

ADDENDUM NO.2

TO : ALL INTRESTED BIDDERS

DATE: 28TH FEBRUARY 2024

LOT 7 CSSD

Amendments to Appendix C – List of Equipment to be provided under Lease for **LOT 7**

SL No.	Lot	Department	Sub Department	Item Name	Technical Specification Code
1	7	CSSD	Recycling	150 Litre Autoclave	MoH-LEA-7-1
2	7	CSSD	Recycling	21 Litre Ultrasonic Washer	MoH-LEA-7-2
3	7	CSSD	Recycling	250 Litre Autoclave	MoH-LEA-7-3
4	7	CSSD	Recycling	325 Litre Autoclave	MoH-LEA-7-4
5	7	CSSD	Recycling	900 Litre Autoclave	MoH-LEA-7-5
6	7	CSSD	Recycling	Cart Cabinet for Storage and Execrating Sets	MoH-LEA-7-6
7	7	CSSD	Recycling	Flash Autoclave Table Top	MoH-LEA-7-7
8	7	CSSD	Recycling	Gas Plasma Sterilizer	MoH-LEA-7-8
9	7	CSSD	Waste Collection & Destruction	Incinerator 100 Kg	MoH-LEA-7-9
10	7	CSSD	Waste Collection & Destruction	Incinerator 150 Kg	MoH-LEA-7-10
11	7	CSSD	Waste Collection & Destruction	Incinerator 200 Kg	MoH-LEA-7-11
12	7	CSSD	Waste Collection & Destruction	Incinerator 25 Kg	MoH-LEA-7-12
13	7	CSSD	Waste Collection & Destruction	Incinerator 50 Kg	MoH-LEA-7-13
14	7	CSSD	Recycling	Packing Table	MoH-LEA-7-14
15	7	CSSD	Recycling	Pressure Steam Gun/ Water For Cart Washing	MoH-LEA-7-15
16	7	CSSD	Recycling	Small Autoclave 40 Liter	MoH-LEA-7-16
17	7	CSSD	Recycling	Storage Cabinet	MoH-LEA-7-17
18	7	CSSD	Recycling	Surgical Instruments Sets	MoH-LEA-7-18
19	7	CSSD	Recycling	Trolley	MoH-LEA-7-19
20	7	CSSD	Recycling	Trolley Cabinet	MoH-LEA-7-20
21	7	CSSD	Recycling	Under Counter Washer 150 Liter	MoH-LEA-7-21
22	7	CSSD	Recycling	Unpacking Table	MoH-LEA-7-22
23	7	CSSD	Recycling	Warmining Cabinet	MoH-LEA-7-23
24	7	CSSD	Recycling	Washer for Endoscopy	MoH-LEA-7-24
25	7	CSSD	Recycling	Washer Sink with All Acc'	MoH-LEA-7-25
26	7	CSSD	Recycling	Washing Machine	MoH-LEA-7-26

27	7	CSSD	Recycling	Water Jet System	MoH-LEA-7-27
28	7	CSSD	Recycling	Working Station	MoH-LEA-7-28
29	7	CSSD	Recycling	WORKING TABLE	MoH-LEA-7-29

Amendments to Appendix D – Specifications for Equipment to be Supplied under Lease Lot 7

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-1	Item Description	150 Litre Autoclave
1. General Description			
Working Volume 150 liters			
Operating Range Up to 136°C, 2.2 Bar (277°F, 32 psi)			
Loading Format Top			
Loading Height 36.8" (935mm)			
Heating Internal Electrical OR House Steam Source			
Heat Input 11.2kW/internal OR 1.2kW/house (Three phase)			
Working Dimensions diameter x depth			
19.5" x 28.4" (496mm x 720mm)			
Outside Dimensions w x d x h			
26" x 33.1" x 40.2" (660mm x 840mm x 1020mm)			
Floor Weight (unloaded)			
363.8lbs (165Kg)			
Minimum Installation w x d x h (and Door Swing)			
38" x 45.1" x 64.6" (965mm x 1146mm x 1640mm)(560mm, 22.1")			
2. Composition			
2.1	150 Litre Autoclave		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-2	Item Description	21 Litre Ultrasonic Washer
1. General Description			
External dimension LxWxH : 600x330x410mm 235/8"x13"x161/8"			
Tank dimension LxWxH: 500x300x150mm 1911/16"x1113/16"x515/16			
Capacity: 21 l - 5.55 gal			
W peak power: 800			
Power connection: 230/240V -50/60Hz			
Degasing function			
Adjustable cleaning time: 0-90 minutes			
Heating power: 1000			
2. Composition			
2.1	21 Litre Ultrasonic Washer		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
Complete installation and setup of the machine as per manufacturer's instructions			
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-3	Item Description	250 Litre Autoclave
1. General Description			
1.1 Main Unit Horizontal			
1.1.1 Application: For sterilization of hospitals porous and non- porous Loads.			
1.1.2 Sterilization agent: Saturated steam with inbuilt steam generator			
1.1.3 Sterilization cycle: Fully automatic with Pre – vacuum, heating (steam pulsating), sterilization (holding), post vacuum (drying). With inbuilt printer capable of printing each successful sterilization cycle			
1.1.4 Sterilization: 121oC to 135oC, selectable programs for different kind temperature range of loads			
1.1.5 Pressure equalization: By sterile HEPA filter, replaceable			
1.2 Sterilization chamber design and capacity: Horizontal type, 250 litres, all high-grade stainless-steel construction			
1.2.1 Sterilization Chamber door: Fully automatic, hydraulic, vertical or horizontal sliding.			
1.3 Control unit: Microprocessor based controlling all operational cycles With large LCD or similar display of cycle progress i.e. temperature, pressures and time.			
With different programmable cycle programs for different type of loads.			
1.4 Steam generator: In built, Electrical heating three phase 415V, 50 Hz			
1.5 Water to steam generator: De- carbonated water to safe guard heating element.			
Suitable RO filter units to be installed			
1.6 Safety features: The autoclave should have major safety features such as: Safety pressure relief valve: Door lock under pressure			
2. Composition			

