



**Bihar Medical Services & Infrastructure Corporation  
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### **Corrigendum-II**

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for Procurement, Rate contract, Supply, Installation of Medical Equipment vide Tender No.-BMSICL/2024-25/ME-361. During Pre-bid meeting various suggestions were received from different prospective bidders regarding amendment in technical specification of equipment which were discussed and deliberated on by the experts. On the basis of their recommendations certain amendments in the technical specification of the equipment have been made which are annexed as **Annexure-I** of this corrigendum.

**SD/-  
GM (Procurement)  
BMSICL**

## Annexure-I

<b>Name of Equipment - Oxygen Concentrator (5Litre)</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>After Amendment</b>
1	Oxygen concentrator to provide oxygen from ambient air	No Change
2	Oxygen concentration measured at the flow meter by oxygen sensing device (OSD)	No Change
3	Sound level &lt;50 dB	No Change
4	Superior grade of molecular sieve	No Change
5	Maintenance free valve.	No Change
6	Oxygen purity, approx.: 90%. (+/-3)	No Change
7	Oxygen output, approx.: 0 - 5 LPM	No Change
8	Pressure, approx.: 8 psi	No Change
9	Double/ Single outlet for oxygen Delivery	No Change
10	Oxygen tube of 2 m length must be provided with	No Change
11	Facility for nebulization with tube & mask	No Change
12	With one humidifier bottles and one cabinet filters	No Change
13	Unit should function with 200-240Vac, 50/60 Hz input power supply	No Change
14	Should have USFDA/European CE (Issued by notified body)/BIS	No Change

<b>Name of Equipment - Oxygen Concentrator (10 Litre)</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Oxygen concentrator to provide oxygen from ambient air	No Change
2	Oxygen concentration measured at the flow meter by oxygen sensing device (OSD)	No Change
3	Sound level & lt;50 dB	No Change
4	Superior grade of molecular sieve	No Change
5	Maintenance free valve.	No Change
6	Oxygen purity, approx.: 95% (+/-3)	No Change
7	Oxygen output, approx.: 0 - 10 LPM	No Change
8	Pressure, approx.: 8 psi	No Change
9	Double/ Single outlet for oxygen Delivery	No Change
10	Oxygen tube of 2 m length must be provided with	No Change
11	Facility for nebulization with tube & mask	No Change
12	With one humidifier bottles and one cabinet filters	No Change
13	Unit should function with 200-240Vac, 50/60 Hz input power supply	No Change
14	Should have USFDA/European CE (Issued by notified body) /BIS	No Change

<b>Name of Equipment - Suction Machine- Foot Operated</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	0 to - 600 mmHg +/-10mm regulable, flutter free, vacuum control knob	No Change
2	Setting should be manual.	No Change

3	Accessories & spare parts- collection bottles, clear unbreakable jar (one set extra)	No Change
4	Consumables / reagents - (open, closed system) silicon tubing - two sets	No Change
5	Certificate – ISO 13485 (NABCB accredited)	No Change

<b>Name of Equipment - . Proctoscope- Adult</b>		
<b>SI. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Proctoscope adult size Reusable, stainless steel with inbuilt illumination unit	No Change
2	Manufacturer should have ISO 13485 (NABCB) Accredited/ BIS approved product	No Change

<b>Name of Equipment - Proctoscope- Child</b>		
<b>SI. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Proctoscope Pediatric Reusable, stainless steel with inbuilt illumination unit	No Change
2	Manufacturer should have ISO 13485 (NABCB) Accredited/ BIS approved product	No Change

<b>Name of Equipment - Ultrasonic Nebulizer</b>		
<b>SI. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
a.	Should be light weight, portable, Compact and easy to use.	No Change
b.	Frequency of ultrasonic generator should be greater than 2.5 MHz	No Change
c.	Should have 3 speed nebulization rate control (minimum, medium, maximum)	No Change
d.	Should have a nebulization capacity of 0.3 ml/min.	No Change
e.	Transducer element should have life of at least 5000 hours	No Change
f.	Medication cup capacity should have capacity of maximum 8ml.	No Change
g.	Should uses water as ultrasonic conduction medium, no gel is required.	No Change
g.	Should provide silent operation.	No Change
i	Should have a built-in timer.	No Change
j	Should works on 200-240 VAC / 50 Hz.	No Change
k	Should be provided with a complete nebulization kit of 10 Nos. including adult and child mask and medication cup – 5 Nos.	No Change
l	Should be US FDA/European CE (Issued by Notified body)/BIS approved model	No Change

