdraws his tender as a whole or for any particular item or items at any stage after opening of the tender or fails/refuses to enter into written agreement for any or all of the items of his accepted bid within the time specified when requested to do so or fails to furnish Performance Bank Guarantee within the stipulated time. EMD should be deposited online in the Pooling Account of Government of West Bengal maintained at ICICI Bank, RN Mukherjee Road Branch in the manner as prescribed in Government Order no. 3975-F(Y) dated 28/07/2016. (Order copy is available at the site-www.wbfin.nic.in) Hard copy of Bid A should reach the office on or before the stipulated date as mentioned in clause 23.

#### 8. Rate:

The price is to be quoted in INR only including cost of insurance, entry tax, packaging, forwarding, delivery charges, clearing charges and installation of the new instrument. The basic rate should be furnished inclusive of Transportation Cost, Insurance, Testing Charges, Incidental Charges etc. but excluding GST and any other applicable taxes etc. which should be quoted separately in the template for Bill of Quantities (BOQ).

#### 9. Order & Supply:

The tendering authority has the liberty to ask for **performance demonstration** of any item during any stage of the tender process, before placing order for supply. In case of dissatisfaction, the authority will have the right to disapprove the offer of L1 bidder and go for the next bidder. Orders for supply of the approved products will be placed with the successful tenderers after execution of agreements and such supply shall have to be made in such installments as may be fixed or spread over the period to be specified in the supply orders to be made in pursuance of the agreements. The equipment is to be transported in such packaging so as to avoid damage to primary package of manufacturer. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

The tendering authority will be at liberty to enhance the quantity of the item tendered up to 40% of the original required quantity. Bidder will have to consider the same while bidding as supply of the enhanced quantity will be mandatory as the original one.

#### 10. Withdrawal /Cancellation & Purchase Policy of Tendering Authority:

The tendering authority reserves the right to withdraw any item from the tender at any stage. The selection of such item, if already made in favour of any tenderer, shall be treated as cancelled. The tendering authority reserves the right to reject or accept any tender or part thereof at any stage or to split any tender without assigning any reason. Withdrawal of tender or any revision after submission of tender by the tenderer will not be allowed.

Purchase will, however be made following the existing purchase policy of the Govt. of West Bengal and its amendment(s) made from time to time. The purchase policy of the State Government as provided in the West Bengal Financial Rules, the policy of price preference in particular incorporated under Notification No. 10500-F dated 19.11.04, 5400-F(Y) Dated 25/06/2012 and subsequent relevant orders should be observed in considering the tenders.

#### 11. Important Instruction with regard to Submission of Tender:

The rate should be quoted in Indian Rupees for a particular brand or model (model no. of the offered item only must be mentioned in the appropriate column of the 'Tender Form'. Alternative offer will not be accepted). The tender shall be cancelled for the quotation of item without its brand name, model, model no. etc. Detail information regarding the manufacturer and the item quoted in the 'Tender Form' should be furnished.

#### 12. Spare Parts:

The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipment and the complete system for at least five years on a continuing basis. However, this does not relieve the supplier of any warranty obligations under the contract.

#### 13. Guarantee / Warranty Period:

- i) The machine/Instrument should be covered by free on-site comprehensive Warranty for one year after successful installation. The tenderers must quote for 5 (Five) years' comprehensive on-site AMC of entire system (including all spares & labour) after the date of completion of free warranty period. The CAMC charges for 5 years to be quoted in the BOQ, will however be determined on extant Govt. rules in this regard.
- ii.) All faults appearing and their rectification shall be periodically advised to the institute, the period being not more than two weeks.
- iii.) Any lacuna or lacunae noticed in the functioning of the installation as a result of any design or other feature shall be rectified by the supplier free of cost within 72 hours of call log.

#### 14. After Sales Services and Maintenance Contract:

After sales service must be provided by the supplier, during and after warranty period of the equipment. Selected vendor will remain liable to attract penalty for violation of machine downtime as per agreement. The selected vendor or his authorized servicemen has to attend the machine within 72 hours of Call Log. It is desirable to have a fully equipped service centre in or around Kolkata.

