



राष्ट्रीय फैशन प्रौद्योगिकी संस्थान
(एक सांविधिक संस्थान निफ्ट 2006 अधिनियम के तहत प्रमाणित)
(वस्त्र मंत्रालय, भारत सरकार द्वारा स्थापित संस्थान)

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9505(136)/NIFT/RBL/Bldg/CAMC of HVAC System/2023

Date: 01.05.2024

Notice for Pre-Bid Meeting for CAMC of HVAC System

National Institute of Fashion Technology (NIFT) is a statutory Body governed by the NIFT Act 2006 & set up by the Ministry of Textile, Govt. of India for the promotion and development of education and research in field of Fashion Technology. NIFT provides Fashion business education across the country through its network of 19 campuses. NIFT has its Head Office at New Delhi with its campuses located at Bengaluru, Bhopal, Bhubaneswar, Chennai, Daman, Gandhi Nagar, Hyderabad, Jodhpur, Kangra, Kannur, Kolkota, Mumbai, New Delhi, Patna, Punchkula, Raebareli, Shillong, Srinagar and Varanasi.

NIFT, Rae Bareli campus was established in the year 2007 and imparting education to 5 (five) undergraduate and 1 (One) post graduate programmes. NIFT Donations are exempted u/s 80 (G) of Income Tax Act. and registered with DSIR, NIFT is entitled for Custom/Central Excise duty Exemption.

National Institute of Fashion Technology (NIFT), Raebareli intends to have a pre-bid meeting with prospective bidders for “**Comprehensive Annual Maintenance of LG Make 720 HP HVAC System VRV/VRF**” installed at NIFT Rae Bareli Centre. The interested contractors/service provider are advised to submit their willingness by post or on e-mail purchase.raebareli@nift.ac.in (with subject: Pre-Bid Meeting for CAMC of HVAC System on or before 08.05.2024 (upto 05:30pm). The prospective contractors may attend the meeting to enable formulation of the bid criteria on 10.05.2024 at 11:00 AM in NIFT Raebareli Campus.

We hereby attached the details of **scope of work** for Comprehensive AMC of HVAC System (720HP) VRV/VRF. The prospective contractors/servive providers interested to render their service are requested to attend the meeting and give their concent for the same.

Purchase Officer
NIFT Raebareli

A. Scope of work for Comprehensive AMC of HVAC system (720HP) VRV/VRF

The scope of work includes repair/ replacement/ overhauling of all the parts of the machines, which become defective, inefficient or get damaged during working. The decision of competent authority regarding repair/ replacement/ overhauling of any part of the machine will be final and binding on the contractor. All the consumable and non-consumable required for equipment listed in schedule of quantities shall be obeyed by the contractor during execution of the contract period. Repairing/ leakage attend of any unit is to be done by the contractor. Manpower, material (consumable & non-consumable), tools and tackles etc. required are in the scope of the contractor. If service of Helper or unskilled worker is required for above job, it is in the scope of the contractor.

The contractor has to carry out the break down job on call whenever required at site and except the break down job the following list of preventive jobs are to be carried out as per the time period mentioned. Successful bidder will have to maintain a log book for recording preventing maintenance schedule for the enter VRV/VRF(HVAC)System installed in the Campus as per following details:

PREVENTIVE MAINTENANCE SCHEDULE

Sl. No.	Time Line	Description
AIR HANDLING UNIT		
1	Weekly.	Check for damage especially to coil and filters.
2	Weekly.	Cleaning of AHU pre-filters
3	Weekly.	Check for air and water leakage
4	Weekly.	Check condensate drain for any blockage, clean if required.
5	Weekly.	Check drain pan for any blockage.
6	Monthly	Check fan Belt for correct tension and sign of wear and alignment of fan and motor.
7	Monthly	Inspect coils and clean if required
8	Monthly	Check functioning of lights and limit switch interlocking & proper illumination
9	Monthly	Check for bearing of motor and blower
10	Monthly	Check for tightness of V-belts and pulleys.
11	Monthly	Check looseness of any bolt in fan casing motor base etc
12	Monthly	Check for vibration in blower and motors.
13	Monthly	Check access doors and hinges for easy operation.
14	Monthly	Check cleanliness of the filters and clean if required.
15	Monthly	Check the looseness of any bolt in the fan or casing etc.,
16	Monthly	Check the associated damper flap movement and apply grease for the bearing housing if required.
17	Monthly	Check running current of the motor.
18	Quarterly	Check/Add grease or lubricate to the Fan shaft bearing, motor bearing blower bearing. if required.
19	Quarterly	Check the alignment of Fan and Motor, If necessary, correct the

