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Schedule No. 1- Advanced OT Table with Orthopaedics'attachments

Sr. No.	Description of Technical Specification
1	General constructional characteristics:
2	1. Mobile OR table with electrical hydraulic drive via integrated batteries and mains power supply.
3	2. Adjustment for base locked / unlocked via hand control unit by means of a four post, self leveling hydraulic locking system.
4	3. OR table in standard configuration of the table top generally capable to support patient weight above 250 kg.
5	4. In reverse orientation, the patient weight should be equal or above 190 kg in full articulation;
6	5. Table must have inbuilt battery backup for at least 20 operations.
7	6. Characteristics of the OR table top:
8	OR table top is equipped with powered longitudinal slide or rotating top of at least 300 mm for unobstructed intraoperative access for the C-arm over the full length
9	·Table top subdivided into at least 4 sections:
10	i. Head rest, with up / down articulation
11	ii. Back rest
12	iii. Seat plate with perineal cut-out
13	iv. Split Leg rest, detachable
14	Additionally the OR table top should be equipped with or without a powered kidney elevator for >=70mm between the back and the seat plate to enable stronger flexion to the patient's body.
15	For additional flexibility, OR table should allows for the use of several positioning accessories with or without detachment of back section. OR table top designed completely without X-ray interfering crossbars, for large scale application abilities of the C-arm.
16	Guide rails underneath the table top allow for inserting of X-ray cassettes over the complete length including the area of the central seat section or radiographic table top for seamless x-ray facility.
17	OR table top surface is constructed of radiolucent Phenolic which provides superior imaging and strength.
18	7. Control of the adjustment motions:
19	The adjustments of the hydraulically powered motions are controlled electrically from outside the intervention area via cable/Remote connected hand control. Hand pendant with backlight.
20	•In case of failure in powered/electrical section, it should function on battery power. Table should have at least dual control i.e. Remote Panel (Corded remote) and Backup Control on table column or two hand operated remotes.
21	8. Safety characteristics:

22	Every power adjustment of the table should have dual control, so that in the unlikely case of a technical failure, every OR table adjustment, including locking / unlocking the table's base, can be operated independently.
23	· In the case of a total loss of functionality, it should have some foot unlock switch that will release the floor locks and allow removal of the table.
24	9. Battery-powered / mains operation:
25	•It should have Maintenance-free special-design batteries, with a capacity for approx. 50- 80 surgical operations. The battery charge-level is monitored electronically and indicated optically on the hand control/base of the Table.
26	10. Technical data:
27	· *Dimensions:*
28	i. Total length of OR table top incl. head rest: >2000 mm
29	ii. Length of OR table top without head rest: >1500 mm
30	iii. Width of OR table top: >500 mm
31	iv. Total width of OR table top incl. side rails: >500 mm
32	v. Upper body Imaging Window >1000mm
33	vi. Standard Lower body imaging >1000mm
34	vii. Radiographic with >450mm
35	viii. Total length table base: >1000 mm
36	ix. Max. width of base: >500 mm
37	x. Gross weight of OR table > 300 kg
38	xi. Admissible max. Patient weight full articulation >240 kg
39	xii. Admissible max. Patient weight (reverse) >190 kg
40	xiii. *Adjustments via hand control unit (better shall also be considered):*
41	xiv. Height: 670mm – 900 mm or more
42	xv. Height incl. pads: 685 – 1000 mm
43	xvi. Kidney elevator up infinitely variable: >70 mm
44	xvii. Lateral tilt left / right: >15° / 15°
45	xviii. Trendelenburg / Reverse Trendelenburg: >25° / 25°
46	xix. Back plate up / down: >75° / 40°
47	xx.Leg plate up / down: >20° / 90° or more
48	11. Also on the hand control unit should have following features and status monitoring indicators for:
49	0-position (reset of all powered table top functions to horizontal position)
50	Base locked / unlocked
51	Flex / Reflex
52	Beach Chair (position is required but direct key on remote is not mandatory)
53	Charge level of the OR table batteries and mains connection
54	Fault status / service required
55	12. Table and Standard Accessories should have CE (Class I) from notified body.
56	i. Arm Board - one hand adjustable with radiolucent
57	ii. Anesthesia Screen should adjusted vertically, horizontally, radial and folded
58	iii. Belt Strap
59	iv. Hand Cuff
60	v. Split leg plate
61	vi. Knee crutches Goepel Pair
62	vii. Shoulder support in trendelenburg position
63	viii. Gel heal pad