#### 15. Delivery, Installation and Commissioning

- Delivery of the goods at the purchaser's premises shall be completed by the Supplier in accordance with the terms specified by the purchaser.
- ii. The installation, testing and commissioning of the proposed system shall be completed in accordance with the order.
- iii. All items are to be delivered within six weeks from the date of placement of order.
- iv. In case of distributor, the firm should be direct distributor of manufacturing unit. Sub distributor authorization by distributor will not be accepted at all.

#### 16. Penalty Clauses:

PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRADULENT/ MISLEADING DOCUMENTS: If during the tender process or at any stage during the validity of the tender period, it is found that a tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated. Similar penal measures shall also be initiated against those tenderers who have submitted false/ misleading/ fraudulent documents or made incorrect declarations. The penal measure will be forfeiture of Earnest Money, forfeiture of Performance Bank Guarantee if enlisted as a supplier in addition to any other legal action against the firm.

#### 17. Appeal:

Appeal against the decision of the Principal, Nil Ratan Sircar Medical College, Kolkata and then to impose such a penalty will lie with Tender Selection Committee. Review against the decision of the Tender Selection Committee (TSC) will lie with Health & F.W. Dept. of the Govt. of W.B. The Special Secretary/Secretary/Principal Secretary will be the appellate authority within the Department of Health & Family Welfare, Government of West Bengal. Before imposing any penalty as per clauses 20, 21 and 22 the concerned supplier may appeal to the authority citing the proper reasons for non-imposing the penalty as stated.

#### 18. Agreement:

On a tender being accepted, intimation of acceptance will be forwarded to the tenderer by Principal, Nil Ratan Sircar Medical College, Kolkata. After communication of the same, the tenderer will have to execute agreement in the prescribed form with the Principal, Nil Ratan Sircar Medical College, Kolkata. In case any direct purchasing unit wishes to go for a separate agreement, the head of the purchasing unit must get written permission to that effect from his controlling authority. This present document and the tender forms filled in by the tenderer or copies thereof in so far as they are not inconsistent with these terms & conditions will be incorporated as part of the agreement. Such agreement will be binding on the tenderer.

#### 19. Validity Period of Agreement:

20. Performance Bank Guarantee:

The contract period will be for a period 01 (one) years from the date of finalization of tender which can be extended for a further period of 6 months if Tender Selection Committee feels necessary.

The performance bank guarantee will be mandatory for all suppliers and will not be waived in any case. The successful tenderers shall be required to furnish the 'Performance Bank Guarantee' from any Nationalized/Scheduled Bank acceptable to Govt. of West Bengal for One year @ 10% of quoted base rate per item for which the tenderer has been selected as supplier. The performance bank guarantee will have to be renewed after completion of Free Warranty period, for additional 5 (Five) years under the paid CAMC period before transfer of the CAMC amount to bidder's account. Mentioning of West Bengal Government Pooling Account for Performance Bank Guarantee No. 000605030134 IFS Code ICIC0000006 MICR 70229002 at ICICI Bank, RN Mukherjee Road Branch, Kolkata on the body of Performance Bank Guarantee is made mandatory vide Finance Department GO No. 2691-F(Y) dated 02/05/2017.

21. Inspection: Before submitting the tender, the intending tenderers should thoroughly get acquainted themselves with the proposed supply and installation by local inspection of site and take into consideration the site condition and other criterion for effecting smooth supply. No claim whatsoever will be entertained afterwards.

#### 22. Payment Terms:

Payment will be made electronically by Govt. of West Bengal approved system after execution of due supply and successful installation as ordered, subject to :

- Submission of Performance Bank Guarantee in terms of Clause 20 and subject to penalty clause in terms of Clauses 16.
- Supply of the materials as per specification as provided in the tender documents and the catalogue.
   Supply of the materials must be made within the stipulated period as specified in the work orders.
- iii. On being selected, the successful vendors will have to submit one application to the Principal, NII Ratan Sircar Medical College, Kolkata stating the name of the payee/recipient, Bank account no with IFS code of the payee/recipient for making e-payment. Payment will only be released after satisfactory installation and verification of following items-
  - Supplier's invoice in original
  - 2. Challan and installation certificate
  - 3 Any other thing of importance on the discretion of College Authorities

23. Dates &Information:

S. No	Items	Dates
1	Date of uploading of N.I.T. Documents (online) from this end.	28.10.2024, 5.00 P.M.
2	Documents download start date (Online)	28.10.2024, 5.00 P.M.
3	Date of hoisting of documents at Departmental Website (www.wbhealth.gov.in)	28.10.2024, 5.00 P.M.
4	Date of Pre Bid Meeting and workshop with the intending bidders at the office of the Principal of NRS Medical College	29.10.2024, 12.30 P.M
5	Bid Submission starting (On line)	30.10.2024, 4.00 P.M. onwards
6	Bid Submission closing (On line)	14.11.2024 at 4 P.M.
7	Bid opening technical bid(online) (Bid A)	16.11.2024 at 4.00 P.M. onwards.
8	Date of uploading list for Technically Qualified Bidder (online)(Bid A)	
9	Date & for opening of Financial Proposal (Bid B) (Online)	To be declared later
10	Date of uploading of list of bidders along with the approved rate	To be declared later.

Principal, Nil Ratan Sircar Medical College, Kolkata, reserves the right to change the above schedule in case of any exigencies after putting up a notice in the departmental website and Notice Board of N R S Medical College, Kolkata.

24. Validity of Tender:

- i. The tender will remain valid up to 1 (one) year from the date of finalization of tender which can be extended for a period of 6 months. Any objection raised by any bidder in this respect will not be entertained. No informal tenderer will be entertained in the bid further.
- ii. During the scrutiny, if it comes to the notice of tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice.
- iii. Prospective bidders must take training from authorized agencies before submission of their bids.
- iv. The Tender Selection Committee reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

#### 25. NO- CONVICTION CERTIFICATE:

No conviction certificate in the form of An Affidavit is to be submitted in the prescribed Pro-forma as Annexure-IV attached herewith from Notary Public/ Judicial Magistrate/Executive Magistrate.

> Principal NRS Medical College

Kolkata-14

# CHECK LIST (MUST BE PROPERLY FILLED)

NOTE: For Non applicability for some documents please mention "NA" in the check list. Must be mention page number in the check list.

S. No	Item	PI put tick or NA	Page No
1	Application submitted in Annexure I		
2	Annexure II (Copy of agreement between the Manufacturer and the Direct Importer/Distributor)		
3	No conviction certificate in the form of an Affidavit as per Annexure-III.		
4	Income Tax Returns submitted for the last three Assessment years		
5	GST Registration certificate(not provisional)		
6	PAN Card of the organization and authorized signatory.		
7	Manufacturer's guarantee (in case of Distributors and Direct Importer, to be obtained from manufacturer)		
8	Audited P/L & Balance sheet of last three years		
9	Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart).		
10	Trade License in the name of participating firm		
11	Valid Manufacturing License(if applicable)		
12	Import License with validity (for importers)		
13	List of purchaser in Govt. Institutions of repute, for last two years		
14	A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.		
15	A Proof of submission of applicable EMD		

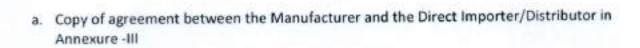
# ANNEXURE-I

## APPLICATION FORMAT

The Principal, Nil Ratan Sircar Medical College, Kolkata-700014. ub: Tender NoDt(Name of the Item -1)	21
3)	
	Medical
ir.	
aving examined the pre-qualification & other documents published in the N.I.T, I /we hereby abmit all the necessary information and relevant documents for evaluation:	
That the application is made by me / us on behalf of	
the capacity ofduly authorized to submit the offer. The	
uthorization letter from the Company is attached in Annexure II.	
We accept the terms and conditions as laid down in the NIT mentioned above and	
eclare that we shall abide by it for throughout the tender period and its extensions, if any.	
. We are offering rate for the following item /items and assured supply to the Health &	
amily Welfare Department, Government of West Bengal as per Table-1 (Instrument pecification)	
a. We propose that the order and bill should be raised in our name.	
or liasoing, we have appointed M/S having its office at	
(Address, contact no and e mail address) as	
&F agent /Liasoner /Contact person/ Others (strike out whichever is not applicable) as er clause of the NIT	
. The agreement between ourselves and the distributor/C&F/Liasoner & other documents s prescribed is attached in annexure III	
. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.	
. We understand that:	
<ul> <li>Tender Selection Committee/ H&amp;FW Dept can amend the scope &amp; value of the contract bid inder this project.</li> </ul>	
<ul> <li>Tender Selection Committee/ H&amp;FW Dept reserves the right to reject any application rithout assigning any reason.</li> </ul>	
ate:-	
Signature of applicant including title	
and capacity in which application is made.	
ontact details -	