2.1	250 Litre Autoclave				
4	Quality standards				
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards			
4.2	Conformity to standards	CE marked or any other equal or recognized international document			
5	Delivery point				
5.1	See Schedule	For inspection and testing			
6	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
7	Training				
7.1	User Training	On site user training on operation and daily up keep			
7.2	Maintenance training	On-site maintenance training on preventive maintenance			
8	Technical documentations				
8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-4	Item Description	325 Litre Autoclave
1. General Description			
1.1 Main Unit Horizontal			
1.1.1 Application: For sterilization of hospitals porous and non- porous Loads.			
1.1.2 Sterilization agent: Saturated steam with inbuilt steam generator			
1.1.3 Sterilization cycle: Fully automatic with Pre – vacuum, heating (steam pulsating), sterilization (holding), post vacuum (drying). With inbuilt printer capable of printing each successful sterilization cycle			
1.1.4 Sterilization: 121oC to 135oC, selectable programs for different kind temperature range of loads			
1.1.5 Pressure equalization: By sterile HEPA filter, replaceable			
1.2 Sterilization chamber design and capacity: Horizontal type, 325 litres, all high-grade stainless-steel construction			
1.2.1 Sterilization Chamber door: Fully automatic, hydraulic, vertical or horizontal sliding.			
1.3 Control unit: Microprocessor based controlling all operational cycles with large LCD or similar display of cycle progress i.e. temperature, pressures and time. With different programmable cycle programs for different type of loads.			
1.4 Steam generator: In built, Electrical heating three phase 415V, 50 Hz			
1.5 Water to steam generator: De- carbonated water to safe guard heating element. Suitable RO filter units to be installed			
1.6 Safety features: The autoclave should have major safety features such as: Safety pressure relief valve: Door lock under pressure			
2. Composition			
2.1	325 Litre Autoclave		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		

8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-5	Item Description	900 Litre Autoclave
1. General Description			
<ul style="list-style-type: none"> • For 900 litres capacity ,4 pre-set sterilization programs • Program and customize cycle parameters to meet your needs • High precision control system for accurate sterilization results • Integrated printer for cycle documentation (optional) • PC Communication port enables storage of sterilization results • Temperature and pressure monitoring • User friendly, intuitive display • Cycle information recovery in the case of power failure or cycle interruption • Insufficient water detector with automatic shutoff • Consistent monitoring of temperature and pressure for realtime accurate results • Water-level sensors prevent cycle activation when insufficient water is detected in the chamber or reservoir 			
2. Composition			
2.1	900 Litre Autoclave		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-6	Item Description	Cart Cabinet For Storage And Execrating Sets
1. General Description			
1.1.	Complete S.S Sterile Storage Mesh Units with Tubular Frame		
1.2.	Should Have Mono Steered, Antistatic 5" Castors		
1.3.	Should Have 5 Shelves App. 2~3" Depth		
1.4.	Size Of the Mesh Basket App. 2'X 3' Overall Size: App 6' Customized according to locations		
2. Composition			
2.1	Cart Cabinet For Storage And Execrating Sets		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	

5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-7	Item Description	Flash Autoclave Table Top
1. General Description			
<p>Internal Tank Capacity- 70 to 100 liters Load: 4KW Chamber dimension: Minimum 18" x 24" No.of Drums & Sizes minimum 2 (12" x 15"), Working Pressure: 1.2 kgf/cm sq.g (15 psi - 17 psi) (Can be Upgraded up to 30 PSI), Sterilizing Temperature 121°C to 134°C (150°C - Optional) Heat Average <=±1°C Sterilization Time 25 to 30 Minutes Digital Timer 0 to 99 min Construction Double / Triple wall & SS GMP construction Outer Chamber Mild Steel (304 stainless Steel – Optional) Inner Chamber 304 SS (316 / 316L grades Stainless Steel – Optional) Insulation Glass Wool Waste Container Stainless Steel Door / Lid Foot lifted with safety and interlock device Door Locking type Radial Type (Wing Nut Optional) Water Filling & Removal Manual Safety Features Radial locking, safety valve, low water detector and pressure interlock Accessories - PID controller - Low / High water cut-off device - Digital alarm - Temperature chart recorder - RS 232 / USB PC Connection Port - Stainless Steel wire mesh carrier - Dressing drum - Sterilization indicator tape - Autoclave bags - PLC control system - Extra Silicion gas cutter to be provided along with 2 heating coils</p>			
2. Composition			
2.1	Flash Autoclave Table Top		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		

7.1	User Training	On site user training on operation and daily up keep			
7.2	Maintenance training	On-site maintenance training on preventive maintenance			
8	Technical documentations				
8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			
Department	CSSD	Room Name/No.	Recycling		
Item Code No.	MOH-LEA-7-8	Item Description	Gas Plasma Sterilizer		
1. General Description					
<p>1. Description of the medical supply unit design type</p> <p>1.1. Should provide simple & fast sterilization of surgical instruments at low temperature using H2O2 Gas Plasma technology for effective removal of H2O2 from sterilized items and to compliment the process.</p> <p>1.2. Should be suitable for sterilization of medical items like rigid endoscopes, lumen & non lumen, metal , non-metal, heat & moisture sensitive instruments</p> <p>1.3. Chamber should have usable volume of around 50 liters</p> <p>1.4. The sterilization temperature inside the chamber should be less than 55°C</p> <p>1.5. Cycle time should be 35 to 60 mins</p> <p>1.7. Should be endorsed by leading instruments and scopes makers like Karl Storz, Olympus, Stryker, Medtronic and Johnson & Johnson</p> <p>1.8. The system should use minimum quantity of sterilant which should be less than 6-8 ml per injection to deliver dry terminal sterilization to ensure safety of Instruments against corrosion.</p> <p>1.9. The unit should be equipped with all the safety features</p> <p>1.10. Sterilizer should have storage of cycle records data.</p> <p>1.11. Should be environment friendly and have no toxic products or harmful residues in the sterilized items in the chamber.</p> <p>1.12. Sterilizer should be approved by CE or equivalent</p>					
2. Composition					
2.1	Gas Plasma Sterilizer				
4	Quality standards				
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards			
4.2	Conformity to standards	CE marked or any other equal or recognized international document			
5	Delivery point				
5.1	See Schedule	For inspection and testing			
6	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
7	Training				
7.1	User Training	On site user training on operation and daily up keep			
7.2	Maintenance training	On-site maintenance training on preventive maintenance			
8	Technical documentations				
8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			