		same.
20	Quarterly	Inspect the condensate drain pane and ensure that it is clean and water is freely flow to the drain.
21	Quarterly	Inspect the coils for cleanliness. If necessary, wash the coil with a low pressure water hose or low pressure air.
22	Quarterly	Observe all dampers for proper operation.
23	Quarterly	Check tightness of electrical connections
24	Quarterly	Check flexible connections spool piece for leakage
25	Quarterly	Check for condition of inlet strainers and clean(if required)
26	Half yearly	Check in motors full load current, fan motor running current and tightness of Terminals
27	Half yearly	Check blower shaft, scroll, impeller and bearing.
28	Yearly	Check/clean cooling coils & fins.
29	Yearly	Clean interiors and check for corrosion, check tightness of all sections
30	Yearly	Check anti-vibration mounting & flexible connections
31	Yearly	Check operation & condition of all electrical connections.
32	Yearly	Check alignment of drive pulleys, adjust the same if required
33	Yearly	Combing of fins to be done after coil cleaning (if required)
34	Yearly	Check all bellows, replace if any crack/water leakage observed
35	Yearly	Check insulation resistance (Megger) of motor
FAN COIL UNIT		
1	Weekly.	Check the water leakage
2	Weekly.	Clean air filters.
3	Weekly.	Check drain pan for any blockage.
4	Monthly	Clean the filter & Y-Strainers, if required.
5	Monthly	Check the fan belt tension, abnormal noise and rectify if required.
6	Monthly	Check any water leakage from unit.
7	Monthly	Inspect the condensate drain pan and ensure that it is clean and water is freely flow.
8	Monthly	Check the condition of access door hinges for proper fixing.
9	Monthly	Check the unit is secured.
10	Monthly	Check the operation of inlet/outlet isolation valve.
11	Monthly	Check looseness of any bolts in fan casing motor base etc
12	Monthly	Checks associated damper movement and apply grease for bearings.
13	Quarterly	Inspect cooling coil and clean if required.
14	Quarterly	Clean strainers for FCU.
15	Half yearly	Check blower, motor unit etc. Clean lubricate.
16	Half yearly	Check and receive the vibration value and compare with recommended values.
17	Half yearly	Check tightness of electrical connections.
18	Half yearly	Add water and flush condensate drain pan, trap and drain line.
19	Half yearly	Check the condition of inlet strainers and clean if required

20	Half yearly	Check the proper functioning of the 3 way and 2way valve.
21	Half yearly	Check the interconnection, copper piping, canvas and cooling coils.
22	Half yearly	Check full load current of motor.
23	Half yearly	Check the tightness of terminals of motor.
24	Half yearly	Check motor running current.
25	Yearly	Check blower, motor unit etc clean & lubricate.
26	Yearly	Check electrical control & connection.
27	Yearly	Check and clean cooling coil with water, if necessary.
28	Yearly	Check 2/3-way valve for proper operation.
29	Yearly	Check insulation resistance (Megger) of motor.
30	Yearly	Check/clean cooling coils and fins.
COOLING TOWER		
1	Weekly.	Check the operating oil level and oil leakage in gear box.
2	Weekly.	Inspect basin for clogging.
3	Monthly	Check for unusual noise/vibration in fan and fan guard, motor drive shaft and guards gear reducer.
4	Monthly	Inspect for clogging in eliminator, fills and water basin
5	Monthly	Check operating and static oil level in gear reducer.
6	Monthly	Check oil seals of gear reducer.
7	Monthly	Check oil for water and sludge in gear reducer.
8	Monthly	Check water level in water basin.
9	Monthly	Check and adjust float valve if required.
10	Monthly	Check AMP of motor
11	Monthly	Check for any leakage in gear reducer, water basin and float valve.
12	Monthly	Check gear-reducer oil for water and sludge.
13	Monthly	Inspect eliminator and fills for clogging
14	Monthly	Check motor winding for over heating
15	Monthly	General cleaning for inside and outside.
16	Monthly	Drain cooling tower twice in a month along with condenser pipe line water.
17	Quarterly	Check access door work properly
18	Quarterly	Check the staircase ladder & interior walkway of wooden decay or stell corrosion
19	Quarterly	Check the distribution basin for corrosion, leaks and sediments
20	Quarterly	Check the drift eliminator louvers for scale build up
21	Quarterly	Adjust belts and pulleys for proper tension and alignment
22	Quarterly	Check the fan blades for dirt/scale deposits and condition of fan cylinder
23	Quarterly	Check the mechanical parts of motor supports (cracks)
24	Quarterly	Check the distribution spray nozzles to ensure even distribution of water over the fill
25	Quarterly	Check sludge in gear box
26	Quarterly	Check motor winding for Overheating
27	Quarterly	Clean cooling tower from inside and outside.
28	Quarterly	Check and top up oil in gear box