64	x. Narrow Lateral Support, support rolls with Back support, bottom support and for pubis support
65	xi. Lateral position set consist of rectangle or circular set.
66	13. Trauma unit:
67	1. Hand arm table Hourglass Shape or Rectangle shape with Radial clamp. Clamp could be of any shape but rod length should be sufficient.
68	2. Hand traction
69	3. Extension unit. Should Consist of
70	· Pelvis plate
71	· (basic-) adapter
72	· Joint adapter
73	· Swivel joint bar
74	· Traction bar
75	· (Lateral) filler pieces
76	· Counter traction post
77	· Traction unit
78	· Adjustment clamp
79	· Foot plate
80	· Foot plate support
81	· Support bars
82	· Leg plate
83	· Counter traction post for tibia treatment
84	· Side rail elongation
85	· Leg support
86	· Traction stirrup
87	14. All Quoted Accessories should be from Same Manufacture and accessories should also have European CE/USFDA certification.
88	15. Safety class I, Type B; the housing leakage current should meet the requirements of the patient leakage current for CF conditions according to IEC 60601-1.
89	16. 3 year Warranty , 5 year CMC

Schedule No. 2- General Surgical Instrument

Sr. No.	Description of Technical Specification
1	The instruments quoted should be of high quality and standard.
2	1. The instruments should be European CE or US FDA certification.
3	2. A confirmation that the Instruments should have gone through a Passivation Process with detailed certification for the same.
4	3. Each instrument should have the following information printed on it
5	a. Article Number.
6	b. Manufacturers Name.
7	c. Country of Origin. "MADE IN _____(country Name)
8	d. Lot No
9	e. Country of origin certificate should be provided
10	4. Sterilization Container of Parent company should be provided along with Instrument set & container seal & indicator Label.
11	a. The container should meet international standards of quality and approved for steam sterilization procedures of EN 285:2008
12	Description
13	B.P Handle No. 3 - qty-1

14	B.P Handle No. 4- qty-1
15	Dissecting forceps 18cm plain - qty-1
16	Adson forceps 12cm 1x2t - qty-1
17	Adson forceps 12cm Plain - qty-1
18	Towel clamp 15.0cm - qty-1 -6
19	Super Cut Metzenbaum scissors curved 18cm Golden Ring handle with tungsten Carbite insert - qty-1
20	Super Cut Metzenbaum scissors curved 20cm Golden Ring handle with tungsten Carbite insert - qty-1
21	Mayo scissors stright length 17cm - qty-1
22	Mayo Needle holder HM 15cm Tungsten Carbite insert With Godlen Ring Handle - qty-1
23	Mayo Needle holder HM 20 cm Tungsten Carbite insert With Godlen Ring Handle - qty-2
24	Artery forceps cvd 15cm - qty-4
25	Artery forceps st 15cm - qty-2
26	Mosquito artery forcep Cvd 12.5cm - qty-2
27	Mosquito artery forcep st. 12.5cm - qty-2
28	Allis forceps 15cm - qty-2
29	Allis forceps 20cm - qty-2
30	Babcock forceps 15cm - qty-2
31	Babcock forceps 20cm - qty-2
32	Probe with director - qty-1
33	Frazier suction cannula 1,2,3,4 - qty-1 each
34	Yankauer suction cannula - qty-1
35	Mixter forceps 18cm - qty-1
36	Langenbeck retractor small - qty-2
37	Langenbeck retractor Medium - qty-2
38	"c " shaped retractor Medium - qty-2
39	Sponge holding forceps 20cm str - qty-2
40	Skin hook - qty-2
41	Doyen Retractor - qty-2
42	Balfour Retractor adult size - qty-1
43	3 year Warranty. AMC/CMC is not required for instruments.

