

**Minutes of the Technical Evaluation Committee Meeting of Urology Department.
RIMS . Imphal, Manipur.
Dated 6/8/2019 ,Imphal .**

“The Technical evaluation committee “ meeting of the Urology Department ,RIMS Imphal Manipur was held on 6/8/2019 at 2 pm in the seminar room of the Urology Department to discuss the Technical specification of the following instruments indented for use for Urology Department RIMS Imphal Manipur.

1. Uretero – Renoscopy (URS) Large sets (2)
2. Uretero – Renoscopy (URS) small sets(2)
3. Nephroscope and PCNL sets(2)
4. MINI – PCNL (1)
5. Adult Cystoscopy set(1)
6. Cystolitholapaxy set(1)
7. Visual internal Uretrotomy set(1)
8. Bipolar / Saline TURP set(1)
9. Pediatric Cystoscopy set(1)
10. Pediatric VIU (optical uretherotome) set(1)
11. Pediatric Resectoscope set(1)
12. HD Laparoscopic system(1)

The following members were present in the meeting .




- 1.Dr.AK.Kaku Singh (Prof & HOD Urology Department RIMS Imphal , Manipur)
- 2.Dr.S.Sekharjit Singh (Prof Urology Department RIMS Imphal , Manipur)
- 3.Dr.Kh.Somarendra (Registrar , Urology Department RIMS Imphal , Manipur)

The Head of the Department Urology welcomed the other two members and the meeting was put into order.

The three members studied and discussed the technical specification of each and every item indented for , very minutely. All the members unanimously agreed to the technical specifications of each and every items submitted earlier without any further changes.

The meeting ended with vote of thanks by the head of department .

Signature of the Members present

1. Prof.Dr.Ak.Kaku Singh

PROFESSOR & HEAD
Department of Urology
Regional Institute of Medical Sciences
Imphal, Manipur
2. Prof.Dr.S.Sekharjit Singh

PROFESSOR
Department of Urology
Regional Institute of Medical Sciences
Imphal Manipur
3. Dr.Kh.Somarendra Singh

Registrar
Department of Urology
RIMS, Imphal

Specification for URS – Large

1. Uretero-Reno scope-2 pcs

It should have the following features:

- Direction of view should be 5-12 degree.
 - Distal end outer diameter should be around 8.0-9.0 Fr.
 - Working length should be 400-450mm.
 - Single/dual working channel- Incorporated/Detachable instrument port with sealing system and quick release lock, 2 channels.
 - Working channel diameter should be around 5-7Fr.
 - Semi-Rigid type.
 - Angled eye piece.
 - Autoclavable.
 - Atraumatic tip design.
 - 2 lateral irrigation ports.
 - Built –in maintainance free stop cocks.
 - It should be supplied with following items
 - Self sealing cap- 10no.
 - Autoclavable instrument tray.
2. Grasping forceps for stone fragments, double action jaws, 3Fr-4 Fr, flexible/rigid, autoclavable, length 55-60 cms-4 pcs.
 3. Grasping forceps for large stone fragments, double action jaws, 5 Fr, flexible/Rigid, length 55-60cms- 4 pcs.
 4. Accessories(for each scope)
 - a. Handle-1
 - b. Membrane seal(pack of 10)-2
 - c. Membrane retainer, standard-1
 - d. Membrane retainer with luer-1

Stone therapy with laser, ultrasound, electro-hydraulic or ballistic lithotripsy should be feasible. Rigid auxillary instruments should go through the straight instrument channel. Use of flexible auxillary instruments or two different instrument such as laser fibre of electro hydraulic probe and stone extractor to stable and retrieve the stone fragments should be possible.

