

BILL OF QUANTITIES (BOQ)

For Three (3) Quotation Cases

Maintenance, Repairing and Descaling Of Condenser & Absorber Tubes of Vapor Absorption Chiller No.2, Air Handling Unit, Installation of Butterfly Gear type Valve (HVAC System) SSGC H.O

DESCRIPTION OF REQUIREMENT					
S.	Description of Work	UOM	Qty.	Unit Price	Value
1	Provide service of chiller- 2 to Carry out of Descaling of tubes of condenser and absorber side as per instruction of Site Charge. 1.1 Descaling and chemical cleaning of the evaporator coils of Four (04) Air Handling Units (AHUs) using approved alkaline and non-acidic chemical cleaning agents As per Attached Scope Of Work (SOW)	JOB	01		
2	Provide service for installation of new Butter fly Gear type Valve (provided by SSGC) at condenser pipe lines and chilled water pipe line As per Attached Scope Of Work (SOW)	JOB	01		
TOTAL AMOUNT IN FIGURES:					



Scope of Work (SOW)

Descaling of Condenser and Absorber Tubes of Chiller No.2

- Pressurize the chiller with dry nitrogen gas up to 8 PSI
- Descaling with HCL Base chemical with metal inhibitor as proper and after neutralize with Soda Ash
- Mechanical cleaning of condenser/Absorber tubes with nylon brush & proper arrangement to the satisfaction as per advise site Engineer (should be use brushing machine)
- Dismantling of Header of Both sections (Condense Side & Absorber Side)
- Header facing with fixing of M.S bar 1/2"X 1/2" Welding Cutting & Grinding.
- Header Plate facing with Fiber poly-gate complete with all hardware accessories.
- Inspect all tubes to verify that they can be cleaned properly and withstand the recommended conditions.
- Assembling of Headers with allied fittings included new rubber gas kit and tube sheet, paint work with epoxy paint with all respect.
- Cleaning of High Pressure Generator Fire Side to remove Carbon as per slandered procedure inclusive replacement of both end covers packing's.
- Clean the burner throat, diffuser, and ignition electrodes.
- Inspect the combustion chamber for cracks or carbon accumulation.
- Conduct a combustion analysis (adjust air-to-fuel ratio for optimal efficiency)

Descaling of Evaporator Coils – Air Handling Units

- Isolation and preparation of each AHU prior to cleaning.
- Application of approved alkaline and non-acidic descaling chemicals.
- Thorough cleaning and removal of accumulated scale and deposits.
- Proper rinsing of the coils with clean water after chemical treatment.
- Inspection of the coil surfaces to ensure satisfactory cleaning.
- Cleaning of the surrounding drain pan and accessible areas, where required.
- Restoration of the AHU to normal operating condition upon completion.
- Final inspection and performance verification of all four (04) AHUs.

Service for installation of new Butter fly Gear type Valve (provided by SSGC)

Installation of new Butter fly Gear Type Valve (Provided by SSGC) at condenser pipe lines and chilled water pipe line work included welding, all fitting and flanges complete work with all hardware accessories, Nut and Bolts .

I) Butter fly Gear type Valve size 8" inch	2 Nos
II) flanges size 8" inch	4 Nos
III) Butter fly Gear type Valve 10" inch	2 Nos
IV) flanges size 10" inch	4Nos



SPECIAL TERMS AND CONDITIONS

- Bidder are encouraged visit the site before participating bid to evaluate site condition and requirements.
- Bidder should provide Documentary evidence (If required) to Work on HVAC System since Last 10 years.
- Bidder should be entirely responsible for successful running after completion of maintenance of the Chiller No. 2 of HVAC system & Air Handling Units.
- Bidder should follow PPE and HSE Ethics Code during Service/Descaling of chiller, Air Handling unit & installation of butter Fly Gear type valve.
- Completion Period after issuance of Letter to Proceed is 30 Days.
- The jobs mentioned in scope of work will be carried out on conditional and requirement basis.
- Bidder should have to perform work during normal office timings (07 Days a week)