Contact details Mobile: E mail ID:

# Annexure- II



#### ANNEXURE-III

Draft Affidavit Proforma (Notarized on Rs. 100 Stamp Duty)

The	Managing	Director/Proprietor	(etc.)	of	the	Firm.
***********			(Name of	the firm	)	
At (add						
A						
P.O						
200		Dist				

- a. That I am not under conviction of any offence making myself liable to be disqualified to supply of Surgical Equipments/Instruments etc. to any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States.
- b. My Firm has not been blacklisted at present as a whole or for any item/ items as quoted in this tender by any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States in India.
- c. That no case is pending against me or against my Firm in any criminal court of law in connection with the supply of Surgical/hospital equipment/Instruments to the Govt. or Govt. undertaking Organization / Institution in the State of West Bengal or other State or States ( If any case is pending, pl state the details ).
- d. That, I declare that the item or items quoted by me confirms the specification given in the NIT document or higher standard relating to the specification is provided.
- The duly authenticated Technical Data Sheet is uploaded conforming to the prescribed standard.
- f. That, I also declare that if any information subsequently found incorrect or false will it automatically render the tender submitted by me cancelled and make me liable for penal/legal action as per law of the country.
- g. That I do further affirm that the statements made by me in this tender are true to the best of my knowledge and belief and all the documents attached are genuine & correct.

Deponent

# Office of the Head of the Department Department of Nephrology Nilratan Sircar Medical College & Hospital, Kolkata-14

# BODY COMPOSITION ANALYZER - 1No.

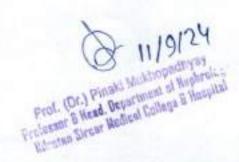
Application: To measure cellular health, nutritional status and fluid shifts in and out of the cells.

### Features:

- Should be portable and convenient to use.
- To measure ECW/ICW, cellular fluid shifts, prognostic health indicators, nutrition index and raw data at four frequencies (5, 50,100, 200kHz)
- Provided with Thermal Printer and Bluetooth for instant print out of results.
- To be provided with medical graded electrodes
- Should have ISO certified quality standards, accredited by Medical Devices Directive and FDA cleared.
- Should have three years warranty with guarantee of supply of pasts and peripherals.

#### MEASUREMENTS:

- Extracellular Water percentage and Extracellular Water Volume
- Intracellular Water percentage and Intracellular Water Volume
- Total Body Water percentage and Total Body Water
- 3rd Space Water
- Body Cell Mass (BCM)
- Extracellular Water/Total Body Water
- Nutrition Index
- Plus Normal percentage Levels
- Body Fat percentage and Fat Weight
- Lean Mass
- Dry Lean Mass
- Basal Metabolic Rate (BMR)
- BMR/Total Weight
- Average Daily Calorie Requirement
- Waist/Hip Ratio
- Body Mass Index Plus Normal Range
- Body Fat Mass Index (BFMI)
- Fat-Free Mass Index (FFMI)
   Prediction Marker<sup>TM</sup> (Impedance Ratio)
- Impedance Values at 5, 50, 100 and 200 kHz
- Resistance 50 kHz
- Reactance 50 kHz
- Phase Angle 50 kHz



# Specifications:

Technology : Bio-impedance analysis

Impedance range : 20 to 1200ohms or better

Accuracy : Impedance 2-3 $\Omega$ , Resistance  $\pm 2\Omega$ , Reactance  $\pm 1\Omega$ 