Schedule No. 3- Orthosurgical Instrument Set

Sr. No.	Description of Technical Specification
1	The instruments quoted should be of high quality and standard.
2	1. All Surgical Instruments should be European CE certified or USFDA approved.
3	2. A confirmation that the Instruments should have gone through a passivation Process with detailed certification for the same.
4	3. Each instrument should have the following information printed on it
5	a. Article Number.
6	b. Manufacturers Name.
7	c. Country of Origin. "MADE IN _____ (country Name)
8	d. Lot No.
9	e. Country of origin certificate should be provided
10	4. Sterilization Container of Parent company should be provided along with Instrument set & container seal & indicator Label.

11	a. The container should meet international standards of quality and approved for steam sterilization procedures of EN 285:2008
12	Description
13	B.P Handle no-3 - qty-1
14	B.P Handle no 4 - qty-1
15	Dissecting forceps plain 15cm - qty-1
16	Dissecting forceps tooth 15cm - qty-1
17	Towel clamp 10.5cm - qty-6
18	Artery forceps cvd 16cm - qty-4
19	Mayo Scissors CVD 16cm(HM) Tungsten Carbite insert With Godlen Ring Handle - qty-1
20	Metzenbaum (HM) scrs cvd 20cm Tungsten Carbite insert With Godlen Ring Handle - qty-1
21	Mayo Needle holder HM 15cm Tungsten Carbite insert With Godlen Ring Handle - qty-1
22	Mayo Needle holder HM 20 cm Tungsten Carbite insert With Godlen Ring Handle - qty-1
23	Leksell Bone nibbler 8mm ,length 23 cm - qty-1
24	Ruskin bone Nibbler 5mm cvd length 18cm - qty-1
25	Ruskin bone Nibbler 5mm cvd length 24cm - qty-1
26	Ruskin bone cutting length 18cm cvd - qty-1
27	wire cutter 19cm - qty-1
28	parallel wire plier 18.5cm - qty-1
29	Lambotte Raspatory 10mm - qty-1
30	Lambotte Raspatory 15mm - qty-1
31	Osteotome 4mm length 20cm - qty-1
32	Osteotome 10mm length 20cm - qty-1
33	Osteotome 15mm length 20cm - qty-1
34	gouge 6mm length 20cm - qty-1
35	gouge 10mm length 20cm - qty-1
36	gouge 15mm length 20cm - qty-1
37	Sponge fcps 20cm - qty-1
38	Frazier suction cannula 1mm,2mm,3mm,4mm, - qty-1
39	Yankauer suct tube 28cm - qty-1
40	Mallet,(Hammer) - qty-1
41	mostroid retractor small - qty-2
42	mostroid retractor Medium - qty-2
43	mostroid retractor Large - qty-2
44	Langenbeck retractor 21cm medium - qty-2
45	Langenbeck retractor 21cm large - qty-2
46	3 year Warranty. AMC/CMC is not required for instruments.

Schedule No. 4- ABG Machine

Sr. No.	Description of Technical Specification
1	1. Should measure blood gas parameters pH, pCO2,pO2, electrolyte parameters such as Na, K, Cl-,Ca++ and Lactate.
2	2. Should have all important derived parameters i.e.HCO3-, HCO3-st, ABE, SBE, AaDO2, Anion Gap, pHst, nCa++, Hct, TCO2, P50, BB, and derived Oximetery parameters tHb & sO2 in the same analyzer.
3	3. Should have single/multiple use cartridge (cassette) based system with minimum six months shelf life.

