

Tata Memorial Centre  
**HOMI BHABHA CANCER HOSPITAL, VARANASI**  
Schedule of Quantities

Name of work: Supply ,installation Testing and commissioning of Hot water system and MGPS at BMT wards of Homibhabha Cancer Hospital at Varanasi.						
	HVAC Work	HSN/SAC code	UOM	QTY.	RATE	AMOUNT
1	Supplying,Installation, testing and commissioning of Energy Efficient Heat Pump System. Hot Water System comprises of high performance semi hermetic scroll/compressor, air cooled condenser. Machine is equipped with microprocessor based control, safety device, digital display unit, electrical panel, inbuilt primary Pump & Clean in place system. Heat Pump shall include all necessary valves, accessories along with pressure guages,temperature guages etc. Unit shall be supply with control panel and internal wiring. Make:-Kehems,Daikin, Trane		Nos	2		0
	<b>Heating Capacity : 72 KW</b>					
	No. of Compressors circuit : Two					
	Hot Water Inlet/Outlet Temperature : 40/55 Deg C					
	Hot Water Generation/Hr. (From 25.0°C to 55.0°C) Pump - 2Nos - ( 1W + 1S) (19m Head & 6m3/hr Discharge)					
2	Chilled water piping out of M.S. heavy class ERW C -class pipe (pressure rating PN 16) conforming to relevant IS 1239 Code with necessary fittings,tik wood gutties for indoor and hard puff blocks for outdoor pipes, elbows, tees, reducers, Suitable MS/GI supportslake clamps,anchor fasteners,tie rods,brackets, nut/bolts,etc as specified. chilled water pipe line with 50mm thermocol with 26G AL cladding. Pipe Make- Tata,Zenith,Jindal					
2.1	50 mm dia pipe		Mtr	150		0
3	SITC of insulated Butterfly Shut of Valves of Pressure Rating PN 16, complete with gaskets, suitable flanges, nutbolts as per relevant standards and specification. Make- Kitz,Audco,Danfoss					
3.1	50mm dia		Nos	12		0
4	SITC of insulated CI Balancing Shut of Valves flanged ends of Pressure Rating PN 16, complete with SS-410 stem and disc, Epdm Sealing disc,gaskets, end flanges/matching flanges, thermal insulation,additional supports, fixing accessories, nutbolts as per relevant standards and specification. Make- Kitz,Audco,Danfoss					
4.1	50 mm dia		Nos	2		0
5	Supply and installation of Y- Strainers including necessary mating flanges, gaskets, bolt& nuts and insulation. Make:-Itap,Emerald,NVR leader					
5.1	50 mm dia		Nos	2		0
6	Supply and installation of 3 way valve including necessary mating flanges, gaskets, bolt& nuts and insulation. Make:- Siemens, Danfoss, Honeywell					
6.1	50mm dia		Nos	2		0
7	SITC of Exhaust/Fresh air Fan with TEFC motor, drive assembly ,belt guard etc of 5500 CFM, 40MM SP Cabinet Direct drive fan with 20G GSS cabinet complete with inlet and outlet spigots, mounting brackets, access panel, filter, fixing arrangement fitted as standard. Forward curve DIDW impeller is directly driven by single phase Squirrel cage induction TEFC motor. with all necessary hardware and accesories as per instruction and as directed by OIC-ES. Make:- Caryaire, Kruger, Greenhack, Maico		Nos	1		0
	<b>MGPS Work</b>					
8	Supply and installtion of the bed head panel (horizontal) should be made from high strength extruded Aluminium with anodized finish. The panel should not be flipped opened. The panel should have following configuration: Horizontal Bed Panels, w/1.5 mtr length Panel ,2 nos. 16 A. MCB, isolation wired, 2 nos. 16/6 Amp electrical switch/socket (RAW), 4 nos. 16/6 Amp electrical switch/socket (UPS), 3 Nos 6 Amp Elec. Room lights, RJ-45 Data Connector - 1 Each, Slot for Nurse-Call Bed unit Module, Prov.for 3 nos.elec.isolated medical gas outlets, Electrical Wiring factory harnesssed & tested. Make:- MDD, J.K.engineering, Medisystem,Unitech		Nos	1		0
9	SITC of MEDICAL GAS OUTLETS in Bed head panel. BS/German Standard and duly CE marked. Medical gas outlets With stainless steel probes. Make:-J.K. engineering, Active, S.K. engineering		Nos	3		0
10	<b>Oxygen Flow meter with Humidifier Bottle :-</b> It should have Humidifying bottle with whole flow meter assembly, should be of light weight material.It should have backpressure compensated flow meter.It should provide accurate gas flow measure by 0-15 liter/m flow meter.Flow tube should be of good quality, transparent with measuring humidifying bottle.Flow meter should be fitted with matching adaptor (probe) for oxygen outlet point		Nos	1		0
11	<b>Ward Vacuum Unit :-</b> It should include vacuum pressure regular up to 760 mm Hg with Dial gauge . Should have re-usable collection bottle 1000 ml made with a wall bracelet. Or unbreakable polycarbonate materials, fully auto-clavable along with safety device to prevent overflow and with a wall braket.Should be wall mounted and back flow resistance should have 600ml capacity with play contracted jar. The controller should be operated by means of a 180 degree on/off switch and a bonnet adjustment		Nos	1		0
12	Supply and installtion of S.S 304 rail for Instrument Mounting as per instruction and as directed by OIC-ES.		Feet	25		0
13	SITC of Nurse call system with following comprising of : 08- Line, Central Display Unit, Std Bed Unit-08, Std. Handset-08, Toilet Emergency Unit-07, Door Display Unit-07, Emergency Alert-07, Shower Pull Cord, Bed Unit with Nurse Help Request Feature-08, Attendant Call Facility-08, Hospital Wide, Code Blue Alert Feature-08, Drip Sensor Module for Critical Area-08, Two Way Speech facility between Patient & Nurse-08, Computerised Nurse-Call Response Monitoring(NCRM)-08. system should include with related Cabling, conduiting, inserting of plastic/ metal boxes and other hardware and supports as per instruction and as directed by OIC-ES.		Set	1		0
					Total	-

**Notes:-**

- The contractor/vendor also needs to restore the existing firefighting connections/lines & ensure its operation.
- The agency is requested to visit the site to know actual scope of work.
- Rate shall be basic quoted inclusive of all taxes.
- Material required at site should be assessed by the agency and bill will not be settled for excess/supplied items.
- Bill will be settled as per actual measurement.
- Deviations/suggestions may be put on separate page in order to attain higher quality performance. Component authority reserves full right to accept or reject any kind of changes.
- Agency will have to prepare detailed drawing/ plan of work & obtained approval before execution. Agency will have time bound work schedule for carrying out the work.
- Agency will have guarantee of at least 1 years for all installation after handing over the project.

- 9 Agency will have to maintain the installtion by undertaking preventive maintenance on regular basis for smooth operation during defect liability period.
- 10 Payment will be released for consumed quantity on satisfactory completion on providing necessary certifications/documentation.
- 11 all above items of this schedule shall be standard make and approved to before installtion.
- 12 Demolishing of brick wall or concrete work shall be done free of cost as a minor work & Debries shall be cart away out of the hospital premises time to time as directed by EIC.
- 13 Heat pump inspection & test to be carry out at manufacture site/factory site in presence of TMC engineers before dispatch the same with out any additional cost.
- 14 Loading/unloading and lifting /shifting of all equipments including Heat pump at the location decide by the TMC is in the vendor scope without any additional cost.
- 15 Foundation require for heat pump is in scope of contractor with any additional cost.