Department	CSSD	Room Name/No.	Waste Collection & Destruction
Item Code No.	MOH-LEA-7-9	Item Description	Incinerator 100 Kg
1. General Description			
100: Burn Rate (KG/HR): 90~120 Gasification Furnace (Primary Chamber): Diameter: 1,732mm Height: 1,680mm Combustion Furnace (Secondary Chamber): Diameter: 1,087mm Height: 3,387mm Capacity of Fan (kW): F.D FAN: 3.4kW EJECTOR FAN: Not specified Capacity of Burner (kW): Ignition Burner: 0.15kW Auxiliary Burner: 0.4kW			
2. Composition			
2.1	Incinerator 100 Kg		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Waste Collection & Destruction
Item Code No.	MOH-LEA-7-10	Item Description	Incinerator 150 Kg
1. General Description			
150: Burn Rate (KG/HR): 140~160 Gasification Furnace (Primary Chamber): Diameter: 1,922mm Height: 1,923mm Combustion Furnace (Secondary Chamber): Diameter: 1,262mm Height: 3,412mm Capacity of Fan (kW): F.D FAN: 11kW EJECTOR FAN: 11kW Capacity of Burner (kW): Ignition Burner: 0.15kW Auxiliary Burner: 0.4kW			
2. Composition			

2.1	Incinerator 150 Kg				
4	Quality standards				
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards			
4.2	Conformity to standards	CE marked or any other equal or recognized international document			
5	Delivery point				
5.1	See Schedule	For inspection and testing			
6	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
7	Training				
7.1	User Training	On site user training on operation and daily up keep			
7.2	Maintenance training	On-site maintenance training on preventive maintenance			
8	Technical documentations				
8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			

Department	CSSD	Room Name/No.	Waste Collection & Destruction		
Item Code No.	MOH-LEA-7-11	Item Description	Incinerator 200 Kg		
1. General Description					
200:					
Burn Rate (KG/HR): 190~210					
Gasification Furnace (Primary Chamber):					
Diameter: 1,952mm					
Height: 2,360mm					
Combustion Furnace (Secondary Chamber):					
Diameter: 1,407mm					
Height: 3,412mm					
Capacity of Fan (kW):					
F.D FAN: 15kW					
EJECTOR FAN: Not specified					
Capacity of Burner (kW):					
Ignition Burner: 0.15kW					
Auxiliary Burner: 0.4kW					
2. Composition					
2.1	Incinerator 200 Kg				
4	Quality standards				
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards			
4.2	Conformity to standards	CE marked or any other equal or recognized international document			
5	Delivery point				
5.1	See Schedule	For inspection and testing			
6	Installation and testing				
	Complete installation and setup of the machine as per manufacturer's instructions				
7	Training				
7.1	User Training	On site user training on operation and daily up keep			
7.2	Maintenance training	On-site maintenance training on preventive maintenance			
8	Technical documentations				
8.1	User manuals	1 Set			
9	Commissioning				
9.1	Testing and commissioning of the devices to the satisfaction of the user.				
10	Warranty				
10.1	Equipment	Minimum of one year after commissioning on all parts.			
10.2	Equipment System	Nil			

Department	CSSD	Room Name/No.	Waste Collection & Destruction
Item Code No.	MOH-LEA-7-13	Item Description	Incinerator 25 Kg
1. General Description			
25: Burn Rate (KG/HR): 20~30 Gasification Furnace (Primary Chamber): Diameter: 1,069mm Height: 1,364mm Combustion Furnace (Secondary Chamber): Diameter: 909mm Height: 1,759mm Capacity of Fan (kW): F.D FAN: 3.4kW EJECTOR FAN: 2.3kW Capacity of Burner (kW): Ignition Burner: 0.15kW Auxiliary Burner: 0.15kW			
2. Composition			
2.1	Incinerator 25 Kg		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
Complete installation and setup of the machine as per manufacturer's instructions			
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Waste Collection & Destruction
Item Code No.	MOH-LEA-7-14	Item Description	Incinerator 50 Kg
1. General Description			
50: Burn Rate (KG/HR): 40~60 Gasification Furnace (Primary Chamber): Diameter: 1,300mm Height: 1,652mm Combustion Furnace (Secondary Chamber): Diameter: 1,016mm Height: 2,160mm Capacity of Fan (kW): F.D FAN: 2.3kW EJECTOR FAN: 3.4kW			

Capacity of Burner (kW): Ignition Burner: 0.15kW Auxiliary Burner: 0.25kW				
2. Composition				
2.1	Incinerator 50 Kg			
4	Quality standards			
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards		
4.2	Conformity to standards	CE marked or any other equal or recognized international document		
5	Delivery point			
5.1	See Schedule	For inspection and testing		
6	Installation and testing			
	Complete installation and setup of the machine as per manufacturer's instructions			
7	Training			
7.1	User Training	On site user training on operation and daily up keep		
7.2	Maintenance training	On-site maintenance training on preventive maintenance		
8	Technical documentations			
8.1	User manuals	1 Set		
9	Commissioning			
9.1	Testing and commissioning of the devices to the satisfaction of the user.			
10	Warranty			
10.1	Equipment	Minimum of one year after commissioning on all parts.		
10.2	Equipment System	Nil		