<b>Name of Equipment -Nebulizer</b>		
<b>SI. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
	<b>Product Quality and Safety Standard certification:</b>	
1	The quoted model should be USFDA /EU-CE/BIS/ISO 13485 and accredited by NABCB	No Change

2	The quoted medical device must be registered under CDSCO and submit the license for manufacture to sale or distribute the medical device. If not registered, the acknowledgment copy of the online application for the said registration must be uploaded in the bid.	No Change
3	Compact, lightweight, low noise	No Change
4	Durable long-life compressor. Suitable for heavy duty/ institutional (hospital) use, should be able to run uninterruptedly for one hour, Max Press= 2.0-2.5 bars.	No Change
5	Should produce particle of size 1-5 micron.	No Change
6	Medication capacity should be 8 ML ±2ml	No Change
7	Operating Temp/Humidity should be -10-degree c to +50-degree c, 30% to 95% relative humidity Maximum.	No Change
8	Material of the cabinet should be ABS plastic.	No Change
9	Piston-type electric aspirator that offers high performance and great durability.	No Change
10	Protective thermal cut out relay.	No Change
11	Air delivery rate app 5 L/min.	No Change
12	Noise level should be 20 dB or less.	No Change
13	Maximum pressure should be 100 kpa.	No Change
14	Nebulizing rate should be 1.0 ml ≤ ML/min.	No Change
15	Power input to be 220-240VAC, 50Hz fitted with Indian plug.	No Change
16	Accessories to be supplied with the machine:	No Change
i	“Face mask with Nebulization kit and Tubing” for Adult, Pediatric and Infant patient -1 number each	No Change

<b>Name of Equipment - Laryngoscope Adult</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
	<b>Product Quality standard certification:</b>	
1	The quoted model should be either “USFDA approved (Device listed with registration under valid FEI number /CFG)” or “European CE certified”. The EUROPEAN-CE certificate should be issued from notified body having notified body number. Manufacturer Quality standard certification:	The quoted model should be either “USFDA approved (Device listed with registration under valid FEI number /CFG)” or “European CE certified”. The EUROPEAN-CE certificate should be issued from notified body having notified body number. Manufacturer Quality standard certification/CE Certified.

2	The manufacturer of the quoted product should have EN ISO 13485 certificate issued from a notified body or ICMED 13485 (with or without plus) certificate issued from certification bodies accredited by NABCB or ISO 13485 certificate issued from certification bodies accredited by NABCB/Nationally Recognized Accreditation Board under IAF MLA.	No Change
3	The manufacturer should be certified to the standard ISO 7376:2009 or Latest.	No Change
4	The quoted medical device must be registered under CDSCO and submit the license for manufacture to sale or distribute the medical device. If not registered, the acknowledgment copy of the online application for the said registration must be uploaded in the bid.	No Change
1	Fiber optic Laryngoscope should comprise of excellent ribbed grip Stainless steel handle and light source using the latest LED technology.	No Change
2	The main body of the handle should incorporate an excellent ribbed grip.	No Change
3	There should be a freely moving light from the light source through to the tip of the fiber optic blade to prevent any possibility of cross contamination.	No Change
4	The unit should allow the blade to be inserted easily & should provide a positive locking mechanism when moved in to the closed position.	No Change
5	The patient contact material should be biocompatible.	No Change
6	User Interface-Manual	No Change
	<b>CONFIGURATION:</b>	
1	Light weight, handheld unit, single piece when in use	No Change
2	External material of handle should be stainless steel.	No Change
3	Blades to be surgical grade stainless steel of sizes Neonatal -Straight (00&0), Pediatric -Curved (1&2) Adult (Curved)-3&4, Adult Flexi Tip-3&4.	No Change
4	Storage box should be provided (to be supplied in protective, reclosable container) Power Requirements-Battery operated (Internal batteries or rechargeable batteries)	No Change

