d. Corrosion Protection shall be as per specifications, Volume III, Section '5'.

1.2.23 Air Conditioning Equipment

A. The Contractor shall design, supply, install, test and commission an air-conditioning system conforming to the requirements of the DMAT Engineering Section.

1.2.23.1 Design Parameter

A. Outdoor air condition: 46 ^{o}C Dry bulb, 30^{o}C Wet bulb, unit must continue working at external temperature up to 52^{o}C ambient

B. Indoor room air condition 24 ^{o}C Dry bulb, 17.5 ^{o}C Wet bulb, Outdoor air volume minimum 10% of supply air volume, controlled by manual air volume damper

C. Supply air filter class B2 DIN 24185 (throw-away type)

D. Cooling capacity summer cooling load + 10%, derated to outdoor/indoor condition

E. A/C type split type

F. Control electronic microprocessor for temperature and fan speed control, on/off, timer

G. Supply air fan speed minimum 3 speed

H. The de-rated output cooling capacity for each A/C unit shall be 3 tons of refrigeration (10.6 kW) as standard in case of higher cooling demand multiple 3 ton units shall be used.

1.2.23.2 Material

A. Equal A/c units, each with a derated output capacity of 10.6kW (3 ton of refrigeration) shall be provided and the quantity of A/c units required shall be based on the result of the cooling load calculation, subject to approval by the Engineer / Department.

B. All material used shall be resistant to attacks of gases (H2S etc.). Corrosion resistant coating shall be factory applied. Special attention shall be paid to provide coating to all hidden areas. All bolts, nuts, screws, washers, supports shall be stainless steel.

C. Heat exchanger shall be copper tubes with aluminium fins, coated with a corrosion resistant air drying phenolic type material