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-15	Item Description	Packing Table
1. General Description			
Material: Stainless steel (304-grade is commonly used for medical equipment)			
Tabletop dimensions: 120cm (length) x 60cm (width)			
Height of tabletop: Adjustable between 75cm to 95cm			
Number of shelves: 2			
Shelf dimensions: 100cm (length) x 30cm (width)			
2. Composition			
2.1	Packing Table		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-16	Item Description	Pressure Steam Gun/ Water For Cart Washing
1. General Description			
Steam Pressure 2000 PSI 140 Bar Water Volume 2.0 GPM 7.5 Lt/m Temperature Range Cold to 330 F Cold to 166 C Operating pressure (bar) 8.0 Pressure tank volume (l) 5.0 Max. filling volume (l) 3.8 Max. power consumption (W) 3120 Steam temperature in the tank (°C) max. 185 Steam temperature at the nozzle (°C) max. 160 Dimensions W/D/H (mm) 285 / 350 / 520			
2. Composition			
2.1	Pressure Steam Gun/ Water For Cart Washing		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
Complete installation and setup of the machine as per manufacturer's instructions			
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-17	Item Description	Small Autoclave 40 Liter Tta
1. General Description			
Combine compact design with high performance, reliability and safety Intelligent design for your professional choice Microprocessor control system provides nine fully automatic programs, including add water, sterilization and dry Eight pre-installed sterilization cycles Two separate water-level check mechanisms: water tank level and chamber water level Auto dry function Pressure door auto-lock device Chamber protected by pressure switch and steam pressure safety valve Vacuum/Pressure Release button cuts off the power supply, exhausts the chamber of pressure, and releases the chamber vacuum simultaneously Indicator lights: DOOR OPEN - Door has not been closed completely; all functions stop LOW WATER - Water level is too low COMPLETE - Full cycle has run properly and is complete			
2. Composition			
2.1	Small Autoclave 40 Liter Tta		

4	Quality standards			
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards		
4.2	Conformity to standards	CE marked or any other equal or recognized international document		
5	Delivery point			
5.1	See Schedule	For inspection and testing		
6	Installation and testing	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training			
7.1	User Training	On site user training on operation and daily up keep		
7.2	Maintenance training	On-site maintenance training on preventive maintenance		
8	Technical documentations			
8.1	User manuals	1 Set		
9	Commissioning			
9.1	Testing and commissioning	of the devices to the satisfaction of the user.		
10	Warranty			
10.1	Equipment	Minimum of one year after commissioning on all parts.		
10.2	Equipment System	Nil		

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-18	Item Description	Storage Cabinet
1. General Description			
Stainless steel narrow double door cupboard with 1 fixed and 4 adjustable shelves 1000 x 680 x 2100h mm 393/8" x 263/4" x 8211/16			
2. Composition			
2.1	Storage Cabinet		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing	Complete installation and setup of the machine as per manufacturer's instructions	
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning	of the devices to the satisfaction of the user.	
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-19	Item Description	Surgical Instruments Sets
1. General Description			
Amputation Set , Basic Laparotomy Set , Basic Proctectomy Set , Thyroidectomy Set , K-Nail Set - As Per Spec, Paedtric General Set, Caesarian Section Set , E.U.A Set , General Hystrectomy Set , V.V.F Set - As Per Specs., Bladder Set , Catheterization Set , Cut Down Adult Set, Incision & Excisional Biopsy Set, Incision Tray - As Per Specs., Stitch Removing Set, Cholecystectomy Set , Craniotomy Set , General Thoracic Set , Urethroplasty Set, ENT General Set , Foreign Body Ear Nose Set , Myringotomy Set , Tonsillectomy Set, Tracheotomy Set , Vericose Vein Stripper Set, Cataract Set with IOL Implantation Set , Glaucoma Set , Gromet Set ENT ,			

Laryngoscope Adult & Paediatric, Laryngoscope with Blades For Neonates , Magil Forceps Adult & Paediatric				
2. Composition				
2.1	Surgical Instruments Sets			
4	Quality standards			
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards		
4.2	Conformity to standards	CE marked or any other equal or recognized international document		
5	Delivery point			
5.1	See Schedule	For inspection and testing		
6	Installation and testing			
	Complete installation and setup of the machine as per manufacturer's instructions			
7	Training			
7.1	User Training	On site user training on operation and daily up keep		
7.2	Maintenance training	On-site maintenance training on preventive maintenance		
8	Technical documentations			
8.1	User manuals	1 Set		
9	Commissioning			
9.1	Testing and commissioning of the devices to the satisfaction of the user.			
10	Warranty			
10.1	Equipment	Minimum of one year after commissioning on all parts.		
10.2	Equipment System	Nil		

Department	CSSD	Room Name/No.	Recycling	
Item Code No.	MOH-LEA-7-20	Item Description	Trolley Cabinet	
1. General Description				
<ul style="list-style-type: none"> • SS 304 construction • Contoured traumatic finish • 100mm wheels • Adjustable 3Nos SS Racks • Pull / Push SS Handles • SIZE: 1240 X 610 X 1370mm 				
2. Composition				
2.1	Trolley Cabinet			
4	Quality standards			
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards		
4.2	Conformity to standards	CE marked or any other equal or recognized international document		
5	Delivery point			
5.1	See Schedule	For inspection and testing		
6	Installation and testing			
	Complete installation and setup of the machine as per manufacturer's instructions			
7	Training			
7.1	User Training	On site user training on operation and daily up keep		
7.2	Maintenance training	On-site maintenance training on preventive maintenance		
8	Technical documentations			
8.1	User manuals	1 Set		
9	Commissioning			
9.1	Testing and commissioning of the devices to the satisfaction of the user.			
10	Warranty			
10.1	Equipment	Minimum of one year after commissioning on all parts.		
10.2	Equipment System	Nil		