<b>Name of Equipment - Laryngoscope Paediatric</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
	<b>Product Quality standard certification:</b>	
1	The quoted model should be either “USFDA approved (Device listed with registration under valid FEI number /CFG)” or “European CE certified”. The EUROPEAN-CE certificate should be issued from notified body having notified body number. Manufacturer Quality standard certification:	The quoted model should be either “USFDA approved (Device listed with registration under valid FEI number /CFG)” or “European CE certified”. The EUROPEAN-CE certificate should be issued from

		notified body having notified body number. Manufacturer Quality standard certification/CE Certified.
2	The manufacturer of the quoted product should have EN ISO 13485 certificate issued from a notified body or ICMED 13485 (with or without plus) certificate issued from certification bodies accredited by NABCB or ISO 13485 certificate issued from certification bodies accredited by NABCB/Nationally Recognized Accreditation Board under IAF MLA.	No Change
3	The manufacturer should be certified to the standard ISO 7376:2009 or Latest.	No Change
4	The quoted medical device must be registered under CDSCO and submit the license for manufacture to sale or distribute the medical device. If not registered, the acknowledgment copy of the online application for the said registration must be uploaded in the bid.	No Change
1	Fiber optic Laryngoscope should comprise of excellent ribbed grip Stainless steel handle and light source using the latest LED technology.	No Change
2	The main body of the handle should incorporate an excellent ribbed grip.	No Change
3	There should be a freely moving light from the light source through to the tip of the fiber optic blade to prevent any possibility of cross contamination.	No Change
4	The unit should allow the blade to be inserted easily & should provide a positive locking mechanism when moved in to the closed position.	No Change
5	The patient contact material should be biocompatible.	No Change
6	User Interface-Manual	No Change
	<b>CONFIGURATION:</b>	
1	Light weight, handheld unit, single piece when in use	No Change
2	External material of handle should be stainless steel.	No Change
3	Blades to be surgical grade stainless steel of sizes Neonatal -Straight (00&0), Pediatric -Curved (1&2) Adult (Curved)-3&4, Adult Flexi Tip-3&4.	No Change
4	Storage box should be provided (to be supplied in protective, reclosable container) ENERGY SOURCE: Power Requirements-Battery operated (Internal batteries or rechargeable batteries)	No Change

<b>Name of Equipment -Laryngoscope Infant</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Laryngoscope disposable blade cover	No Change
2	Laryngoscope set, neonate, curved, Macintosh Type blade no. 0	No Change
3	Laryngoscope set, neonate, straight, Miller/Magill Type blade no 0	No Change
4	Laryngoscope set, neonate, straight, Miller/Magill Type blade no 1	No Change

5	Laryngoscope set, neonate, straight, miller/Magill type blade no 00 (For premature neonates)	No Change
6	Laryngoscopes disposable handle cover.	No Change
7	Should have ISO 13485 (NABCB accreditation )	No Change

<b>Name of Equipment - Tourniquet- Adult</b>		
<b>SI. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Automatic Tourniquet System should be dual-port, dual- cuff system with microprocessor controls and dedicated ports for supplying and measuring pressure independently, so that it can be used for bilateral joint replacement procedures. With the innovative Limb Occlusion Pressure (LOP) feature. The tourniquet should combine the latest in advanced tourniquet technology with the well-established tradition of safety, reliability and convenience.	No Change
2	It should have the following Features: -	No Change
2.1	Ability to provide a specific Recommended Tourniquet Pressure (RTP) for each patient based on physiological characteristics	No Change
2.2	Limb occlusion pressure (LOP) feature	No Change
2.3	Dual Cuffs: Dual port, color coded	No Change
2.4	Dual Displays	No Change
2.5	Should use ambient air	No Change
2.6	Microprocessor Controlled	No Change
2.7	Self-check calibration	No Change
2.8	Audible and visual alarms	No Change
2.9	Internal pump for fast Inflation time	No Change
2.10	Positive locking connectors	No Change
2.11	Should automatically checks the accuracy of machine calibration every time the system is powered up.	No Change
2.12	Should alert the user of the cuff status when attempt is made to power down the machine	No Change
2.13	Cuff Lockout safety Feature	No Change
2.14	Dual compressors to allow for independent control over cuffs “one” and cuff “two”, addressing the potential physiological differences in the patient.	No Change
2.15	Dedicated pressure line and pressure measurement line for cuff “one” and cuff “two”, which should be designed to provide most accurate readings.	No Change
2.16	Utilization of two independent cuffs during one surgical procedure to allow bilateral knee procedures.	No Change
2.17	Battery backup of 04(Four) hrs., so that it can be used during patient transport and to be used during a power failure. No interruption in the procedure while the cuff is inflated- Automatically transfers power to the battery.	No Change

2.18	Should sense, calculate and report the cuff pressure necessary to achieve complete blood occlusion in the operative limb.	No Change
2.19	USFDA/European CE (Issued by notified body) /BIS approved model should be offered	No Change