Test Current : 200 micro amps RMS

Frequency : 5 / 50/ 100/ 200 kHz

Computation time : < 6seconds or better

PC Communication : Bluetooth wireless interface

Temperature : +5°C to ambient

Power source : Duracell alkaline batteries (non rechargeable)

Indications : To display warning when battery power low

Yours Faithfully,

Dr. Pinaki Mukhopadhyay Professor & Head

Department of Nephrology Nilratan Sircar Medical College & Hospital

Prof. (Dr.) Plinakt Machings in Hospital
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Mileston Stress Madded Ciplings in Hospital

2 11/9/24

## GOVERNMENT OF WEST BENGAL DEPARTMENT OF NEPHROLOGY NRS Medical College & Hospital 138, AJC BOSE ROAD KOLKATA-700014

#### SPECIFICATION FOR DIALYZER REPROCESSING MACHINE

- Fully automated / computerized dialyzer reprocessing system.
- 2. High standardization in cleaning, volume measuring, leak testing and chemical disinfecting.
- No external dilution / minimize chemical contact.
- 4. Separated mixing and volume tanks to minimize cross contamination.
- Automatically shut down after system disinfecting.
- Simultaneously and independently reprocess two or more dialyzers.

#### DIALYZER REPROCESSING

- REPROCESSING PROCESS: Automatic cleaning, volume measuring, leak testing and chemical filling.
- Should be able to process all types and brands of dialyzers.
- 9. Volume measuring range = 25-300 ml
- Volume measuring accuracy + 5%.
- 11. Leak test method, low limit setting should be specified.

#### ELECTRICITY REQUIREMENT

- 12. 100-240 VAC, 50-60 Hz.
- 13. Temperature 10-35 degree
- 14. Humidity 10-80 %
- 15. RO or DI water in accordance with AAMI standard for Hemodialysis.
- 16. Input pressure 25-30 psi.
- 17. Flow rate 1.5 6.0 liters/minute
- 18. Water consumption 27 liters/dialyzer
- 19. MDT PLUS 4 Cold sterilant or any other commercial per acetic acid conc. 3.5-4.5 %
- Quantity consumed to be specified for dialyzers.
- 21. Loose connector
- 22. Dialyzer volume priming failure.
- 23. Leak test failure.
- 24. Empty Solution.
- Self test and disinfection interlock.
- Priming volume lower than limit.
- Incoming water pressure failure.
- 28. LCD, backlight with auto shut off.
- Data display, reprocessing data.
- Failure message.
- 31. Status
- 32. Date and time

- 33. 10-13 minutes / dialyzer
- 34. Data management system.
- 35. Sterilant volume indicator cartridge
  - Three years warranty and should provide with technical support and required spares.
  - It should follow international standard and safety requirements.
  - User's list with the addresses and contact Nos. to be provided.
  - Demonstration is compulsory.
  - Operating and detailed service manual should be supplied.
  - Service in Mumbai good.

Dr. Pinaki Mukhopadhyay

Prof. & Head

Department of Nephrology Nilratan Sircar Medical College & Hospital

Prof. (Or.) Pinaki Mukhopasi Professor B Head, Department of Hespital Professor Screen Medical Callege & Hespital

D- 10/9/24

# Specifications for Equipments

TechnicalSpecifications:General Purpose DialysisMachine NilratanSircar Medical College and Hospital, Kolkata-14