All instruments should be CE and FDA approved

A. Kishan Singh

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Dr. Srinivas

Specifications for URS- small

1 . Uretero-Renoscope – 2pcs

It should have the following features :

- Direction of View should be around 5-7 degree
- Distal End outer Diameter should be around 6-7 Fr
- Working length should be around 400-450mm
- Working channel diameter should be around 4-5 Fr
- Semi-Rigid type
- Angled eye piece
- Autoclavable
- Atraumatic tip design
- 2 lateral irrigation ports
- Built-in maintenances free stop cock
- It should be supplied with following items :
 - Self-Sealing Cap – 10 no
 - Autoclavable Instrument Tray

2. Grasping Forceps for stone fragments , double action jaws ,

3 Fr- 4 Fr , rigid , length 55-60 cm – 2 pcs.

Stone therapy with laser , ultrasound , electro-hydraulic or ballistic lithotripsy should be feasible . Rigid auxiliary instruments should go through the straight instrument channel.

Accessories (for each scope):

Handle	1
Membrane seal (pack of 10)	2
Membrane retainer , standard	1
Membrane retainer with Luer	1

All instruments should be CE and FDA certified wherever applicable .

An. K. Singh

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Dr. Somendra

Specification for Nephroscope and PCNL sets

The system should have following:

- Telescope: QTY 2 Nos. each
 - 18-22 Fr , autoclavable, with >12 Fr working channel and having working length of more than 220mm.
 - Should have maintenance free stopcocks.
- Sheaths and hand instruments

The system should have quick snap on mechanism. Sheath should have matt finish for staying of lubrication gel to reduce friction trauma to the patient. Maintenance free stopcocks needing no lubrication
- Rotatable outer sheath :QTY 2 Nos each
 - Should be 24-26 Fr for compatible telescope 18-22Fr, autoclavable, with >12 Fr working channel with standard hollow obturator.
- Hand instrument: QTY 4 Nos. each
 - 380mm-400mm grasping forceps , toothed. 4
 - 380mm-400mm grasping forceps, with fenestration. 4
 - 380mm-400mm grasping forceps , three nail. 4
 - 380mm-400mm biopsy forceps for collecting samples of biopsy. 4
 - 380mm-400mm compatible knife to be used with nephroscope. 4
 - Compatible scissors for use with nephroscope set. 4
 - Sickle knife for use with nephroscope set. 4
- The eye piece should be compatible with standard endovision camera head.
- Accessories – standard
- Storage and transportation tray
- All instrument must be CE and FDA certified wherever applicable.

Ankush Singh

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Dr. Somenendra

Specifications for MINI-PCNL Set

The system should have:

- Nephroscope should have a size of not more than 12 FR- 1pcs.
- Single and continuous flow system.
- It should have an angled eye piece.
- Direction of view 7-12 degree
- Straight and large working channel accepting working instruments of 5 Fr size easily.
- Sheath should have matt finish for staying of lubrication gel to reduce friction trauma to the patient.
- Maintenance free stopcocks needing no lubrication.
- Compatible Sheaths for Mini-PCNL should be included- 1 set.
- An applicator consisting of sheath and rod may be supplied so as to use with haemostatic agents like ,Flo seal and Surgiflow.- 5pcs.

Hand Instruments:

Hand Instruments: QTY 2 No. Each

- 5 Fr. Grasping forceps
- 5 Fr. Biopsy forceps o 5 Fr Scissor
- 3 Fr. HF-electrode, flexible-for coagulation
- HF-Cable compatible with Electro-Surgical Unit

All Instruments should be CE and FDA certified wherever applicable

Ankush Singh

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Dr. S. Srinivasan

Specifications for Adult Cystoscope set, Cystolitholapaxy Set, Visual Internal Urethrotomy (VIU) Set, Bipolar/Saline TURP Set and Bipolar Electrocautery Set.