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-21	Item Description	Under Counter Washer 150 Liter
1. General Description			
Touch panel with color graphic display with a total of 40 programs: preset and programmable procedures Advanced features Air drying prefilter + HEPA H14 filter. 3 heating elements. Built-in steam condenser. Integrated water softener (optional). Dosing pumps with flowmeter For acid and alkaline detergents (2 additional pumps optional)			
2. Composition			
2.1	Under Counter Washer 150 Liter		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-22	Item Description	Unpacking Table
1. General Description			
Stainless steel 304 construction · Safety folds to all edges · Single shelf with embedded LED examination light · 2 drawers · Size:1000*600*850mm.			
2. Composition			
2.1	Unpacking Table		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-23	Item Description	Warming Cabinet
1. General Description			
Control System PLC processor, Electronic card			
Usage Full Automatic / button and touch screen (Monochrome screen optional)			
Screen Type Color TFT, Touch LCD			
Screen Dimensions 4,3" and/or 7" (Screens in a different size may be installed on purpose.)			
Keyboard Touch			
Printer 40 characters/lines, integrated thermal printer (optional)			
Communication RS485 Port/USB (Ethernet Optional)			
Warning System Visual, auditory and written message warning			
Data Storage 30-day data			
Process Touch screen Monitoring/Tracking			
Mobility Easy direction on 4 rotating wheels			
Door Single door/Double door, heat insulated, non-vapor producing and non-moisture producing, tempered glass, magnetic sealed			
Door Security System Magnetic lock, open via the encoded/unencoded touchscreen			
Fan Material Provides homogenous air. Fan protective grating is made from non-flammable Both partitions can be set at different temperatures for single and double doors models. According to this;			
Operation Temperature Range 1. In IV Solution Mode : 32 OC - 44 OC (Only used for the upper cabinet.)			
2. In Irrigation/Blanket Mode : 32 OC – 71,1 OC (Used both for the upper and the lower cabinet.)			
3. BLT Mode: 32 OC – 94 OC (Used both for the upper and the lower cabinet.)			
(Note: The upper cabinet is set in IV Solution Mode by default.)			
Lighting Resistant to high temperatures, LED type, automatically on upon door opening, turning on the light via the touchscreen when the door is closed			
Wheel System Four wheels, two of which are with brakeage			
Alarm System Both visual and auditory alarming			
Shelves Mobile, AISI 304 quality stainless steel drawers			
Material All parts of the device, both inner and outer, are made from AISI 304 quality stainless steel			
Insulation 40 mm thick polyurethane material			
Power Value 220 V/50 Hz			
2. Composition			
2.1	Warming Cabinet		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-24	Item Description	Washer For Endoscopy
1. General Description			
Large Capacity Each cycle has the capacity to wash and disinfect either two flexible endoscopes or up to six non-channelled naso-endoscopes in two separate baskets. Control Screen The full-colour touch screen is large and easy to read from a distance. Swift and Effective Processing Inside and Out The rotating spray arm for washing and disinfecting is able to reach into the far corners of the chamber for both the top and bottom baskets. Rinse Water Control A pure water filter is included as standard in the Reliance PTX Processor. Full Traceability The Reliance PTX Processor provides comprehensive cycle recording, monitoring and verification records using the inbuilt systems of the unit. Full-Cycle Monitoring Each cycle is independently monitored to ensure compliance of key cycle parameters of time, temperature, quantity of cleaner and disinfectant, quantity of water, flow through channels and conductivity (optional). Full Scope Characterisation The flow characteristics of each endoscope are entered into the Reliance PTX Processor control by a trained STERIS technician, and linked to that scope ID. Isolated Chemical Chamber The Reliance PTX™ Processor has been designed to use STERIS chemicals and to hold these chemistries in an easy-to-reach front opening drawer.			
2. Composition			
2.1	Washer For Endoscopy		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-25	Item Description	Washer Sink With All Acc'
1. General Description			
stainless steel and seamlessly integrated into worktops, sinks are in large or small sizes, single or double configuration for installation on the left, middle or right hand side of worktops into cabinets for sinks underneath.			
2. Composition			
2.1	Washer Sink With All Acc'		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
	Complete installation and setup of the machine as per manufacturer's instructions		
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		

8.1	User manuals	1 Set
9	Commissioning	
9.1	Testing and commissioning of the devices to the satisfaction of the user.	
10	Warranty	
10.1	Equipment	Minimum of one year after commissioning on all parts.
10.2	Equipment System	Nil

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-26	Item Description	Washing Machine
1. General Description			
<ul style="list-style-type: none"> • Drum capacity: 518liters • Capacity 40kg • Frequency controlled: standard • Material cabinet stainless steel AISI 304 • Heating 90°c • Heater power 54Kw • Power supply 3phase, 380-480V/50Hz 			
2. Composition			
2.1 Washing Machine			
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
Complete installation and setup of the machine as per manufacturer's instructions			
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning of the devices to the satisfaction of the user.		
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-27	Item Description	Water Jet System
1. General Description			
1.1. Complete stainless steel CSSD instrument sluicing table with hand water jet table form machine pressed made of acid-proof stainless steel.S.S.304; 1.5mm thickness laser cut with hot and cold water faucets.			
1.2. Should have sturdy tubular framework			
1.3. Should have twin bay sink with drain out water connection.			
1.4. Adjustable stumps.			
1.5. Size should be 1200mm x w 600mm x h 850mm			
2. Composition			
2.1 Water Jet System			
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	

5	Delivery point	
5.1	See Schedule	For inspection and testing
6	Installation and testing	Complete installation and setup of the machine as per manufacturer's instructions
7	Training	
7.1	User Training	On site user training on operation and daily up keep
7.2	Maintenance training	On-site maintenance training on preventive maintenance
8	Technical documentations	
8.1	User manuals	1 Set
9	Commissioning	
9.1	Testing and commissioning	of the devices to the satisfaction of the user.
10	Warranty	
10.1	Equipment	Minimum of one year after commissioning on all parts.
10.2	Equipment System	Nil