SINo.	SpecificationsForHaemo-DialysisMachine	
1	Machines hould have Facility for Bicarbonate Dialysis	
2	Should have facility to perform both HighFlux& Low Flux and Expanded Haemo Dialysis	
3	Should have Facility for Sequential Dialysis.	
4	Blood pump that is adaptable to standard AV lines and runs even without water or dialysate flow.	
5	Machine should have dialysate filter for endotoxin or bacteria free dialysate.	
6	Machine should have high resolution multicolor graphical digital touch screen display.	
7	Bloodpumpspeed:"5 to600ml/min pressurecontrolled.	
8	Facility for different dialysate flowrange100-800ml/min.	
9	Facility for UF Profiling, Sodiump ro filing and Bicarbonate Profiling	
10	DialysateTemperature35°Cto39°C.	
11	Ultra Filtration rate 0-4Litre/hr with accuracy±1%	
12	Parameter Display-Ultra Filtration Goal, UF time, UF rateand UF Volume.	
13	VolumetricUltraFiltration control 0-4lit/h.	
14	Facility for Dialysis fluid conductivityrange12.5to165.0mS/cm.	
15	Na+:128to150mmol/L,HCO3:20to40mmol/L,	
16	Machine Should have mandatorySelf-Testand Ultrasonic Air Bubble detector facility.	
17	Should have Facility for arterial venous transmembrane pressure monitoring	
18	Should have facility for Reverse UltraFiltration Alarm.	
19	Arterial pressure monitoring range shouldbe between-700to+750mmHg, Accuracy±5mmHg.	
20	Machine is with Inbuilt SLED Dialysis Facilities. Sustained Low Efficiency Dialysis.	
21	Should have facility for air and bloodleakdetector.	
22	Bloodleakdetectorsensitivity≥0.35mL/min blood with haematocritat32%	
23	Machine should have the facility to provide Day-Night, weekly scheduling of Disinfection Program and should have the facility to stored infection history.	
24	Facility for Rinse, Hot rinse, Hot Chemical Disinfection≥80°CandShortdisinfectionfacility(Lessthan21m, cold rinse with 5% sodium hypochlorite	
25	Machine must be disinfected by Citric acid or any alike composition as chemical, thermal and a combination of both with Short and long disinfection without any binding for disinfectant.	
26	Audiovisual alarms on violation of limits on conductivity, blood leak, air leak, trans membrane pressure, dialysatetemperature and dialysate flow; detection of empty dialysate can and stopped blood pump; alerts for end ofdisinfection, reverse ultrafiltration and step bypass. With Guided, help Message.	
27	Automatic setting and monitoring of set alarm limits based on the delivery of set blood pump rate ultrafiltrationrate and level of blood in venous chamber	
28	Machine should have heat exchanger facility	
29	Machine should have reinfusion and drain facility after therapy	
30	Machine should have real-time urea measurement facility and Kt/V monitoring.	
31	Should have standby function to save dialysate and water	

32	Facility to store alarms, dialyzate treatment data, disinfection history in the machine so that they could be reviewed later.	
33	Should have inbuilt heparin infusion syringe pump with auto bolus function compatible with 10ml or 20ml syringe and infusion rate 0to 9.9ml/h. stop time before 30minutes end of treatment.	
34	Should have Onscreen help function facility.	
35	Facility for timer function	
36	Blood pressure and pulse rate monitoring. Reading Cycle setting options.	
37	Should have minimum 30 min battery back up for safety monitor sand blood pump.	
38	DialysisMachine should be USFDAand CECertified.	
39	Should have HaemoDialysis standard(IEC 601,1 IEC601216IEC60112)approval	
40	Machine should have isolated ultrafiltration facility.	
41	Machines should have warranty period of three years and guarantee of supply of peripherals and parts.	

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# Specifications for Equipments

Technical Specifications: Bicarbonate Mixer machine Nilratan Sircar Medical College and Hospital, kol-14

Features:-

Tank, Stand, Motor bed: LLDP, AC OPERATED, 1 PHASE-230VOLT AC OF 50Hz

: Stainless SS316L ROD GRIT, NON WETTED PEDESTAL Stirrer

BLADE / PROPERRER : Stainless Steel SS316L

Technical Specifications;

TYPE	MANNUAL
CAPACITY	100LITRS
PUMP POWER	0.25-0.5 HP
SPEED OF PUMP	1000RPM TO 1500RPM
FILL METHODE	MANUAL
PLUMBING CONNECTIONS	AS PER REQUIREMENT
LEVEL CONTROL	MANUAL
OVERFILL SYSTEM	YES
DISINFECT TIME	10 MINUTES
DIMENSIONS	500mm, X 500mm
WEIGHT	40Kg
POWER SUPPLY	1 PHASE-230VAC-50Hz
POWER CONSUMPTION	MIN, 150W AND MAZ. 400W

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