A. Adult Cystoscope set

This set should include the following:

1. Forward oblique 30-degree telescope, 4mm diameter, autoclavable, length 30cms, fibre optic light transmission incorporated -2pcs.
2. Forward oblique 0-degree telescope, 4mm diameter, autoclavable, length 30cms, fibre optic light transmission incorporated.-1 pcs
3. Oblique 70-degree telescope, 4mmdiameter, autoclavable,length 30cms, fibre optic light transmission incorporated.-1 pcs
4. Cystoscope-Urethroscope sheath, 19/19.5 Fr, with obturator and 2 Luer-lock connectors.
5. Cystoscope-Urethroscope sheath, 17/17.5 Fr, with obturator and 2Luer-lockconnectors.
6. Cystoscope-Urethroscope sheath, 22/23 Fr, with obturator and 2Luer-lock connectors.
7. Cystoscope-Urethroscope sheath, 25 Fr, with obturator and 2Luer-lockconnectors.
8. Telescope bridge with 1 lockable channel.
9. Optical grasping forceps, double action jaws for DJ Stent removal-1 pcs
10. Optical Biopsy forceps, 5Fr and 7 Fr, each with double actionjaws,flexible,length 40cms.-1 pcs
11. **Sachse Urethrotome Set** : The set should have 21 Fr Urethrotome sheath with obturator and channel for Urethrotome workingelement. There should be a telescope bridge for use with the Urethrotome sheath with a 5 Fr channel for instruments. A supplementary half-moon sheath, that slips on the Urethrotome sheath and is side-open for introduction of the balloon-tipped catheter, should be included. Thesetshouldbe provided with a passive workingelementandshould have cold knife, straight-06nos and cold knife, half-round-06 nos.
12. **Maurmeyer Stone Punch**: This set should be compatible with 4mm 12-degree telescope. The set should have the stone punch-workingelementand should be provided with compatible punch sheath with visual obturator. Sheath should have matt finish for staying of lubrication gel to reduce friction trauma to the patient.
13. **Toomey glass syringe**-50ml and 100 ml-1 each in number.
14. **Otis/Non-optical Urethrotome knife**-should be supplied with the dilatation unit. Should be supplied with knife and head parts-conical, flat and ball-shaped-1 each.

An. Kaur Singh

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Dr. Somendra

15. **Bipolar/ saline TURP set and bipolar electrocautery set**

This system should be compatible with following procedures:

- SalineTUR
- Conventional Monopolar TUR
- Bipolar/Saline Enucleation of Prostate
- Open Monopolar
- Open Bipolar
- Laparoscopic-Monopolar
- Laparoscopic-Bipolar
- Open Vessel sealing
- Laparoscopic Vessel sealing

System should have following features:

- Output mode: Monopolar, Bipolar and Saline.
- Monopolar cutting: PURE, BLEND
- Monopolar coagulation: SPRAY
- Bipolar Cutting: PURE
- Bipolar Coagulation: SOFT, HARD
- Saline cutting: PURE, BLEND

System should have possibility of vessel sealing upto 7mm, suitable reusable instrument for sealing and cutting simultaneously should be provided (5mm for laparoscopy surgery-2 nos and 10 mm for open surgery-2 nos) (In case of quoting Disposable instrument, 3 instruments each type should be quoted).

Saline coagulation: 2 or more different strengths

Base Frequency: 350 kHz

Protection against electric shock: Class I Type CF Weight should not be more than 15 Kg.

Automatic Smoke Evacuation facility. System should include the following:

- Electrosurgical Unit
- Footswitch
- Bipolar Passive Working Element
- Monopolar Passive Working Element
- Bipolar HF-Cable
- Monopolar HF-Cable
- Rotatable Outer sheath, 26 Fr./24Fr, ½ stopcock-1 pcs.
- Resection Inner Sheath, 24 Fr/22 Fr with obturator and with/without stopcock-1pcs.
- Two way Irrigation Port for 24 Fr/22Fr sheath for intermittent flow TUR.
- Compatible visual Obturator-1

Ankita Singh

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Dr. S. Srinivasan

Should be supplied with compatible electrodes-

- Monopolar Cutting loop electrode (8 Pcs).
- Monopolar Coagulation roller electrode (6 Pcs).
- Bipolar Cutting Electrode (8 Pcs).
- Bipolar Needle Electrode (6 Pcs).
- Bipolar Button Electrode for plasma Vaporization (2 Pcs).
- Bipolar Enucleation Electrode (6 Pcs).
- Light Guide Cable, 3.5 mm, 3 Meter (2 Pcs)
- Ellik's Evacuator (1 Pcs).

