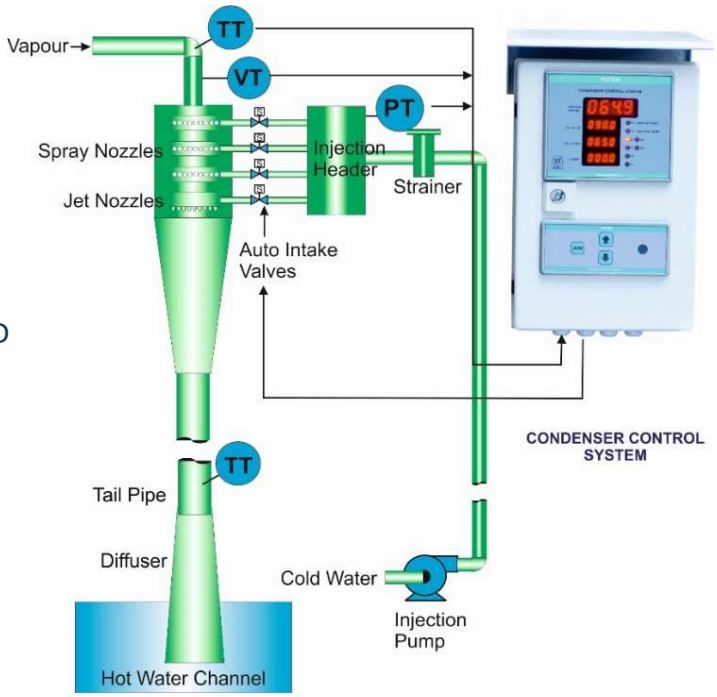
CONDENSER AUTOMATION

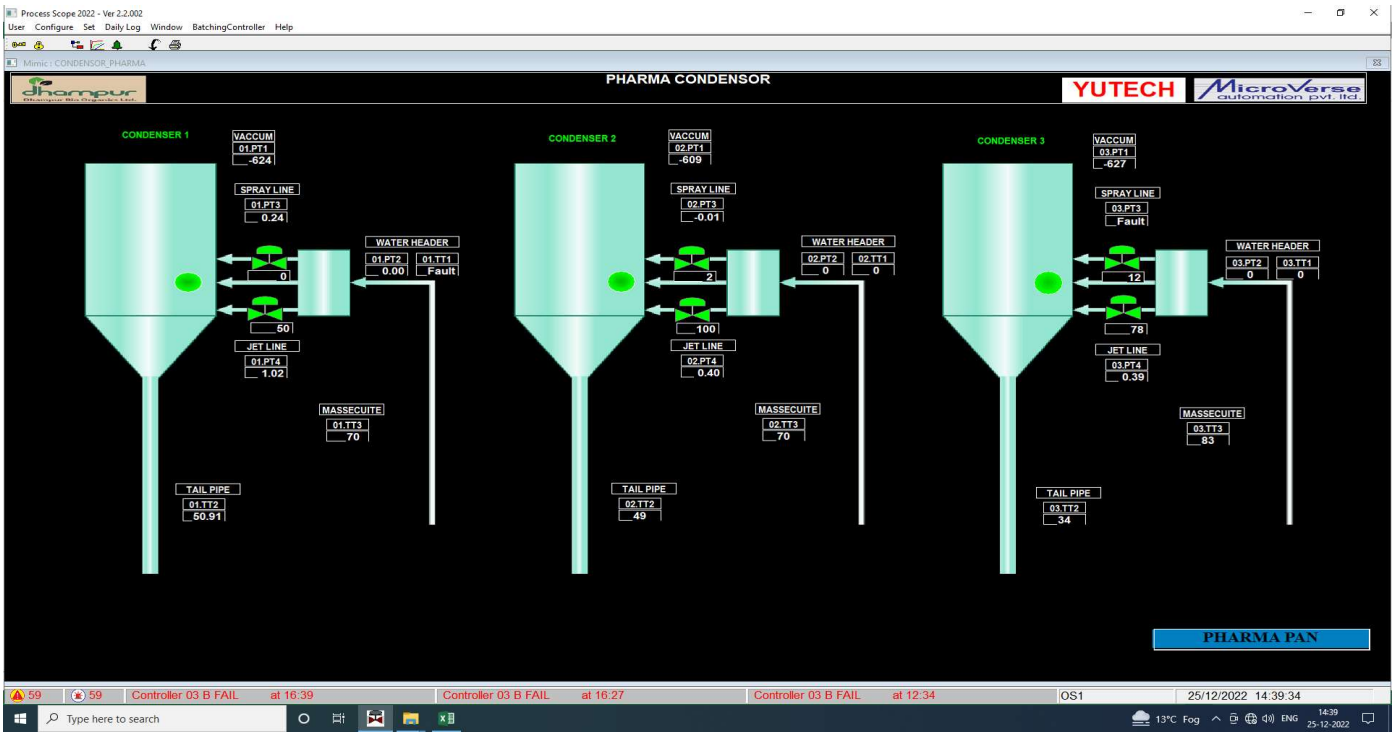
YUTECH MULTI-ENTRY AND SINGLE-ENTRY CONDENSER AUTOMATION SYSTEM

