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DATE: 25 - 1 - 91

ROJECT : TEXTILE TESTING -

INSTALLATION OF CENTRAL AIR CONDITIONING UNIT

CONTRACTOR: BRANCA IDEALAIR

**CONTRACT NO : 90/109** 

CONTRACTOR'S REPRESENTATIVE : G. BRANCA

UNIDO/UNDP REPRESENTATIVE : FIIRO(MR. M.D. BALOGUN)

In accordance with regulation No. 6 of the Contract, I give below the report of the work done etc.

First we have found all the items sent from BRANCA. The contractor connected air conditioning to the air condenser, modify the electrical refrigirant circut diagram.

They introduce some improvement to avoid any over efforts to the compressor.

They checked all the component on Wednesday and switch on and calibrate the unit, all work perfectly.

They explain to the staff in charge, the instructions and performances of the unit.

Special attention is required for services and prevention of failure: Filters, without vacuum cleaner, musc be washed every fifteen days and changed every three months inside and outside.

Blower 3 control the belt to maintain the right tension at first after fifteen days and then every month.

Cooling coil, wash with high pressure pump every three months if not require before by alarm, protecting the unit with steel plate or plywood, and sterilise with the special soap.

Air condenser, check the coil every month to be free from leave and papers, wash it every three months.

Electrical panel, every month check the contractors at 1 change when it is not more functioning and put the Ampres-clamp on each phase to see if the absorbtion is normal.

Refrigration circut, use the system inalyser to see every month if the compressor run well considering the pressuring guage corresponding with the greem scale for F22 of this values:

$$-25^{\circ}$$
C - stand by - 10

1 - 10 - 15°C dehumidification

01 + 10°C cooling

35 - 45°C condensation

Every year change the filter dryer on the liquid and bypass line. Verify the calibration of electronic temperature controller and hygro start every week with your Psychrometer.

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# INSTALLATION OF AIR CONDITIONING UNIT FINAL INSTRUCTION/EXPLANATIONS

BY

### MR. G. BRANCA

- We have found the ventilation and humicification contractor broken and the Branca Technician changed it taking two from the Air Condenser mounted behind Lab 3.
- The Branca Technicians also mounted the timer on the Compressor Starter calibrated for 20 minutes
- 3. It was also established that there is power cut about 2 to 3 times daily.

  lack of uniform power at night thus the unit is normally off at night and at weekends.
- 4. There is a slight difference in the room temperatures of Lab 1 & Lab 5 (Between  $0.5^{\circ}$ C and  $1^{\circ}$ C) due to the outside wall of Lab 5 being exposed to sunlight all the time
  - It is hereby suggested that this wall should be insulated to maintain uniform temperatures in the two rooms (since the wall of Lab 1 are within the building.
  - The windows should be provided with Venician Blinds to reduce the heat from the sun-rays, at morning hours and mid days.
- The windows and doors must be air tight to avoid the leakage of the conditioned air
- 6. Install on the three doors entering the labs, a self closing device. especially Lab 3 where the unit and control panel is installed.
- 7. Presently, there is not water pipe connected to the unit as there will be no need to humidify the rooms, since the RH% in the country is normally on the high side.

- 8. The water point for washing the condensing coil (cooling system) must be provided inside Lab 3
- 9. The Technicians suggests that a gate should be provided to protect the Refrigirant . Pipes, so as not to step on it by workmen.
- 10. The unit should be cleaned with Portable Vacuum Cleaner every 15 days.
- 14 ELIMINATE THE HICLES INTHE CEILING TO PROVENT AIR LEAKAGES
- 12 PROVIDE A PLATE TO RECEIVE WATER DROPLETS

MR. M D. BALOGUN