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-28	Item Description	Working Station
1. General Description			
SS 304 construction			
<ul style="list-style-type: none"> • With transparent illuminating section • Magnifying lens optional • Size: 2285 X 815 X 950mm 			
2. Composition			
2.1	Working Station		
4	Quality standards		
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards	
4.2	Conformity to standards	CE marked or any other equal or recognized international document	
5	Delivery point		
5.1	See Schedule	For inspection and testing	
6	Installation and testing		
Complete installation and setup of the machine as per manufacturer's instructions			
7	Training		
7.1	User Training	On site user training on operation and daily up keep	
7.2	Maintenance training	On-site maintenance training on preventive maintenance	
8	Technical documentations		
8.1	User manuals	1 Set	
9	Commissioning		
9.1	Testing and commissioning	of the devices to the satisfaction of the user.	
10	Warranty		
10.1	Equipment	Minimum of one year after commissioning on all parts.	
10.2	Equipment System	Nil	

Department	CSSD	Room Name/No.	Recycling
Item Code No.	MOH-LEA-7-29	Item Description	WORKING TABLE
1. General Description			
Complete stainless steel CSSD sterile packing table form machine pressed made of acid-proof stainless steel; grade - S.S.304 grade, 1.5mm thickness laser cut Sturdy tubular framework Lightened tabletop Adjustable stumps.			
Size: Approx. 1400mm x w 900mm x h 850mm		Customized according to locations	
2. Composition			
2.1	WORKING TABLE		

4	Quality standards	
4.1	Manufacturing standards	ISO/ FDA/CE or any other equal and recognized internationally standards
4.2	Conformity to standards	CE marked or any other equal or recognized international document
5	Delivery point	
5.1	See Schedule	For inspection and testing
6	Installation and testing Complete installation and setup of the machine as per manufacturer's instructions	
7	Training	
7.1	User Training	On site user training on operation and daily up keep
7.2	Maintenance training	On-site maintenance training on preventive maintenance
8	Technical documentations	
8.1	User manuals	1 Set
9	Commissioning	
9.1	Testing and commissioning of the devices to the satisfaction of the user.	
10	Warranty	
10.1	Equipment	Minimum of one year after commissioning on all parts.
10.2	Equipment System	Nil

LOT 3 IPD, LOT 2 ICU & LOT 5 OT

Medical Oxygen Plant with Pipeline (MGPS) **MoH-LEA-2-16** Set-up Under Lot 2 ICU is removed from ICU and added Under Lot 3 IPD the new Technical Specification Code for Medical Oxygen Plant with Pipeline (MGPS) would be **MOH-LEA-3-24**. Bidders need not include **MoH-LEA-2-16** while bidding for LOT 2. The specifications for MOH-LEA-3-24 would be the same as the Specification mentioned under MoH-LEA-2-16 in the tender document.

Medical Gases under FFS should be supplied under Lot 2 ICU and Lot 5 OT as per the updated Procedure/Service Code mentioned below, the bidders who are bidding for Lot 2 ICU and Lot 5 OT under Lease should include these LOT(S) under FFS for medical gases for the procuring entity to consider it complete.

The Medical gases supplied under the below mentioned LOT(S) should be of at least 99% purity and with a maximum pressure variance of +/- 5% as it would be for the ICU and OT.

Amendments to Appendix E – List of Services to be provided under FFS for LOT 5

SL No.	Category	Sub-Category	Procedure/ Service Name	Procedure/Service Code	LOT No.
1	ICU	Medical Gases	Oxygen (O2) 8.5 m3 (170 bars)	MoH-SER-FFS-2-1	2
2	ICU	Medical Gases	Oxygen (O2) 1.36 m3 (136 bars)	MoH-SER-FFS-2-2	2
3	ICU	Medical Gases	Medical Air 8.0 m3 (160 bars)	MoH-SER-FFS-2-3	2
SL No.	Category	Sub-Category	Procedure/ Service Name	Procedure/Service Code	LOT No.
1	OT	Medical Gases	Oxygen (O2) 8.5 m3 (170 bars)	MoH-SER-FFS-5-1	5
2	OT	Medical Gases	Oxygen (O2) 1.36 m3 (136 bars)	MoH-SER-FFS-5-2	5
3	OT	Medical Gases	Medical Air 8.0 m3 (160 bars)	MoH-SER-FFS-5-3	5

Department	Imaging	Room Name/No.	Imaging
Item Code No.	MOH-FA-3-6	Item Description	Digital Mobile X –Ray Unit
1. General Description			
Mobile X-ray unit, digital type, on castors and having a rotating anode standard tube. It should be easy to maneuver and control and capable of undertaking bedside and theatre radiography. Should also incorporate a cassette storage chamber with a minimum capacity of 2 Flat Panel detectors			
2. Composition			
2.1	X-Ray Generator		
2.2	X-Ray Tube		
2.3	Digital cassettes		
3. Performance Specifications			
3.1	X-Ray Generator		
3.1.1	Type	Microprocessor controlled, Maximum power rating 30 KW	
	Frequency	40KHz	
3.1.2	Anatomic programmes	Available	
3.1.3	DAP	To be provided	
3.1.4	mAs range	0.2mAs to 200mAs at 90 KV and 0.2 mAs to 50 mAs at 125KV	
3.1.5	Control Panel	Touch Screen type with 19" LED/ LCD Digital display of parameters.	
3.2	X-ray tube		
3.2.1	Type	Rotating anode type	
3.2.2	Tube voltage range	40 to 125 kV.	
3.2.3	Tube current	Not less than 300mA	
3.2.4	Focal	0.6/1.5 duo focal spot	
3.2.5	Anode heat storage	Min 200KHU	
3.2.6	Collimator	Manual operation without screen with DAP assembly interface	
3.3	Detector	Flat panel, wireless 17 X17 HD static type	
3.4	Software	APR photography	
3.4.1	Operating system	Minimum WIN 10 professional 64 bit	
3.5.	Connectivity	DICOM 3.0 compatible with USB port, Wireless connection compatibility, Ethernet Port	
3.6	Physical characteristics	Mobile on castors Ø 120 mm with brakes	
		Electric assisted with anti-collision function	
5	Operating environment		
5.1	Power Requirements	240V, a/c 50 Hz, Single phase, with PE conductor	

