Item No 2:- Diathermy (Electrocautery) machine

Technical Specifications for Electro Surgery unit cum vessel sealing

- i. The unit should be a microprocessor controlled 350 KHx out put, up to 400 watts class Electro surgery unit with TFT single having touch screen (Key Touch).
- ii. Visual indicator for the actual power being delivered bar graph.
- iii. The unit should have universal socket for bipolar, monoplar & neutral output socket along with multifunctional socket for vessel sealing based on plug & play mechanism, also having the facility to upgrade to additional socket if required.
- iv. The unit should have heat dissipation without external air passing inside the unit i.e. internal cooling system (no conventional external air cooling system)
- v. The unit should have precise monopolar and bipolar modes for fine & micro surgery applications.
- vi. The unit should have facility to use very less voltage from 40 volts for precise applications.
- vii. The unit should have the facility up upgrade with twin coagulation for simultaneous activation of 2 electrodes.
- viii. The unit should have bipolar auto start functions.
- ix. Automatic control of output power according to all currently available electrosurgical regulative technologies.
- x. Should have the facility for preview function to shows the expected target tissue effect on display even prior to activation.
- xi. Should have the facility to be up to date with the upgradable feature on site.
- xii. Should have facility to program more than 190 with procedure or surgeon name.
- xiii. Should have facility of self check of the unit after every on & off of the unit.
- xiv. Should have facility to upgrade with optional bipolar cut & coagulation up gradation.
- xv. Possibility for upgrading to APC, irrigation system, smoke evacuation system.
- xvi. Unit should have type: Protection class CF, class 1, Llb.
- xvii. Should have continuous patient monitoring with return electrode (neutral electrode).
- xviii. Neo-natal safety system and neutral electrode safety system for the pediatric application.
- xix. Reusable vessel sealing instrument for open surgery-FDA approved instruments for 7 mm vessel sealing with 23 degree bent and 150 mm length.
- xx. The unit should have special solutions for changing the power setting without touching the equipment.
- xxi. The unit should be supplied with nonstick bayonet bipolar forceps of 1mm blunt & 0.4 mm fine top having length of 170 mm-200 mm with guide pin maintains parallel.

xxii. The unit should be supplied with all standard accessories to make the system to work full functional includes (all accessories should be from same manufacturer).

a) Two pedal and single pedal foot switch - 1 no.
b) Non stick bipolar forceps & cable - 3 nos.
c) Reusable monopolar pencil with cable - 10 nos.
d) Disposable monopolar pencil - 10 nos.
e) Reusable patient plate with cable - 20 nos.

g) Reusable vessel sealing for open - 2 nos.

50 nos.

f) Disposable patient plate with cable



TENDER SPECIFICATION FOR NEURO DRILL OF NEUROSURGERY

- 1 Should have the provision to mount the console on various sizes of IV poles
- 2. Should be able to connect multiple hand pieces at a time like Neuro Drills (Up to 75000RPM),
- 3. Should have large Touch screen monitor
- 4. Should have inbuilt pumps each for Irrigation(5Cc / Min to 100Cc / Min) and Cooling
- 5. Console should recognize the various hand pieces and automatically adjust the settings accordingly
- 6. The various parameters should be able to adjust either from touch screen panel or from the multifunction foot switch
- 7. Should have multifunction ergonomically designed foot control with light emission for easy identification
- 8. Surgeon should be able to control from the foot control itself the Speed / Mode, Forward / Reverse Toggle active hand piece change etc.
- 9. Should have option for remote control Irrigation to operate from sterile area by the surgeon himself t
- 10. Should have in built user friendly interactive menu and illustrative help guide
- 11. Should have in built Lens cleaning system
- 12.. Cranial, Spine, applications should be possible from a single Electrical console

Drill:

- 1.Speed should be variable from 50,000to \$5,000rpm.
- 2. Should have detachable cable to connect to console
- 3. Weight of the drill should not be more than 180gms and length should be less than 9.02 Cm with a diameter not exceeding 2.03cm
- 4. Should be ergonomically designed electrical Drill System with high Torque up to 41 mN-m and Power up to 138W
- 5. No Lubrication or seal should be required to run the motor
- 6. Should have quick release and lock system for tools and attachments
- 7. Should be suitable for Cranial, Skull base, and Neuro Otology applications
- 8. Should have multifunction ergonomically designed foot control with light emission for easy identification
- 9. The console should have provision of connecting nerve monitor for monitoring of nerves.
- 10. The neuro drill should have provision of up gradation to navigated drill system
- 11. The system should be provided with Spine shaver system.
- 12. Should be able to connect multiple hand pieces at a time like Neuro Drills (Up to \$5000RPM),

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Attachments and Accessories:

- 1. Telescopic tube of 12 cm curved should be provided
- 2.It should have Transnasal burs for doing skull base surgery.
- 3. Small attachments of size 9cm should be provided
- 4. Straight, Angled, of Small and Large Attachments, Hooded Telescopic Tubes
- 5.Craniotome 2 nos attachment should be provided
- 8. There should be option for curved burs to enhance visibility and access, with wrapped shaft to protect the surrounding tissue from mechanical damage, should be available in overall length of 9cm.
- 9. Various Dissecting Tools should be available in variety of tip shapes like Match head, Tapered, Round, Cylindrical, Acron, Reverse Taper, oval etc. They should be also available in Diamond and Diamond Coerce tip design. Additionally Carbon tools and disc tools for metal, ceramic and cement removal.

10 Buss < segular - 50 no.

11. hole maker - -

12. Coanofome Clade (auto) - no. 100,