Request For Budgetary Estimate for Hospital furniture Items for Radiotherapy Department at Govt. Cancer Hospital Block at Aurangabad, Maharashtra.

Ref.: HSCC/GCHB-Aurangabad/Hospital Fur/2024, Date: 17/05/2024

HSCC (India) Ltd. intends to invite on-line bids from eligible bidders, in single stage two bid systems for Supply, Installation testing and commissioning of Hospital furniture Items for Radiotherapy Department at Govt. Cancer Hospital Block at Aurangabad, Maharashtra.

Technical Specifications and Bill of Quantity proposed for hospital furniture items are annexed herewith. It is requested to submit the Budgetary Quotation of the hospital furniture items with inclusive of all taxes & duties, 3 Years warranty and freight from warehouse to consignee location i.e. Govt. Cancer Hospital Block at Aurangabad, Maharashtra.

The quotation should be on Company Letter Head with sign and stamp as per the BOQ format enclosed and should be submitted in both Hard & Soft Copy within 15 days of issue of this Notice at the following address:

General Manager (Procurement)
Furniture Department
HSCC (India) Ltd.,
E-6(A), Sector-1,
Noida (U.P.) - 201301.
Soft copy may please be sent to: r_kumar@hsccltd.co.in, l_singh@hsccltd.co.in

General Manager (Procurement), HSCC (India) Ltd.

Technical Specification of Hospital furniture Items for Radiotherapy Department at Govt. Cancer Hospital Block at Aurangabad, Maharashtra.

1. Fully Motorized ICU Bed with Mattress.





Supply and Installation of 5 function fully motorized 4 section bed with mattress. The bed system should be electrically operable by handheld wired remote control which can be placed on each side of the bed for adjustments of back rest, knee rest, heights, Trendelenburg and reverse Trendelenburg, single touch cardiac chair position & automatic CPR positions

Overall dimensions: (L) 2241 mm X (W)1050 mm X (H) Adjustable from 440 mm to 770 mm. Min height: 440 mm; Max height: 770 mm without mattress. (± 10% Engineering Variation)

Back rest angular movement:0-65 deg; Knee rest angular movement:0-30 deg.

Trendelenburg: 0-13.5 degree and Reverse Trendelenburg: 0-13.5 degree.

Safe working load should be 250 kg Patient load bearing capacity: 200 kg.

All edges in contact with patient to be rounded safely. The bed has Manual CPR lever on both sides in case of emergencies. Head & Foot board should be made of blow molded Poly polypropylene. Head board and foot board should be with metal inserts to mount it on bed frame. Removable PP head board and foot board should have cut out, for better gripping. Bed frame should be made of MS ERW tube of size 50mmx25mm of 2 mm thick supported with ERW square tube with 25 mm x 25 mm and 1.2 mm thick.

All corners of bed frame are Provided with bumper mounting holders and it should have Provision for iv pole holders. Base frame made of MS ERW tube of size 30mmx60mm of 2mm thick. Base frame has ground clearance of greater than 150 mm to avoid any

obstruction during bed movement. Base frame have Provision to mount oxygen cylinder cage as optional accessory. It has Trendelenburg indicator guide

Bed lying surface be made of PP injection mould. These lying surface has sections for bed profiling i.e. back adjustment, fixed pelvic section, upper and lower leg adjustment. Lower leg rest section is Provided with Ratchet for leg rest adjustment with a single hand operation to achieve the position. Backrest is X-Ray permeable with cassette holder.

Mattress platform is strengthened by frame of size 25 mm x 25 mm and 1.2 mm thick. Under bed clearance should be greater than 150 mm.4 TPE rotating bumpers of diameter 92mm height 69mm with 40-50 shore hardness are Provided at four corners to protect the bed and patient from impact and avoid damages to wall.

The bed is provided with 125mm diameter, twin wheel, plastic polymer with metal insert castors. Out of 4 castors two with brake, mounted at diagonally opposite position.

The bed is provided with 4 nos. Aluminum extrusion side boards with PP molded end caps with full coverage to bed. These side boards should be integrated with drop down mechanism for easy operation.