5.2	Ambient temperature	10° C to 40° C	
5.3	Relative humidity	40% to 90%	
6	Accessories		
6.1	External Hard Disk, USB 3.0, 1000GB		
7	Spare parts		
	Manufacturer's recommended service kit for one year		
9	Quality standards		
9.2	Manufacturing standards	IEC 60601-1, ISO 9001, ISO 13485 or any other internationally recognized standards	
	Conformity to standards	CE marked or any other internationally recognized documents	
11	Delivery point		
11.1	See Hospital Schedule.	For delivery, inspection and testing, installation and commissioning	
12	Pre installation requirements		
	Nil	.	
13	Installation and testing		
	Complete installation and set-up of the Mobile X-Ray Machine as per manufacturer's instructions		
14	Training		
14.1	User Training	On site user training on operation and daily up keep for 3 weeks	
14.2	Maintenance training	On site maintenance training on preventive maintenance	
15	Technical documentations		
15.1	User manuals	2 Sets	
15.2	Service Manual	1 Set	
15.3	Drawings	Nil	
16	Commissioning		
16.1	Testing and commissioning of the machine including calibration and radiation testing to the satisfaction of the user.		
17	Warranty		
17.1	Equipment	Minimum of one year after commissioning on all parts.	
17.2	Equipment System	Nil	
18.	Maintenance contract		

18.1	Capacity to provide maintenance and repair service	Vendor/manufacturer shall have adequate facilities, spare parts, qualified and skilled technical staff to offer comprehensive maintenance contract for 10 years
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AIR COMPRESSOR

- 1) Superior performance State-of-the-art compression element coupled with a maintenance-free gearbox.
- 2) 100% continuous duty cycle.
- 3) Motor and drive train are greased for life to avoid improper re-greasing.
- 4) Reduced electrical cubicle temperature doubles electrical component lifetime.
- 5) Integrated dryer with heat exchanger and integrated water separator for dry, quality air.
- 6) Best-in-class low noise levels.
- 7) Supreme energy efficiency IE4 efficiency rated motor.
- 8) Free Air Delivery increased by 6-10%.
- 9) Power consumption reduced by 3-8%.
- 10) Quick installation & maintenance Delivered plug & play.
- 11) Easy transportation.
- 12) Main components are easily accessible.
- 13) State-of-the-art monitoring & control
- 14) High-tech Electronic ® Touch controller with high-definition color display, easy to use and built to perform in the toughest conditions.
- 15) Week timer, remote monitoring and maintenance scheduling.
- 16) Built-in phase sequence relay for motor control and protection.
- 17) Standard SMARTLINK remote monitoring to maximize air system performance and energy savings.
- 18) Optional multiple compressor control.

AIR TANK

- Air storage tank: 0.6m³, with safety valve,
- drain valve,
- pressure guage
- Air tank capacity 3m³, with safety valve

Sterilization Basket

- 1) For entire sterilization required canters
- 2) Stainless steel wire
- 3) Flexible production in different designs and dimensions
- 4) Stackable

- 5) Dimension (WxLxH): 600x300x300 mm.
- 6) Dimension (WxLxH): 600x300x200 mm.

Booster Pump

- Voltage 240 (v)
- Power 0.75 (kw)
- Current 5.8 (A)
- Inches (") 1"
- Inches 1"
- Dimensions
 - 535 x 600 x 225 (mm) L x h x w
- Weight 20Kg

Cart Cabinet For Storage and Execrating Sets

- 1) Required for storage of Sterile Instruments
- 2) Must be made of Grade 304 Stainless Steel
- 3) Four swivel castors with two brakes
- 4) Must have Lockable Stainless Steel doors sealed with gaskets
- 5) Must have at least 3 shelves
- 6) Doors swing open up to 270° and give complete access
- 7) Dimensions (WxLxH): 430x900x1800 m

Changeover and Manifold

Manifold Fully automatic Medical Oxygen Gas Manifold complete with two stage regulators, monitoring alarm and hose barb outlet for pipeline connection and corresponding cylinder steel braided pig tail hoses complete with the cylinder holding rack.

Automatic manifold assembly

Wall mounted manifold (8x2)

The manifolds for all the specified gases (and air) shall be as far as possible identical in construction and

the following clauses refer to the assemblies any of the "gases".

Manifold Headers

Each bank of cylinders shall be located beneath a high-pressure manifold header securely mounted

Control Panel

The headers shall carry flexible spiral tail pipes on the underside for connecting to the cylinders and each tail pipe shall incorporate a renewable non-return valve on the

manifold header to allow removal and replacement of the cylinder without interrupting the supply from others in the same bank.

Non-interchangeability of cylinder connections

The screwed connections of the tail pipes to the cylinder valves shall be designed such that cross

connection of the pipe for any one gas cannot be made to any cylinders for the gases, the exception

being oxygen and air which to BS. 341 part 1 are identical.

Testing of Headers.

The manifold and tail pipe assembly shall be capable of withstanding a maximum working gauge

pressure of 136 bar (1980 P.S.I.) and shall be tested to twice this pressure by the manufacturer at his

work and a test certificate supplied.