All Instruments should be CE and FDA certified wherever applicable.

Dr. Kalyan Singh

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Dr. Sonaranda

Specifications for Pediatric Cystoscope, VIU and Resectoscope Set

A. Pediatric Cystoscope set

1. Pediatric Cystoscope-miniature straight telescope, 0 degree, diameter 1.2-2.0mm, autoclavable and fibre optic light transmission incorporated.
2. Pediatric Cystoscope-miniature straight telescope, 30 degree, diameter 1.2-2.0mm, autoclavable and fibre optic light transmission incorporated.
3. Should be supplied with Cystoscope-Urethroscope Sheath, 7-8 Fr with 3-4 Fr working channel with Obturator and with 2 LUER-lock connectors.
4. Should be supplied with 3Fr grasping forceps, double action jaws, flexible, length 28 cm.
5. Should be supplied with 3Fr biopsy forceps, double action jaws, flexible, length 28cm.
6. Should be supplied with 3Fr Hook Electrode.
7. Compatible HF Cord for electrodes-2 Nos.
8. Should be supplied with compatible injection needle, rigid, 3Fr, package of 6 nos.

B. RESECTOSCOPE SET:

9. Pediatric Resectoscope sheath, 9-10 Fr for the above cystoscope, with LUERLOCK stopcock, for connecting tube for inflow. Should be supplied with a standard obturator.
10. Working Element Set consisting of:
 - Working Element
 - Cutting loop
 - Coagulating Electrode
 - High frequency Cords-2 Nos
 - Protection Tube-for sterilization and storage of electrodes.
11. Cutting Loops, angled, should be supplied along with the set-6 nos.
12. Coagulating Electrodes, hook-shaped, angled with ball end should be supplied along with the set - 6Nos.

Anil Singh

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Dr. Sumanendra

C. PEDIATRIC OPTICAL URETHROTOME SET:

13. Urethrotome sheath 8-9.5 Fr, compatible with same telescope, with LUER-Lock stopcock with obturator

14. Working element for urethrotomy Set consisting of:

- o Working Element -1 No
- o Cold straight -4 Nos.
- o Cold kniferound - 4 Nos.

All instruments must be CE and FDA certified wherever applicable

An. Kaku Singh

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Dr. Sundara

Tender Technical Specifications for HD Laparoscopic System for Urology:

UROLOGY Laparoscopic Surgery Set with High definition Camera:

1. Description of function:

1.1 laparoscope is used for minimally invasive surgery and comprises telescope and units

2. Operational Requirements:

2.1 The set for Laparoscopic surgery should have units/groups of items/components as given, which should be quoted individually. They could be offered bundled in a comprehensive system or separately for each individual group, which should be adaptable with all major international brands

3. Technical Specifications:

3.1 CAMERA CONTROL UNIT & CAMERA: 1No.

High Definition endoscopic camera System should have following features:

- a. Digital HD technology
- b. Progressive scan
- c. Consistent use of 16:9 format for input and output for HDTV function.
- d. CCD chip having hi-fidelity image transmission
- e. System should have integrated Parafoval Optical Zoom (F 14-30mm, 2X) to enhance image size.
- f. System should be able to optimize all the settings and should be ready as soon as connected to camera control unit
- g. Camera control unit should be compatible with all camera heads i.e., Single Chip or Three Chip
- h. Should be compatible for remote controlled operation of various features.