4	4. Should not need any individual electrodes for measurement of all above parameters. Clarification: Reagents based system is not required. However, if any electode/Gas Cylinder/Memberane etc. are being used in the offered model, the same should be provided free of cost as & when it goes defective. Gas Cylinders, if any should also be provided free of cost as and when it goes empty or expired.
5	5. Should have the wide measured Barometric pressure range for using the analyzer at high altitude
6	6. Should have input parameters like Temperature,Patient ID etc.
7	7- Should have single/multiple use cartridge (cassette) based system with minimum six months shelf life. Bidders are requested to quote the rates of single/multiple use cartridge (cassette), covering all tests mentioned at Point No.1, of pack size should not be more than 25 cartridge in revised price sheet. Comparision shall be made by adding the unit cost of ABG machine & cost of 30000 tests of single/multiple use cartridge (cassette) for conducting all tests mentioned at specifications point no.1.
8	8. Should require less than 200 µl sample volume
9	9. Should be a portable system with the built in rechargeable battery & printer.
10	10 Should aspirate the patient sample automatically or manually push or both.
11	11. Should be able to perform whole blood, plasma and serum samples also
12	12. Should be able to handle the syringe and capillary samples both
13	13. Should have graphic window display for easy operational/ data entry/ menu access
14	14. Should store not less than 200 patient sample reports in its internal memory.
15	15. Should be USFDA approved.
16	16. All consumables such as electrodes, batteries, tubings etc (except printer paper) shall be included in warranty and CMC. No extra payment shall be given to the selected bidder in case it is required to replace these consumables.
17	Additional point added in the specification: Selected supplier should apply third party quality control(s) every six months, to check correctness of results, during warrnty and CMC (if any) period, free of cost.
18	Reagents based system is not required. However, if any electode/Gas Cylinder/Memberane etc. are being used in the offered model, the same should be provided free of cost as & when it goes defective. Gas Cylinders, if any should also be provided free of cost as and when it goes empty or expired.
19	17. Reagents based system is not required. Estimation of 10000 tests per year per machine for a total of 3 years is for comparision purpose only. There will be no obligation on part of purchasing authority to place orders for cartridge/cassates. It should have single/multiple use cartridge (cassette) based system with minimum six months shelf life. Bidders are requested to quote the rates of single/multiple use cartridge (cassette), covering all tests mentioned at Point No.1, of pack size should not be more than 25 cartridge in revised price sheet. Comparision shall be made by adding the unit cost of ABG machine & cost of 30000 tests of single/multiple use cartridge (cassette) for conducting all tests mentioned at specifications point no.1.
20	Warranty: 3 years Warranty and 5 years CMC

Schedule No. 5- Centrifuge machine

Sr. No.	Description of Technical Specification
1	Equipment: Centrifuge - 16 Wells
2	1. Should have a maximum speed of 5000 RPM with stepless regulator
3	2. Should be supplied with safety lid and lock.
4	3. Should have digital speedometer and timer.
5	4. Should have imbalance detector and automatic cutoff.

6	5. Should be CE Certified.
7	6. Should work on 200-240Vac 50Hz power supply
8	7. Should have swing out rotor of size 16*15ml
9	8. Should be brushless type & maintenance free motor with frequency drive
10	9. Should have programmable time and speed.
11	10. Should be low noise operation type
12	11. 3 year Warranty, 5 year CMC

Schedule No. 6- Transport ventilator

Sr. No.	Description of Technical Specification
1	1. Modes of ventilation:
	a) Volume controlled.
	b) Pressure controlled.
	c) Pressure support.
	d) Synchronized intermittent mandatory ventilation (SIMV).
	e) Assist/control mode.
	f) PEEP.
	Added- Non Invasive Ventilation Modes (NIV Mode Inbuilt)
	2. Alarms required: FiO2, minute volume, pressure, PEEP, apnoea, occlusion, high respiration rate, disconnection.
	3. System alarms required: power failure, gas disconnection, low battery, vent inoperative, self diagnostics.
	4. If alarm silencing feature is incorporated, it must be temporary and clearly displayed when activated.
	5. Air and externally supplied oxygen mixture ratios fully controllable. Clarification - FiO2 Controllable between 21% to 100% is required with monitoring.
	6. Inlet gas supply (O2) pressure range at least 35 to 65 psi.
	7. Inbuilt air compressor or turbine required.
2	8. Visual and audible alarms Accessories and tubing should be supplied for adult and pediatric size requirements.
3	1. The following variables should be controllable by the operator:
	a) Tidal volume from 100 ml to 1000 ml or more.
	b) Pressure (inspiratory) up to 50 cm H2O
	c) Volume (inspiratory) up to 120 l/min.
	d) Respiratory rate: up to 50 breaths per minute
	e) SIMV Respiratory Rate: up to 30 breaths per minute.
	f) PEEP up to 20 cm H2O.
	g)Pressure support up to 40 cm H2O
	h) FiO2 between 21 to 100 %.
	i) Inspiratory and expiratory times up to at least 2 sec and 8 sec respectively.
4	User's interface- Manual and Automatic.
5	Software and/or standard of communication(where ever required)-Inbuilt
6	Weight (lbs, kg) -6 to 8 kgs
7	Noise (in dBA), heat dissipation <60dB; Alarm > 65dB
8	Mobility, portability –Yes
9	Power Requirements 220 to 240V, 50 Hz.
10	Battery operated With atleast 4 hours battery backup.
11	Tolerance (to variations,shutdowns)- ±10% of input.

12	Protection OVP, earth leakage protection.
13	Other energy supplies- Gas/battery driven.
14	Accessories & Spares- Full face mask, breathing circuit, carry bag, filters.
15	Consumables / reagents (open, closed system)-Battery, leakage adapter.
16	Capable of being stored continuously in ambient temperature of 5 to 50 deg C and relative humidity of 15 to 90%.
	Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
17	Mounting solution and trolley (both should be rust free)should be provided during transport and stationary use respectively
18	It should have US FDA or European CE approved from notified body.
19	Pre-installation requirements: nature, values, quality, tolerance-Electrical sockets; Oxygen supply.
20	Supplier to perform installation, safety and operation checks before handover. Local clinical staff to affirm completion of installation.
21	Training of users in operation and basic maintenance shall be provided. Advanced maintenance tasks required shall be documented.
22	Warranty- 3 years.
23	Maintenance manual detailing complete maintaining schedule.
24	Warranty of three year with free servicing (min. 6) during warranty.
25	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached.
26	User and maintenance manuals to be supplied in English language. Certificate of calibration and inspection to be provided. List to be provided of equipment and procedures required for local calibration and routine maintenance. List to be provided of important spares and accessories, with their part numbers and cost. Contact details of manufacturer, supplier and local service agent to be provided
27	User/Technical/Maintenance manuals to be supplied in English.
28	Contact details of manufacturer, supplier and local service agent to be provided.
29	Any warning signs would be adequately displayed.
30	3 year Warranty , 5 year CMC

Schedule No. 7- Semi Automated Biochemistry Analyzer

Sr. No.	Description of Technical Specification
1	1. Should be microprocessor controlled general purpose bi-chromatic photometer system with at least 6 filters ranging from 340 to 630nm.
2	2. Temperature 37 self monitoring built-in incubation systems for temperature controlled absorbance reading.
3	3. Light source: Tungsten/ halogen or higher grade with one additional bulb.
4	4. Should have end point, kinetic and two point kinetic measurement modes.
5	5. Should have flow cell measuring device.
6	6. Should have inbuilt printer or External Printer to be supplied.
7	7. Should have a measurement range from 0.001 to 2.300Abs
8	8. Should have facility for reading results on LCD display.
9	9. Should have quality control – two control/test QC survey of at least 30 points, Levy Jenny plot.
10	10. Should have a filter half bandwidth of 10nm or lesser.
11	11. Should have a test programme memory of 50 or more.
12	12. Should be provided with sample carry over prevention facility.

13	13. Aspiration should be based on Bellow/Peristaltic Pump/ Vacuum pump.
14	14. Should provide 500 ml of reagents for urea, S. creatine, S. bilirubin, sugar, cholesterol, and Quality control 5ml one each for normal, abnormal, SGOT & SGPT.
15	15. Should be supplied with on line pure sine wave UPS of sufficient capacity for a minimum back of 30 minutes.
16	16. Should be provided with calibration certificate issued by the manufacturer at the time of installation and periodic calibration must be done during warranty / AMC period.
17	17.Product should be CE / FDA (US) approved. Copy of the certificate/ test report shall be produced along with the technical bid.
18	18. Sample Volume must not exceed 50µl and reagent volume must not exceed 500µl
19	19. There should be provision for two additional filters and the rate for additional two filers must be quoted separately.
20	20. Should be an open system i.e. should be able to operate with reagents of any make.
21	21. 3 year Warranty, 5 year CMC