The bed has powder coated urine bag holder on both side of the bed for ease of accessibility. All metal components are pretreated with zinc phosphating in 9 tank process and then powder coated with epoxy polyester powder coating.

Electrical details: Supply Voltage: 100-240VAC +/-10%; Current: 2.5A max, Electric Shock Protection: Class I, Type B, Liquid Ingress protection IPx4, Four Electric operated features are Backrest, Leg rest, High-Low, Trendelenburg/Reverse-Trendelenburg (Only one handset will be Provisioned).

The bed has Provision for front loading medium sized MS made oxygen cylinder cage as optional accessory. The bed has provision of Telescopic IV pole made of Stainless steel to mount saline bags.

The bed should be designed as per following standards.

IEC 60601-2-52 Medical Electrical Equipment: Particular requirements for safety and essential performance of medical beds. IEC 60601-1-4 General Requirements for Safety: Programmable electrical medical systems. Manufacturer should be ISO 9001 certified for quality standards, Certificate copy of the same should be submitted along with technical bid, ISO 13485:2016 Medical Devices: Quality Management Systems - Requirements for regulatory purposes. 4 section Matters provided as per ICU bed size, The mattress is provided with 40 density 100 mm thick PU foam mattress with ridges for easy bending. It is covered by heavy helium material which is water proof, flame retardant, vapor & X-Ray permeable with Bacteriostatic properties. The zip & stitches for the mattress cover is concealed.

IEC 60601-2-52 Medical Electrical Equipment: Particular requirements for safety and essential performance of medical beds. ICU BED As approved by engineer incharge/employer.

2. Mechanical Fowler Bed with Mattress (Wards/Isolation Rooms)



Supply and Installation of mechanical fowler bed with mattress, the Overall dimension: 2265mm (L) x 900mm (W) x 610mm (H) (± 10% Engineering Variation) Two function bed with adjustable backrest 70deg & upper leg rest 24 deg Head board and foot board having curved profile at the top made of MS ERW round tubes of thickness 1.6mm & diameter 31.75mm with molded Poly propylene with anti-microbial additives. Head & Foot board should be made of blow molded Poly propylene with anti-microbial additives. Head board and foot board should be with metal inserts to mount it on bed frame. The Bed should have 4 nos mosquito to pole holder, bed frame should be made of MS ERW rectangular section tube of size 30mmx60mm of 1.6mm thick & has provision for 4 iv pole holders. It is strengthened by rectangular pipe section of size 60mmx30 mm having 1.6 mm thickness Lying surface should be made of CRCA sheet of thickness of 1mm thick. It should be strengthened by trapezoidal contour (rounded corner) 14 nos, embossed cut out. All metal components should be pretreated with zinc phosphating and then powder coated with antimicrobial epoxy polyester powder coating. The backrest and leg rest should be operated with the help of lead screws and crank mechanism. Lead screws should be made from EN8 and ACME threads with roll formed. All the functions should operated with the help of 2 ergonomically dedicated handles, which are made of metal inserted PP co polymer, it's lever should be snap locked when not in use. All the handles should be provided operating guidance stickers There should be High endurance, metal castors of 125mm wheel diameter having provision for diagonal locking system. The bed should have urine bag holder on both side of the bed. To ensure good quality welding "Co2 Argon" process should be adhered to. All metal components should be pretreated with zinc phosphating in 9 tank process and then powder coated with anti-microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection against at least 2 commonly found bacteria in Hospital environment [Gram positive and Gram Negative]. Goods should be supplied in knocked down construction to reduce carbon emission. In house testing facility should be available like for proof loading test, cycle tests, impact test, horizontal & vertical load tests for side rails, salt spray test, castor break test, pull test for head and foot board. Mattress: The bed should be provided with 40 density 100 mm thick PU foam mattress which should be covered by heavy helium material which is water proof, flame retardant, vapor & X-ray permeable. The zip & stitches for the mattress cover should be concealed, Mechanical Fowler Bed with Mattress As approved by engineer in-charge/employer.

3. Patient Bedside Locker



Supply and installation of bed side locker, the bedside locker provided with two drawer and one cabinet with lock and plastic molded handle. Cabinet is Provided with lock to keep the

valuable items for the safety. Overall dimensions of locker shall be 490mmW x 410mm D x 941mm H $\,$

Corner tube made of ERW round tube with section 25.4 mm diameter of 1.2 mm thickness Cabinet made of CRCA sheet of 0.8 mm thick with Provisioned of lock and handle, the size of cabinet shall be $470 \text{ mm W} \times 410 \text{ mm Dx} 382 \text{mmH}$)

Top made of ABS of 2.2 mm thick. Top has recessed and contoured shape for better aesthetic and usability.

Plastic molded knob is Provisioned with Matt finish and dome shaped for better grip. Plastic molded castors with 50 mm diameter placed in diagonal locking arrangement. RAL white, plastic parts in Grey.

5 kg UDL on both the tops and 10 kg in the cabinet.

All metal components are pretreated with zinc phosphating in 7 tank process and then powder coated with anti-microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection against at least 2 commonly found bacteria in Hospital environment [Gram positive and Gram Negative]. locker supplied in knocked down construction to reduce carbon emission.

Bed side locker as approved by engineer in-charge/employer.

4. Patient Over Bed Table



Supply and Installation of Over bed table with size (L)896 mm X (W)395 mm X (H) Adjustable from 801 mm to 1077 mm should be a height adjustable Over Bed Table. Table top Height can be adjusted with the help of operating lever which activates the gas spring. Base frame should be made of ERW round tube with 50.8 mm diameter and 1.6 mm thickness. Housing should be made of aluminum extruded inner and outer tubes. Handle for gas spring made of MS sheet metal of section 74 mm x 115 mm with 3 mm thick Handle with CRCA material making strong lever and providing wider area for grip. Gas spring of length 835 mm and stroke of 293 mm Smooth functioning gas spring with adjustable height and consistent motion during operation. Effort to push downward = 14.5(-2kg) at room temp 29°CPlain top made of membrane pressed MDF with section 395 mm x 896 mm of 18 mm thickness. Membrane pressed MDF board of frosty white shade on top surface and with edge lipping. Top: MDF top with membrane press, should give anti scratch Property with good surface finish. Also, Glass Holder profiling should be provided on to it. Castors: High endurance anti-static, Plastic injection molded castors are provided of Ø50mmPowder coating should be Bacteriostatic and thermosetting epoxy polyester, formulated to fulfill the requirements for bacterial protection. Powder coating should be Bacteriostatic and thermosetting epoxy polyester, formulated to fulfill the requirements for bacterial protection. Max Safe Working Load: 50 kg UDL. goods should be supplied in knocked down construction to reduce carbon emission. OBT as approved by engineer in-charge/employer.

5. Saline Stand



Supply and Installation of saline stand, the telescopic height adjustable saline stand mounted on castor. Over all dimension should be 695 mm diameter base circle with height adjust from 1568 mm to 2121 mm. The 4 prongs bottom frame should made of 1.6 mm thick mild steel and the lower basement should be 30 mm diameter with 1.6 mm thick MS tube. Four nos. high endurance anti-static plastic molded 50 mm castors should be provided with dual locking. The telescopic rod should be 19 mm diameter, 1.6 mm thick SS 304 grade tube with locking knob. 4 nos. hooks are provided for hanging saline bags. The telescopic tube should have plastic bush at the bottom which provide smooth linear motion during height adjustable. All the MS part are pre-treated with 9tank process with zinc phosphate and powder coated with anti-microbial epoxy polyester powder coating.





Supply and Installation of Emergency trolley with mattress, the emergency trolley should be height adjustable, back rest should be adjustable and have Trendelenburg and reverse Trendelenburg functions. Overall Size should be in- between L 2100 to L2200 X W (900) mm to W1000mm X (H) Adjustable from 700mm to 1080 mm. Bed Frame should be made of ERW 25X50 tube with thickness of 1.6 mm Base frame should be made of ERW 25X50 tube with thickness 0f 1.6mm. The bed should have smooth Trendelenburg and reverse Trendelenburg function with assist of 2 nos. Gas Spring. the gas springs should be of 530 mm length and 168 mm. The bed frame should be height adjustable by assist of Hydraulic

operations is required. The trolley should be provided with detachable stretcher which should be have x-ray permeable top made of high-pressure compact laminate of 6mm thick. The top should be exceptional chemical and stain resistance. The fixed portion of the top should be 1065 mm (L) x 590 mm (W) and tilted back portion should be 728 mm (l) x 590 mm (W). There should be MS made x-ray cassette holder which can move along with the top length to perform x-ray on the different position. The x-ray Cassette should be top mounted. Backrest should be adjustable on ratchet for patient comfort from 0 to 70 Degree 10. The trolley should be provided with high end 125 mm non marking Steinco castors which should be lockable diagonally. The trolley should have Safe working Load should of 135 Kg on flat top. There should iv pole holder with height adjustable ss made telescopic iv pole with two hooks to mount saline bags. The trolley should be provided with 8 mm diameter MS zinc plating urine bag holder on both the side. The trolley should be provided with drop down ss made side rails which should provide shelter in more than half of the total bed length, the tube should be of 19 mm diameter and 1.2 mm thick ss 304 made. The trolley should have 4 nos. Neoprene made bumpers for Excellent Shock absorbing property. The top frame should have X ray Tray assembly made of MS CRCA sheet 1.2 thick X ray Tray can slide along the stretcher length. Provision given for changing the X ray cassette at the leg side, knob to be provided for locking the assembly during TR operation. Fail Safe Mechanism- the trolley should have Fail Safe mechanism to avoid collapse of ERT during gas spring failure for TR & ATR Mechanism. The trolley should be provided with 2 nos. U shaped head and foot bow at both the end to drag or push the trolley for movement, the bow should be covered with neoprene material for better grip and avoid cold shock during patient handling. MS Oxygen Cylinder Holder - cylinder cage should be given to mount B type Oxygen Cylinder at the head side of trolley. The mattress is provided with 40 density 60-70 mm thick PU foam mattress with ridges for easy bending. It is covered by heavy helium material which is water proof, flame retardant, vapor & X-Ray permeable with Bacteriostatic properties. The zip & stitches for the mattress cover is concealed, Emergency Trolley as approved by engineer in-charge/employer.

Pump stroke of 140mm. It should be smooth functioning and consistent motion during

7. Fully motorized Paediatric ICU Bed with mattress



Supply and Installation of 5 function fully motorized 4 section Paediatric ICU Bed with mattress. The bed system should be electrically operable by handheld wired remote control which can be placed on each side of the bed for adjustments of back rest, knee rest, heights, Trendelenburg and reverse Trendelenburg, single touch cardiac chair position & automatic CPR positions. All edges in contact with patient to be rounded safely. The bed has Manual CPR lever on both sides in case of emergencies. Head & Foot board should be made of blow molded Poly polypropylene. Head board and foot board should be with metal inserts to mount it on bed frame. Removable PP head board and foot board should have cut out, for better gripping.

Bed frame should be made of MS ERW tube of size 50mmx25mm of 2 mm thick supported with ERW square tube with 25 mm x 25 mm and 2 mm thick.

All corners of bed frame are Provided with bumper mounting holders and it should have Provision for iv pole holders. Base frame made of MS ERW tube of size 30mmx60mm of 2mm thick. Base frame has ground clearance of greater than 150 mm to avoid any obstruction during bed movement.

Mattress platform is strengthened by frame of size $25 \text{ mm} \times 25 \text{ mm}$ and 1.2 mm thick. Under bed clearance should be greater than 150 mm. 4 TPE rotating bumpers of diameter 92 mm height 69 mm with 40-50 shore hardness are Provided at four corners to protect the bed and patient from impact and avoid damages to wall.

The bed is provided with 125mm diameter, twin wheel, plastic polymer with metal insert castors. Out of 4 castors two with brake, mounted at diagonally opposite position.