CONDENSER AUTOMATION ADVANTAGES:

- AVOID ENTRAINMENT AND AVOID TIME AND RESOURCES WASTED IN REWORK
- HUGE WATER SAVING
  - AS WATER QUANTITY IS OPTIMIZED
- HUGE POWER SAVING
  - POWER WASTAGE IN EXCESS WATER PUMPING IS AVOIDED
- CONSTANT VACUUM
  - MAINTAINED VACUUM ENSURES GOOD PAN BOILING AND EVAPORATION EFFICIENCY
- STABILIZED VAPOUR LOAD
  - MAINTAINED VACUUM ALSO ENSURES STABILIZED VAPOUR LOAD THUS HEATING EFFICIENCY IS INCREASED
- HUGE MONETARY BENEFITS DUE TO SAVINGS

SCHEMATIC DIAGRAM: CONDENSER AUTOMATION





SCREENSHOT: CONDENSER AUTOMATION

CONDENSER AUTOMATION

YUTECH MULTI-ENTRY AND SINGLE-ENTRY CONDENSER AUTOMATION SYSTEM

CONDENSER AUTOMATION:

- Single Entry and Multiple Entry Condensers have the same Control Philosophy but a different Control Method.
- A Single-Entry Condenser's Water Intake is Controlled by a Control Valve in a PID Loop with the Vacuum and Temperatures being the Remote Set Variables.
- In a Multiple-Entry Condenser, every Set or Compartment of Nozzles has an On/Off Type Control Valve to start or stop its water intake.
- The number of Jets and Nozzles and their Diameter is designed as per Condenser Capacity, the Control Valve is designed to suit this size and flow rate.
- Water Pressure in the Common Injection Header maintained by Controlling Injection Pump VFD
- Jet Compartment Controlled by Separate Valve
- Vapour and Tail Pipe Temperature Measured

AUTOMATION PHILOSOPHY:

- Vapour Vacuum and Temperature sensed
- Condensate Temperature Sensed in Tail Pipe
- Temperature Difference Calculated
- Vacuum and Temperature Difference are both Analyzed to derive Remote Dynamic Set Point
- Spray Water is controlled as below:
  - Multi-Entry System:
    - Spray Jets are controlled by separate ON/OFF type Control Valves as per the Remote Dynamic Set-Point
    - 2, 3, or 4 Sets of Nozzles for Spray as per Design
    - 1 or 2 Sets of Jet Nozzles as per Design are controlled only if necessary
  - Single-Entry System:
    - Spray Jets are controlled by a Control Valve in PID Action as per the Remote Dynamic Set-Point
    - 1 or 2 Sets of Jet Nozzles as per Design are controlled only if necessary

Product Code: A15COAACC4RC2D4R4FMC

- A15COAACC4RC2D4R4FMC – A15COA means Condenser Automation System of A15 Product Family
- A15COAACC4RC2D4R4FMC – AC Power Supply
- A15COAACC4RC2D4R4FMC – Analog Inputs and Outputs
  - AI (C4R): 4-20mA Current and RTD PT100, 4 Channels;
  - AO (C2): 2 Ch. 4-20mA (Ch. 1: Spray and Ch. 2: Spare can be used for Spray / Jet)
- A15COAACC4RC2D4R4FMC: Digital Inputs and Outputs
  - DI (D4): 4 DIs (24VDC); DO (R4): 4 Relay Outputs (24VDC, 1A)
- A15COAACC4RC2D4R4FMC – Field Mounted Enclosure
- A15FDAACSCTRC2D4R4FMC – Analyzer with Controller Model
- A15FDAACSCTRC2D4R4FMCEM – Analyzer with Controller and Ethernet Model, EM: Modbus TCP/IP Communication (Ethernet)

THE CONDENSER AUTOMATION SYSTEM IS AVAILABLE AS A STANDALONE LOCAL CONTROL SYSTEM (OPTIONALLY WITH ETHERNET COMMUNICATION FOR DCS) OR IMPLEMENTED IN PLC-SCADA OR PLC-HMI OR DCS.

FOR MORE DETAILS, PLEASE SEE THE PRESENTATION ON OUR WEBSITE www.yutechautomation.com.

YU Technologies Pvt. Ltd.
HO & Works: B 8/5, MIDC, Miraj, 416 410, Distt: Sangli, Maharashtra, India.
T: +91 233 2644042, +91 916 832 4851, +91 916 832 5127 / 8.
E: info@yutech.in; sale@yutech.in W: www.yutech.in; www.yutechautomation.com

CHANNEL PARTNER: