

For achieving QualiTEA by means of best optimised Fermentation.

### Scope of Work:

- Temperature Monitoring of CFM modules (4 nos. of sensing zones).
- Relative Humidity (% RH) measurement of DUCT air and controlling of Mist chamber pump (5/7.5 HP) as per the user set limit.
- Monitoring of Air-pressure of DUCT and controlling the Air Flow Fan motor speed (5/7.5 HP) by using Variable Frequency Drives (VFD) at mist chamber to vary the air-pressure.
- Monitoring of CFM bed material (MAL) thickness.
- Monitoring & controlling CFM residence time depends upon user defined parameters by using VFDs.
- All the controlling operation will be done AUTO or manually.



### Scope of Supply:

- Display cum Controlling Unit for monitoring and controlling.
- 4 nos. RTD suitable to monitor the temperature of different zones of CFM.
- RTD (Pt100) based RH Sensor and Controller module.
- Air pressure sensor for measuring air pressure in duct.
- Sensor for measuring Residence Time of CFM.
- Ultrasonic sensor for measuring thickness of CFM material (MAL).
- Drive unit consisting of 2 nos. of VFDs of 5/7.5 HP and protection circuits.
- Sensors to Display interconnecting Cables.
- Serial port for MODBUS data (baud rate 9600, frequency minimum of 1 sec).
- Audio Visual annunciation for any alarm.

# CFM Automation

## CFM Monitoring & Controlling System