29	Quarterly	Cleaning of sump and check for any leakage
30	Quarterly	Clean Fan & Fan Guard, motor shaft, gear reducer, eliminator, fills, water basin, float valve, control valves etc.
31	Quarterly	Rebalance of fan & fan guard, driveshaft & guards
32	Quarterly	Check insulation resistance.
33	Quarterly	Clean nozzle & clean if required.
34	Quarterly	Check the water distribution system including the nozzles.
35	Half yearly	Inspect keys, keyways and set screws of fan and fan guard, motor, gear reducers, drive shaft and guards.
36	Half yearly	Inspect the general condition of fan & fan guard, motor, shaft, gear reducer, fills, control valves, structural members, fan cylinder, stairs ladders etc.
37	Half yearly	Tighten loose bolts of fan, fan guard, motor, shaft, gear reducer if any,
38	Half yearly	Check the working of control valve
39	Half yearly	Check completely open and close operation of float valve. Repair as reqd.
40	Half yearly	Clean all nozzles & replace if damaged.
41	Half yearly	Check grease, clean and re-lubricate bearings of motor
42	Yearly	Tighten loose bolts of FRP, gear box, structure bolt connection and motor.
43	Yearly	Check and change nozzles, fills if required.
44	Yearly	Complete cleaning the whole parts of CT (Louvers drift eliminators & fill surface)
PUMPS		
1	Weekly.	Check the cable for heating
2	Weekly.	Check for any leakage from glands or flange joint.
3	Weekly	Check alignment of pumps , motor & rectify if required
4	Weekly	Check coupling condition adjust & replace if required
5	Monthly	Check for any leak in motor and pump connections & rectify if required
6	Monthly	Check bearings temperature with thermometer of hand test that bearing is not running excessively hot are not running excessively hot.
7	Monthly	Check for any abnormal noise and vibrations during running (if observed then rectify)
8	Monthly	Check for leaks in isolation of valves, strainers, and flexible connections.
9	Monthly	Clean pump exterior
10	Quarterly	Check pumps lubrication as necessary
11	Quarterly	Check & clean pump, strainers & motor casings
12	Quarterly	Check shaft or shaft sleeve for scoring
13	Quarterly	Tight & clean all electrical terminals, electrical connections, conduits, insulation, flexible connection.
14	Quarterly	Check & record motor running current
15	Half yearly	Check & clean all contact surfaces of Circuit breaker, enclosures switches & push buttons
16	Yearly	Check condition of seals & bearing (Adjust of replace if required)

S.N.	Details of LG Make 720 HP HVAC System VRV/VRF
1.	Comprehensive Annual Maintenance contract of LG make modular VRV/VRF of 720 HP Capacity (HVAC). The VRF system have both heating & cooling mode (Heat pump type) all inverter technology-based scroll compressor. The refrigerant shall be R-410a (environment friendly).VRF duct able split, cassette and split type indoor unit with corded/cordless remotes. Centralized AC control system. This Comprehensive Annual Maintenance Contract includes maintenance /repair or replacement of any or all the electrical/mechanical parts which requires for proper functioning of the systems.

Name of the Prospective Contractor/Service Provider: -----

Name of the Company/Firm: -----

Seal of the Company/Firm: -----

Address: -----

Contact No.: -----

E-mail ID: -----