A. K. Singh

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Dr. Somendra

Technical Specifications:

- | | |
|-----------------|---|
| i. Image Sensor | 3 x 1/3 CCD Chip. |
| ii Pixels | 1920 x 1080. |
| iii AGC | Microprocessor controlled. |
| iv Lens | F 14-30 mm. |
| v Video Output | Composite to BNC, Y/C to S-VHS, RCB to D
socket, HDTV DVI-D, DV for recording. |
| vi Input | Key Board for character Generator, 5 pole DIN
socket. |

3.2 MONITOR: 2 Nos 32 inch: Diagonal screen

Two Wide screen monitors having the following features:

- a. HDTV Displayin 16:10 HDTV format
- b. LED
- c. 32 inch Diagonal Screen
- d. Resolution: 1920 x 1200 pixels
- e. SDI/HD – SDI, Composite, S- Video RGB, OVI-D and VGA input
- f. All required cables and connectors, which should be specified.
- g. TFT screen stand/Fixtures for connecting to Pendant System/Ceiling light Arm.
- h. Dustproof and Drip water protected

3.3 TELESCOPE:

1. 5mm & 10 mm diameter 30-35 cm long, 30 degree angle of view, 0°degree (2each)
2. Low risk of object burn
3. Colour coded for identification.
4. Autoclavable
5. Fiberoptic light transmission incorporated
6. Visiport (2 each)

Anshu Singh

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Dr. Dhanraj

3.4 INSUFFLATOR: 1 No

1. Fully automatic, electronically controlled gas fill.
2. Flow rate of 30-40 litres per minutes (upto 45litres/min)
3. Optical and acoustic warning signals in case of malfunction or excessive pressure.
4. Connectible to medical gas pipeline.
5. Control by keys on front panel.
6. Clear and adjacent display of actual and present flow rate, actual and present pressure, gas consumed.
7. Facility for preheating of gas to body temperature.
8. Facility for easy evacuation of smoke and mist.
9. Memory for easy retention of previous pressure settings.
10. Should include pin-index connection to small/big gas cylinder with regulator, high pressure hose, mains cord, silicone tubing set, universal wrench and gas filter.

3.5 LIGHT SOURCE: 1Nos

1. LED or Xenon 300 watts.
2. Manual and automatic adjustment of light intensity.
3. Lamp life 500 hrs or more.
4. Display of lamp life/Bulb usage meter warning light
5. Standby mode with emergency lamp with visual indicator
6. Long (250 cm or more) fluid and fibre optic light cable of diameter 4.8-5mm

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Dr. Ganesha

3.6 SUCTION – IRRIGATION UNIT : 1 No

1. Pump for irrigation and suction.
2. Maximum irrigation pressure 400 mm Hg
3. Suction pressure 0.75 bar
4. Control from control panel and / or foot pedal
5. Overflow protection on suction bottles
6. Accessories should include silicone tubings, bacterial filter and bottles with cap.

3.7 VIDEO – CART : 1 No

- a. Made of Stainless steel/ Epoxy coated metal.
- b. Portable on 4 antistatic dual castors, 2 with locking brakes.
- c. Required number of shelves for housing all the units of the set.
- d. Adjustable arm for fixation to either side for fixing the TFT monitor.
- e. One drawer unit with lock and key.
- f. Cable Manager
- g. Power box with concealed wiring for providing electrical connections of proper rating to all the units.

3.8 IMAGE MANAGEMENT SYSTEM: 1 No

- a. Documentation system for digital storage of still images, video sequences and audio files.
- b. Latest processor & HDD, which should be specified
- c. Largest possible RAM, which should be specified.
- d. Integrated DVD/CD writer with maximum speed which should be specified.
- e. Compact key board with drape

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Dr. Suresh

f. Cordless mouse.

g. All types of connecting cables (BNC, DVI) and connectors, which should be specified.

h. Flat screen colour monitor of 1024 x 768 resolution with all connectors and connection cables (BNC, S-VIDEO(Y/C), VGA) which should be specified.

i. Separate mobile cart with lock and key for housing all the components of the image management system.

3.9 CARBON DIOXIDE CYLINDER: 1No

Two B – Type cylinders with required regulators and connecting pipe to the insufflators.

3.10. SUITABLE CAUTERY SYSTEM CAPABLE OF BIPOLAR AND MONOPOLAR COAGUTATION AND CUTTING: 1 No

HAND INSTRUMENTS & OTHER ACCESSORIES.