<b>Name of Equipment - Tourniquet- Child</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	Should be European CE (Issued by Notified body) or USFDA certified.	No Change
2	Fabric single cuffs with silicon with bladder having length of bladder equivalent to 0 complete cuff/durable, latex-free sterile cuffs.	No Change
3	Washable at 60 C All Cuffs supplied with male coupling to fit.	No Change
4	05 different paediatric size cuff Should be provided	No Change
5	Control Micro computerized cuff pressure Control	No Change
6	Inflation Air Source Internal Air Compressor	No Change
7	Cuff Pressure Adjustable 100 to 450 mmHg.	No Change
8	Pre-set resolution 10 mm Hg	No Change
9	Accuracy Max. + 5%	No Change
10	Display – 3 digit – pre –selected pressure.	No Change
11	3 digit-Clock- Elapsed time	No Change
12	Different colour LED for Inflate & Deflate	No Change
13	Push Button Functions Preset pressure for each separately,	No Change
14	Inflate/Deflate-cuffs 1 & 2,	No Change
15	Deflate – cuff 1 & 2	

<b>Name of Equipment - Oxygen cylinder Type D</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	D Oxygen Bulk Cylinder ISI marked to IS 7285(Part-2):2004 and Colour code should be as per IS:3933 and conforming to ISO 32:1977 applicable for Medical Gas cylinders duly approved from CCOE Nagpur.	No Change
2	The cylinder shall be fitted with valve & valve guard having following broad specifications:	No Change
i	Dimensions: 232 mm O.D x 1365 mm length.	No Change
ii	Capacity Minimum: 6.7 Cubic meter Gas capacity. : 46.7 liters Water capacity	No Change
iii	Minimum Wall thickness = 5.2 mm.	No Change
iv	Working pressure at 15°C = 150 kgf/cm <sup>2</sup> .	No Change
v	Test pressure = 250 kgf/cm <sup>2</sup> .	No Change
vi	Nominal Tare Weight = 51.00 kg with Neckning.	No Change
vii	Neck Threading: IS3224 1979.	No Change



<b>Name of Equipment -Oxygen Cylinder Type B with all accessories (with flow meter/tubing/catheter/ face mask/nasal prongs)</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
1	B Type Supply of Oxygen Bulk Cylinder ISI marked to IS 7285(Part-2):2004 and Colour code.	No Change
2	Should be as per IS:3933 and conforming to ISO 32 : 1977 applicable for Medical Gas & cylinders duly approved from CCOE Nagpur.	No Change
3	The cylinder shall be fitted with valve & valve guard having following broad specifications:	No Change
I	Dimensions: 140 mm O.D x 855 mm length.	No Change
II	Capacity Minimum : 1.53Cu.m. Gas capacity. : 10.2 liters Water capacity	No Change
III	Minimum Wall thickness = 4.2 mm.	No Change
IV	Working pressure at 15°C = 150 kgf/cm <sup>2</sup> .	No Change
V	Test pressure = 250 kgf/cm <sup>2</sup> .	No Change
VI	Nominal Tare Weight = 14.9 kg with Neckning.	No Change
VII	Neck Threading: IS3224 1979	No Change

<b>Name of Equipment -OT Table</b>		
<b>Sl. No</b>	<b>Technical Specification as per tender</b>	<b>Final Amendment</b>
	<b>Product Quality standard certification:</b>	
1	<b>The quoted model should be USFDA /European CE from notified body/ BIS</b>	No Change
2	The quoted model should have Test Certificates / Reports conforming to IEC 60601-2-46 certified, particular required for the basic safety and essential performance of operating table Certificate issued from BIS conforming to IS 13450(part 1) or IS/ISO 80601(Part 2). Manufacturer Quality standard certification:	Deleted
3	The manufacturer of the quoted product should have EN ISO 13485 certificate issued from a notified body or ICMED 13485 (with or without plus) certificate issued from certification bodies accredited by NABCB or ISO 13485 certificate issued from certification bodies accredited by NABCB/Nationally Recognized Accreditation Board under IAF MLA.	Deleted
4	The Table should provide an elevated surface for supporting the patient body. These tables stabilize the patient position and provide the operating surgeon with optimal exposure of the surgical field. Applications for these tables include both upper-extremity procedures (e.g., shoulder surgery, non-operative myelograms, spinal surgery) and	The Table provide an elevated surface for supporting the patient body. These tables