Technical Parameters

- a. Over all dimensions (Side rails up) 215 cm X 105 cm
- b. Mattress platform shorting / Extension 0 cm 22 cm
- c. Recommended Mattress Size 208 cm X 86 X 14 cm
- d. Max Mattress height 10-15 cm
- e. Bed height 44cm 82 cm through actuator/Motor
- f. Maximum Backrest angle 65-70 Degree
- g. Maximum Thigh rest angle 35 degree
- h. Trendelenburg / Anti-Trendelenburg Position: + 15° or more
- i. Height of Side-Rails (Above Mattress Platform): minimum 30 cm or more
- j. Safe working load 200 Kg
- k. Patient weight load of minimum 150 kg
- I. Battery backup with indicator of capacity and lifetime
- m. Controls must be embedded in the foot end (Wired remote will not be acceptable) for caregiver operation & side end for patient operation
- n. Should have angle indicators for back & TR/RTR
- o. Single button operated motorised cardiac chair position
- p. Should have Bed exit alarm

The bed must be heavy duty, top quality and fully electrically operated bed specially designed for high standard care.

Must have four section bedding area, made from ABS plastic removable parts -hygienical aspects

The control panel a multipurpose control element for complete bed control should be located on bed panels/side rails.

The bed should be equipped with automatic in-bed scale with memory indicate the actual weight of patient and provide the history of collected data with any physical intervention of staff with accuracy of $100 \ \mathrm{gms}$

The bed should have X-ray translucent mattress platform which enables in-bed Xray examination or C arm scanning with minimum effort. Xray cassette holder is inserted through the well accessible side Xray slot.

The bed must have One touch CPR position for immediate release. Manual CPR release for both back and knee angle

Bed should be equipped with following features to prevent the patient fall with following features.

- a. Progressive split side rails with a safe gap concept, side rails down sensors and exceptional height provide excellent fall prevention and must have special protection for paediatric patient to avoid limb entrapment.
- b. Intuitive control of the side-rails enables the quick access to the patient in any situation.
- c. One-point central braking facility must be there as a mandatory safety feature.
- d. An audible alarm is activated if patient moved closed to the bed edge to warn the potential danger and possible risk of a fall.
- e. Must have Night Light.
- f. All the bed movements must be through control panel /Side panel.
- g. Bed should have Blow moulded ABS plastic four sectional fully removable curved mattress platform.

Bed should have following features for infection control.

- a. The construction provides the unlimited access to all bed parts to be cleaned. The columns/ actuators / motors are sealed to avoid liquids leakage into inner structure.
- b. The siderails, mattress platform covers and other components exposed to frequent pollution are designed in the flat and smooth style with minimum gaps to reduce the time for cleaning.

Bed Accessories

- a. Two nos. of telescopic IV pole with weight carrying capacity of 12-15 kg each must be supplied along with each bed. These IV poles must be covered (replacement throughout the warranty period.
- b. Bed must have trays to keep patient reports.
- c. Bed must have a oxygen cylinder (B type) holder to keep oxygen cylinder during transporting of the patient.
- d. Bed must have inbuilt battery backup for all functions for at least 1 hour.
- e. Bed must have Dual sided integral drainage bag rails with hooks

Fully motorized Paediatric ICU Bed as approved by engineer in-charge/employer.

BUGETARY QUOTATION					
Supply, Installation testing and commissioning of Hospital furniture for Radiotherapy Department at Govt. Cancer Hospital Block at Aurangabad, Maharashtra.					
Reference	e No.	HSCC/GCHB-Aurangabad/Hospital Fur/2024			
Name of Manufacturer/Bidder					
Address & Contact Details of the Manufacturer/Bidder submitting the Budgetary Quotation:					
S. No.	Name of Items	Unit	Total Quantity	Rate Per Unit (In Rs.) with inclusive of All Taxes & Duties and 3 Years Warranty	Amount (In Rs)with inclusive of All Taxes & Duties and 3 Years Warranty
1	Fully Motorized ICU Bed with Mattress	Each	10		
2	Mechanical Fowler Bed with Mattress	Each	128		
3	Patient Bedside Locker	Each	58		
4	Patient Over Bed Table	Each	58		
5	Saline Stand	Each	109		
6	Emergency Recovery Trolley	Each	6		
7	Fully motorized Paediatric ICU Bed with mattress	Each	6		
Total Amount In Rs.					0