

CORRIGENDUM


In view of the representations received from prospective bidders regarding the finalization of the Rate Contract for the procurement of "Machinery & Equipment" (vide No. Mach/2025/667 dated 23.07.2025), amendments in the technical specifications of the "Reverse Osmosis Plant (RO) for Hemodialysis," as recommended by the technical experts, are hereby issued. The revised specifications are annexed as Annexure-A (02 pages).

Further, in view of the pending responses from the experts, the critical dates are extended as under:

1. Last date and time for submission of online bids: 20.09.2025 up to 1600 hrs.
2. Date and time for opening of technical bids: 22.09.2025 at 1100 hrs.

Please Note:

1. Firms/bidders who have already uploaded their bids are required to re-upload them in accordance with the amendments and corrigendum issued.
2. All bidders are advised to remain updated and ensure submission of their e-bids through the e-portal as per revised specifications and BOQs. All amendments/modifications will be available on the e-portal and on www.jkmsclbusiness.com.


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General Manager (Adm),
J&K Medical Supplies Corporation Ltd.

No.: JKMSCL/Corg/2025/ 5743-46

Dated: 08.09.2025

Copy to:

1. General Manager (K), J&K Medical Supplies Corporation Ltd.
2. Dy General Manager (Tendering), J&K Medical Supplies Corporation Ltd.
3. P.A. to Managing Director, J&K Medical Supplies Corporation Ltd.
4. Assistant Programmer, JKMSCL for uploading on the web portal.
5. File.

Sr. No.	Specifications
Specifications of Reverse Osmosis Plant for hemodialysis with capacity of 1000 L/hr	
A)	PRE-TREATMENT MODULE
a.1	raw water mesh filtering size 100 microns to prevent big dust/sand particles with back wash control
a.2	There should be an automatically controlled Solenoid Valve to fill the Raw Water Tank.
a.3	vertical raw water tank of food grade quality of 750 litres capacity with automatic water float and dry run protection.
a.4	raw water booster pumps (Stainless Steel 316) with capacity of 3000 LPH.
a.5	Micron particle filter after booster pumps for removing suspended particles more than 20-micron size.
a.6	Zeolith Filter with particles of different grade & should have fully automatic backwash & rinse cycles every day.
a.7	Double Water Softener: with fully automated digital display one in operation while the other in standby and vice-versa with sample valve, Brine tank and automatic regeneration capacity
a.8	Double activated Carbon filter to remove Chlorine and Chloramines with sample valve. It should have fine carbon granules should have fully automatic backwash cycle & rinse cycle every day.
a.9	Micron particle filter after activated Carbon filter for removing suspended particles more than 5- micron size.
a.10	All pre-treatment modules should have programmable back wash and regeneration facility
a.11	Pressure monitoring facility of all filtering stages
a.12	Sample valve facility for all filtering stages
a.13	Should have the provision of pre-treatment connectivity for monitoring.
a.14	Zeolith filter, activated carbon filter and sample valve design should be as per ISO 23500-2.
B)	RO UNIT FOR MAIN TREATMENT
b.1	Distribution of RO plant water sufficient for at least 20 ports (for HD Machines and other ports like; dialyzer rewash, dialysate fluid composition etc)
b.2	R.O. Unit should have fully integrated, compact design and Housing mounted system with wheels, housing membrane, high pressure pump and bypass mechanism.
b.3	RO water for haemodialysis to be applied in therapies such as HD, SLED, HDF and HF
b.4	Plant capacity -1000 Litres/Hr
b.5	Microprocessor/microcontroller controlled Dual stage RO water system
b.6	There should be microprocessor-based emergency operation option available in case of electronic failure, both stages should be capable of working independently to produce dialysis quality water as per ISO 23500 if one stage fails.
b.7	Both stages of RO should be connected in series and should operate together or individually in fail-safe mode
b.8	System shall have auto start/stop based on water level in the supply tank
b.9	System shall be equipped with electrical panel for plant protection
b.10	RO Unit should have fully integrated, compact design and Housing mounted system with wheels, housing membrane, high pressure pump and bypass mechanism.
b.11	Should have fully automatic volume-controlled permeate heat and chemical disinfection cycle
b.12	The complete system should be fully programmable
b.13	In built capabilities to show on display for Permeate (Supply in litre/min, Temperature) & for Raw Water Consumption in Litres/min & Pressure)
b.14	Alarms against low feed water, high output conductivity and high temperature of pump motor
b.15	The alarms should be visible/audible in dialysis unit.
b.16	Unused water feedback facility to RO unit for saving on water rejection
b.17	The unit should be programmable and automatic rinsing/flushing facility at regular intervals when system is not in use.
b.18	Should have the provision for auto-suck disinfectant instead of manual.
b.19	Emergency mode operation to run permeate output in case of electronic failure
C)	RO MEMBRANE
c.1	Efficiency of unit with maximum saving of water upto 75% (dynamic) of overall RO Plant, cumulative efficiency of Stage 1 & 2
c.2	There should be cross flow mechanism across the membranes.
c.3	Should have rejection rate of >99% for bacteria & endotoxins and >96% for dissolved salts.
c.4	Sample valves for permeate should be provided.
D)	POST TREATMENT
d.1	Direct feed for full closed loop distribution piping system
d.2	Disinfection Provision Automatic Disinfection with both chemical/hot water and chemical-based decalcification of RO membranes.

d.3	The permeate should be supplied to distribution loop using PEX piping and Stainless Steel 316 push pull type connectors for water outlet at dialysis machine connecting points at minimum 30 points with a provision to increase more if required
d.4	ISO 15883 volume control Integrated auto programmable heat disinfection permeate loop connected with ISO-15883 for RO and HD machine
d.5	The distribution loop should contain loop pressure regulator to maintain the desired loop back pressure
E)	USER INTERFACE
e.1	Digital display of values of Conductivity/permeable flow/temperature/pressure monitoring/reject flow
e.2	Touch screen/button type illuminated display for easy to operation of user
e.3	All software update to be provided free of cost
e.4	Provision for display of all parameters in a desktop via. Ethernet/LAN (remote operation)
e.5	Provision of data acquisition for monitoring of pre-treatment units through USB/LAN/Ethernet.
F)	CERTIFICATIONS & REPORTS
f.1	It is recommended to share the CDSCO certificate for both RO and HF along with their registration number to ensure that the RO and HF come under the category of Medical equipments as per Indian standards and comply with ISO 23500-2019 guidelines.
f.2	It should be mandatory for OEM to share the test certificate of IEC 60601 for RO to ensure patient safety as per ISO 23500-2019 guidelines
f.3	OEM should provide medical grade certification (CE/USFDA/BIS) for post distribution including pex and its accessories.
f.4	Submission of Test Report for permeate water quality as per ISO 23500:2019 from Central Govt/NABL/ILAC accredited Lab to prove the conformity to declared specifications after installation
f.5	Output water quality should match ISO standards at all times
f.6	Product certification EU-CE/BIS/US-FDA and ISO 26722:2014 and appropriate medical device certification like ISO 13485
f.7	Tender should be submitted with full quality assurance certificate (EC/BIS/ISO)
f.8	Certification, performance and safety standards should be specific to the device
f.9	Supplier to perform installation, safety and operation checks before handover
f.10	All Pre-installation requirements along with site preparation should be provided by the seller to the buyer well in advance before the supply of equipment
G)	MAINTAINENCE AND SERVICE
g.1	Bidder must provide on-site training to hospital personnel. The training should be comprehensive covering basic working aspects plus machine trouble shooting aspects and it should be conducted by full-time qualified trainers who should also issue a certificate to personnel at the end of training.
g.2	Bidder should provide water quality testing (microbial, endotoxin and chemical including heavy metals, as per AAMI/ISO standards from a Central Govt/NABL/ILAC accredited Lab (that is acceptable to Dialysis Unit In-charge) at the start at no additional cost.
g.3	Hardness and Chlorine test kits to be provided
g.4	Bidder should have the in-house engineer support facility for 24 hr within the territory.
g.5	A Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist and tests must be provided according to guidelines and manufacturer recommendation. The job description of the hospital technician and company service engineer should be clearly spelt out.
H)	ESSENTIAL CRITERIA
h.1	Manufacturing company should have an installation base of sufficient number and capacity of RO systems for haemodialysis in India. Only those vendors with at least 10 RO System in India in which at least 25% of them should be of 1000 litre capacity or more will be considered for eligibility.
h.2	The bidder must submit at least five-year performance certificates from hospitals/institutions where a similar RO plant has been installed.
I)	ADDITIONAL FEATURES
i.1	Should have dynamic water-saving technology and rinsing system
i.2	System should operate in 3 phase supply