	<p>lower extremity/ hip procedures (e.g., hip pinning, Ender nailing, intramedullary nailing of the femur, tibia, and fibula).</p>	<p>stabilize the patient position and provide the operating surgeon with optimal exposure of the surgical field. The Table must be supplied with the below standard and Orthopaedic Attachments:</p> <ul style="list-style-type: none"> <li>• Arm Board: 2 Nos.</li> <li>• L shape Anaesthesia Screen: 1 No.</li> <li>• Shoulder support with pad: 2 Nos.</li> <li>• Lateral support with pad: 2 Nos.</li> <li>• Lithotomy Knee Crutches: 1 No</li> <li>Attachments for Orthopaedic-Surgery <ul style="list-style-type: none"> <li>• Hanging Type Orthopaedic Leg Traction Device Complete: 1 No</li> </ul> </li> <li>• Radiolucent Hand Operating Table with Telescopic Support: 1 No</li> <li>• Steinmann Pin Holder: 1 No</li> <li>• Tibia Support: 1 No <ul style="list-style-type: none"> <li>• Hip Nailing Support: 2 Nos</li> </ul> </li> <li>• Mattress: 50 mm antistatic waterproof PU foam mattress: 1 No</li> </ul> <ol style="list-style-type: none"> <li>1. Hand Surgery Attachment</li> <li>2. Spine Frame</li> <li>3. Support for Elbow Surgery</li> <li>4. Thigh Support</li> </ol>
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5	Should have Electro-hydraulic actuator and all the movements should be through remote and backup panel.	No Change
6	Table should have Trendelenburg / reverse Trendelenburg, lateral tilt, longitudinal shift, height adjustment, anti-flex and flex position, back plate up / down movements and zero position by single-click through remote/auxiliary switch through remote control. Also, the table should have a emergency stop switch to stop the table during any electrohydraulic failure or incident.	No Change
7	Operating Table along with all the attachments should be C-Arm Compatible and Radiolucent.	No Change
8	The table top should have 6 or more positions.	No Change
9	The table should have manual override system with auxiliary switch for all electro hydraulic function (height up/down, side tilt, Trendelenburg, back up/down, and table top slide) and should be operated through foot pump after selection from selector mounted on table.	No Change
10	The table should have Wheel mounted and Central locking mechanism.	No Change
11	Table top length should be 1900 mm -2100 mm or more.	No Change
12	Table top width should be 500 mm -580 mm or more.	No Change
13	Minimum table top height should be 700 mm or less & amp; maximum height should be 1000mm or more with $\pm 5\%$ tolerance.	Minimum table top height should be 650 mm or less & amp; maximum height should be 1000mm or more with $\pm 5\%$ tolerance.
14	Material of the Body should be 304 grade SS.	No Change
15	Should have latex free fully radiolucent, detachable, impermeable to fluid and easily washable mattress.	No Change
16	The range of angle should be	No Change
a.	For Trendelenburg & amp; Reverse Trendelenburg position: 25 to 30 Degree	No Change
b.	For Lateral tilt left and right: 18 to 25 Degree	No Change
c.	For Head Section UP/Down: 45 to 90 degree	No Change
d.	For Back Section UP/Down: 80 to 30 degree	No Change
e.	For Leg Section UP/Down: 20 to 90 degree	No Change
f.	For Flex: Upto 230 degree	No Change
g.	For Reflex upto 100 degree	No Change
17	Table top longitudinal sliding, Range should be 5 inch to 12 inch or more.	No Change

18	Should have patient weight bearing capacity 150 kg or more.	No Change
19	Should have detachable head & leg section.	No Change
20	Should have battery backup of 3 Hr or more.	No Change
21	Both arm board should have up and down and rotation function.	No Change
22	Each table should supply with	No Change
a.	Anaesthetic Screen with side clamp & lock - 1 set	No Change
b.	Arm rest with side clamp & lock -1 pair	No Change
c.	Shoulder support with side clamp & lock-1 pair	No Change
d.	Lithotomy with side clamp & lock-1pair	No Change
e.	Extension bar-1pair	No Change
g.	Foot Support -2 No.	No Change
h.	Bolster Pillow – 2 no.	No Change
i.	Supports bars – 2 no.	No Change
j.	Radial setting clamps – 4 No.	No Change
k.	Side rail extension – 2 No.	No Change
l.	Restraint body strap-1pair	No Change
23	Should Operate in 220-240 Volt, 50 Hz, AC	No Change