Attach brochure and/or manual - Should meet any of the following standards;

- ISO 15001:2010
- HTM 02-01
- ISO 7396-01:201

STORAGE CABINET

1. Required for storage of Sterile Instruments
2. Must be made of Grade 304 Stainless Steel
3. Must have Lockable Stainless Steel doors sealed with gaskets
4. Must have at least 3 shelves
5. Doors swing open up to 270° and give complete access
6. Dimensions (WxLxH): 430x900x1800 mm

TROLLEY SPECIFICATIONS

1. For entire sterilization required centers,
2. Manufactured from 304 grade stainless steel,
3. Four castors with two brakes,
4. Two shelves, handle for easy movement,
5. Custom made production in different sizes and designs,
6. Dimensions (WxLxH): 550x860x900 mm

TROLLEY CABINET

- 1) For entire sterilization required places
- 2) Manufactured from 304 grade stainless steel,
- 3) All the edges of the upper and lower plates are convex,
- 4) Corner bumper in all corners, four wheels with two brakes,
- 5) Doors with oval locks with 270° openable double-skinned seal,
- 6) Removable and height adjustable wire rack system and a solid shelf
- 7) Dimensions (WxLxH): 680x1260x1280 m

UNDER COUNTER WASHER

Functional software

- 9 pre-defined & 11 free customizable cycle capacity for various different types of instruments
- Ability to modify cycle parameters to reach specific goals
- Self-diagnosis with animations
- Monitoring all washing parameters in order to ensure real validation

Save & Safe

- HEPA H14 filter for drying and ventilation
- Energy optimization by steam-electric hybrid heating system available
- Air and water warming by condensed steam to save energy
- Optimized pump capacities to reduce consumption

Intelligent design

- Spray arm monitoring which stops cycle in case of an abnormality
- Trolley recognition system to eliminate risk of running improper cycles
- Conductivity probe for optimum washing performance
- T.E.S. (Total Emptiness System) for draining all left over water at pump

Ergonomics

- 4 x 5L can capacity drawer with lock & easy cleaning removable dip tray
- Stainless steel stand for heightening PLUSHER WDC 8 series
- Easy to open manual door or vertical sliding door available in single or pass-through
- Steam condensers to prevent steam coming out from chamber

Shorter Cycle Times JET

- Increased speed in cycle times
- Cycle times reduced up to 50%
- Standard pre-heating tank for hot water connection
- Optional pre-heating tank for demi-water connection

UNPACKING TABLE

1. For entire sterilization required centers,
2. Manufactured from 304 grade stainless steel,
3. Stainless steel adjustable feet,
4. Custom made production in different sizes and designs,
5. Dimension (WxLxH): 600x1300x850 mm.
6. One lockable drawer and half shelf.

WARMING CABINET

Works with 195-230 V/50 Hz mains voltage.

- The outer surface of the device has been produced of galvanized sheet with electrostatic paint
- resistant to rust and the inner surface is produced of chrome nickel sheet.
- Cabinet's door is double coated heat glassed, lockable and magnetic sealed which allows stocktaking.
- It has 7 wire shelves with plastic cover which can be adjusted according to the user's request.
- The cabinet has over-temperature protection as electronic up to 80 degrees, mechanically up to 90 degrees.
- Equal heat distribution is provided by the reinforced fan system in the cabinet.
- There is a filter in the device to prevent the possibility of an external contamination to the air circulation system.
- A fully automatic defrost system is available to maintain the efficiency of the cupboard cooling evaporator.
- Cabinet interior lighting is realized with led lighting.
- A user-friendly microprocessor digital control panel is used on the cabinet. This system can store the data for 30 days in the memory and the old records can be followed on the screen.
- There is a USB socket to transfer the cabinet temperature information to the computer when requested. In this way, the 10-year-old temperature records can be transferred to the PC in excel format.
- The thermostat in the cabinet control panel can measure with 0.1-degree accuracy.
- Sensor adjustment can be done via electronic card to match external sensor and cabinet grades.
- The instrument control panel has an accumulator system that is automatically charged. This system allows the digital control panel and/or thermal printer (if there is) continues to function for 24 hours for any power failures.
- When the upper and lower temperature limits are exceeded while the cupboard was working, while the door is open, the appliance gives a visual and audible warning signal when an electrical interruption occurs.

- There are stopped and two fixed wheels on the cabinet that provide easy mobility.
- As per the request of the user, a thermal printer can be installed at the device. The numerical and graphical printout of the data recorded with the thermal printer can be taken.
- All medical devices are guaranteed for 2 years.
- All our products are produced in line with the ISO 9001:2008, TSE service place competence certificates. The device has CE certificates and barcode.

TECHNICAL SPECIFICATIONS	
Two Sections Working Separately	√
Temperature Range °C	+20/+80 °C
Set Point °C	+30 °C
Number of Cabins	2
Cr-Ni Shelves	√
Digital Microprocessor Control	√
Thermal Printer	Optional
Alarm (Temperature, Open Door, Electricity)	√
Interior Lighting	√
External Dimensions WxLxH mm	765 x 820 x 2000
Internal Dimensions (Up) WxLxH mm	662 x 700 x 810
Internal Dimensions (Down) WxLxH mm	622 x 637 x 400
Gross Volume (Up) L	375
Gross Volume (Down) L	158
Net Volume (Up) L	350
Net Volume (Down) L	140
Weight Kg	190
Door Lock	√
Castors (2 Braked, 2 Regular)	√

Clarifications

1. There are no quantities listed so it is going to be challenging in quoting so we suggest quantities to be issued

As clarified in Addendum No.1 of Tender No. MOH/SDMS/ADM/ONT/00/2023-2024. The scope and nature of Fee-for service and Lease to own are included in page 2- 6 of the Addendum. The Quantities cannot be provided as the order will be placed on "**As and when required**" Basis. The range of estimated quantities for some items are provided as part of addendum No.1.

2. Due to the duration of the project and inflation we request for price variation across the period.

Price variations would be allowed as mentioned in the tender document and addendum Addendum No.1 of Tender No. MOH/SDMS/ADM/ONT/00/2023-2024. published on the Ministry of Health website.