Sl. No.	Instrument:	Specifications:	Quantity
1	Reusable Veress 10 & 13 cm Pneumoperitoneum Needle	Spring loaded blunt stylet luer lock length 10/15 cm	01 each
2	Reusable Trocar: 5mm	Multifunctional valve, insufflations stopcock and threaded sleeves, pyramidal tip, length (10.5 cm)	01 No
3	Reusable Trocar: 10/11 mm & 12 mm	Multifunctional valve, insufflations stopcock and threaded sleeves, pyramidal tip, length (10.5 cm)	01 No each
4	Safety Trocar with Port	10 mm length approx 10.5 mm	01 No
5	Spare Sealing Trocar Caps for Trocar	5-6 mm	01 No
6	Spare sealing Trocar caps for Trocar	10-11 mm	01 No

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7	Reducer Sleeve	10/11 mm to 5/4 mm	01 No
8	Reducer Sleeve	12 mm to 8/5 mm	01 No
9	Suction and Irrigation Cannula	Size 5mm, length 36 cm, used with suction and irrigation handle.	01 No
10	Grasping Forceps – Toothed 2x 4 Teeth.	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
11	Grasping Forceps – Toothed 2x 3 Teeth	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
12	Maryland Forceps	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
13	Grasping Forceps-A traumatic	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
14	Grasping Forceps - Allis	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
15	Grasping Forceps – Rt Angled	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
16	Grasping Forceps - Mixer	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
17	Grasping Forceps – Plain Dissection & Grasping	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No

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Dr. Somendra

18	Grasping Forceps - Babcock	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
19	Fan Shaped Retractor	Rotating size 5 mm, length 33 - 36cm, dismantling facility.	01No
20	Nathanson Liver Retractor	Set of four sizes (45, 55, 78, 95 mm) sandblasted to eliminate light reflection.	01 No
21	Hook scissors	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
22	Micro Scissors	Single /Double action jaws, size 5mm, length 33-36 cm	01 No
23	Laparoscopic knife	5mm, 30-36 cm length	01 No
24	Rotating Metzenbaum Scissors	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
25	Bipolar Coagulating Forceps	Size 5mm, length 33-36cm fenestrated	01 No
26	Bipolar Coagulating Forceps	Size 5mm, length 36 cm, 3mm width of jaws	01 No
27	Maryland Bipolar	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
28	CO2 Connector	Compatible with CO2 'B' type cylinder	01 No
29	High Frequency Cord	For 5mm & 10 mm hand instruments with monopolar electrodes, spatula tip	01 No
30	High Frequency Cord	For 5mm & 10 mm hand instruments with monopolar electrodes, hook tip	01 No
31	Knot Pushers	Eye type, length 33-36 cm	01 No
32	Needle Holder Coaxial Type	Size 5mm, tungsten tip, straight handle with ratchet, single moving jaw, length 33-36 cm	01 No

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M. S. Srinivasan

33	Assistant needle Holder	Size 5mm, tungsten tip, straight handle with ratchet, single moving jaw, length 33-3	01 No
34	Liga Clip Applicator – Medium Large	Rotatable, provision for locking the shaft conveniently, 10mm, compatible with clip LT 300	01 No
35	Liga Clip Applicator – Large	Rotatable, provision for locking the shaft conveniently, 10mm, compatible with clip LT 300	01 No
36	Grasping Forceps- Toothed 2x3 Teeth	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
37	Grasping Forceps - Toothed 2x4 Teeth	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
38	Suction Irrigation cannula	10mm	01 No
39	Babcock Grasper	Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36 cm, dismantling facility	01 No
40	Stone Extractor	10m single / double Jaws	01 No
41	Hassan Cone	Adaptable to 10mm trocar	01 No
42	Bowel Grasper	10mm fenestrated, rotatable	01 No
43	Blunt Obturator	For 11 mm port	01 No
44	L – Hook	Size 5mm, length 33-36 cm with pin for cautery. Well insulated hook with small un-insulated working part.	01 No
45	Spatula	Size 5 mm, length 33-36 cm with pin for cautery	01 No
46	Fascia closure Instruments.	Size 2.8 mm, length 17 cm	01 No
47	Washers	For 5 & 10 mm cannula and reducers	01 No
48	Container Systems : Metal & Plastic	For sterilization and storage of telescope, hand instruments and other accessories, Different sizes	01 No

An. Kalyan Singh

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Dr. Somendra

49	Endobag		100 pieces
50	J- shaped hook with porcelain base		01 No
51	Hemolock clip applicator	large	01 No
52	Hemolock clip applicator	Extralarge	01 No

4. System Configuration Accessories, Spares and Consumables:

4.1 System as specified.

4.2 **ACCESSORIES** : All possible accessories of the equipment should be quoted. The specific accessory and its quantity will be decided on the basis of actual requirement.

4.3 The system should be capable of accepting standard accessories of major international brands, which should be specified and for which suitable adapter, if required, is to be provided.

4.4 All the items should be from one single manufacturer.

5. Environmental Factors:

5.1 The unit shall be capable of being stored continuously in ambient temperature of 0-50 degree C and relative humidity of 15-90%.

5.2 The unit shall be capable of operating continuously in ambient temperature of 10-40 degree C and relative humidity of 15-90%.

6. Power Supply:

6.1 Power input to be 220-240 VAC, 50 Hz fitted with Indian power – plug.

6.2 Electronic Voltage corrector / Stabilizer of appropriate ratings for power supply to the whole set meeting BIS standards/ Specifications, (Input 160-260 V and 220-240 V and 50 Hz)

6.3 Optional UPS of adequate rating for power supply to the system for 60 minutes.

An. Kumar Singh

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Dr. Sonarindra

7. Standards, Safety:

7.1 Should be FDA, CE and BIS approved product.

7.2 Manufacturer and supplier should have ISO certification for quality standards.

7.3 Electrical safety conforms to standards for electrical safety IEC 6060-1 General Requirements (or equivalent BIS standard)

7.4 Shall meet internationally recognised standard for Electro Magnetic Compatibility (EMC) for electro medical equipment: IEG-BO601-1-2: latest edition or Equivalent BIS) or should comply with 89/366/EEC; EMC-directive as amended.

7.5 Certified to be compliant with IEC 60601-2-2 Medical Electrical Equipment Part 2-2: particular requirements for the safety of equipment mentioned above-whenever applicable.

8. Training:

8.1 Comprehensive training for staff of user department and support services till familiarity with the system.

9. Warranty & Service:

9.1 Comprehensive warranty for 5 years and 5 years Comprehensive Maintenance Service after warranty. Tile cost of CMC must be quoted in the price bid

9.2 Percentage of uptime guarantee of the equipment during warranty and CMC period for which commitment is to be given must be specified with acceptance of applicable penalty clauses in case of failure to do so.

9.3 After sales service must be provided in the city of installation. In situations requiring service / repair of the unit outside the city of installation, the expenditure on account of this will have to be borne by the supplier.

An. Kishan Singh

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M. Sumanendra

10. Documentation:

10.1 Product Literature in original along with that of accessories and indigenous components if any. Photocopies / computer generated copies are not acceptable.

10.2 Statement of compliance with tender specification with clear and unambiguous links to relevant portions of product literature / authentic document, which should be highlighted. Alternative provided for noncompliant specifications with justification must be described in detail with supporting literature.

10.3 Certificates of compliance with standards and approvals stated above.

10.4 Certificate of manufacturer/principal regarding authorization of service facility provided by the supplier

10.5 List of Equipment available in the service centre for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

10.6 List of important spare parts and accessories, which are required for maintenance and repair, with their part number and costing.

10.7 Terms and conditions of warranty and CMC including schedules of visit by service personnel with check list of services to be carried out.

10.8 Commitment for supply of log book with check list for daily, weekly, monthly and quarterly preventive maintenance with contact details of service personnel along with the equipment. The job description of the hospital technician and company service engineer should spell out in the log book.

10.9 List of users of quoted model with performance certificate from major hospitals.

Ar. Kaku Singh.

S. Chel

Dr. S. Srinivasan.