



DISTRIBUTED CONTROL SYSTEM (DCS)

■ WHAT IS DCS?

The system controls a production line, process or any other dynamic system. However, the controller is not centralized in a specific area but is arranged distributedly with subsystems controlled by one or more separate controllers.

TRAINING CONTENT

- Survey, research about working principle of system, sensor, actuator and control.
- Set up On-off control including pressure, flow and temperature.
- Set up water level PID control through the relationship of pressure and water column height
- Multivariable control: Proportional-level
- Practice of route control of fluid in system
- Coordinate filling problem using the loadcell
- Test and maintain the system
- Configure device and set up sensor
- Set up PID control problem: pressure control, flow control, level control, mixing ratio control, heating tank temperature control, volume control
- Interactive control: Temperature-water level
- Practive batch control
- Coordinate filling problem using the level and flow sensor
- Operate and monitor the system

DCS SYSTEM APPLICATION



FOOD & BEVERAGE



OIL & GAS

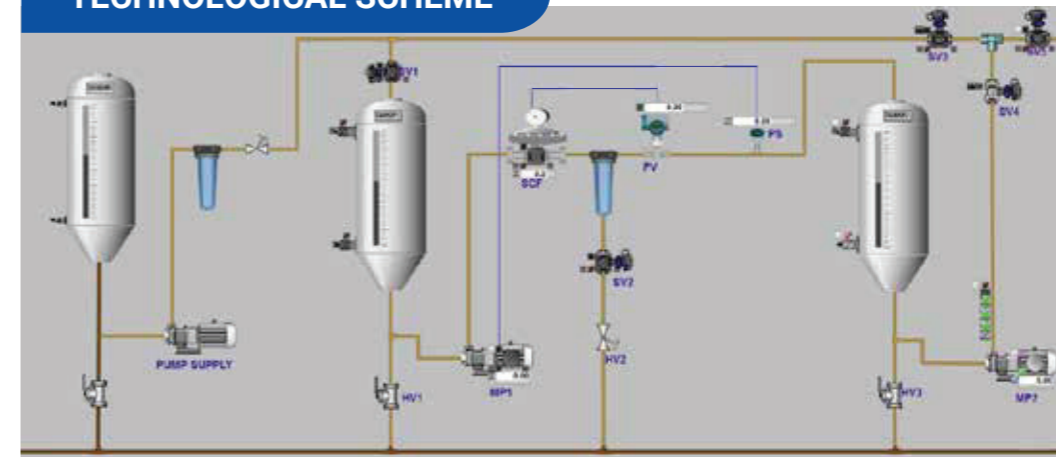


WATER TREATMENT



INDUSTRY MANUFACTURING

TECHNOLOGICAL SCHEME



SCAN NOW

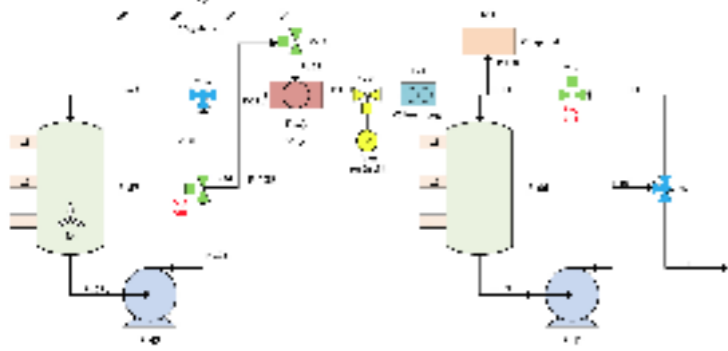
DISTRIBUTED CONTROL SYSTEM








01 FEEDING STATION



Technology

- HART communication flow sensor
- HART communication pressure sensor
- Hart communication pressure sensor PROFINET



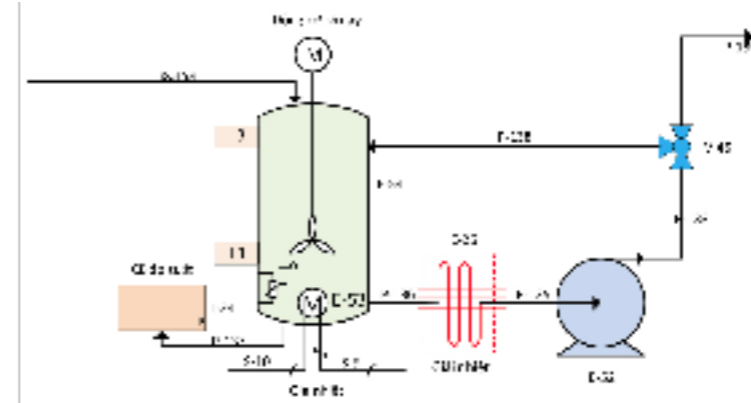
 Feed tank	 Feed pump	 Filter
 Flow meter	 Linear Valve	 Panel HMI
 Base-Frame		








03 HEATING STATION



Technology

- Hart communication temperature sensor ART
- Stimulation of pressure rise when increase the temperature
- Communication Profinet



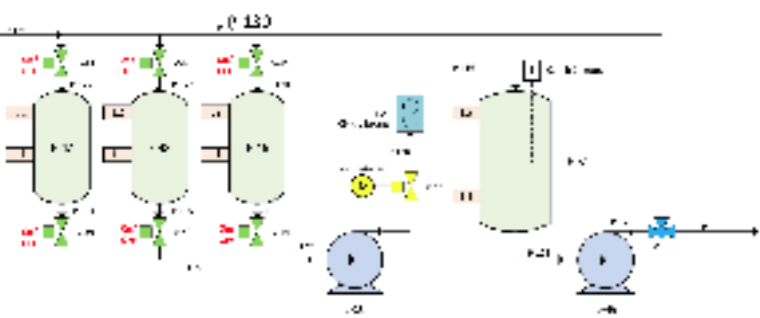
 Heating tank	 Feed pump	 Heating kit
 Pressure sensor	 Solenoid valve	 Panel HMI
 Base-Frame		






02 MIXING STATION MODEL



Technology

- HART communication flow sensor
- Display the colour according to mixing ratio
- PROFINET Communication



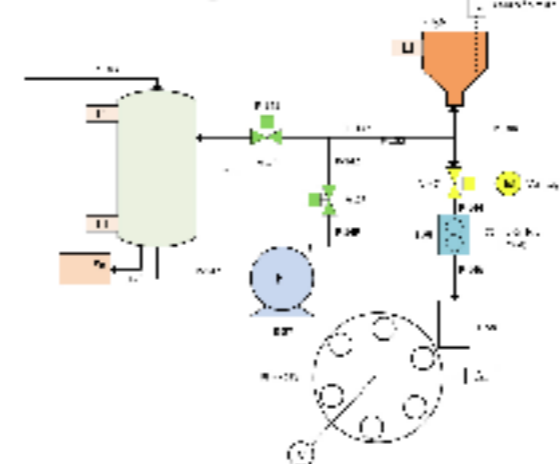
 Feed tank	 Mixing tank	 Feed pump
 Flow meter	 Solenoid valve	 Panel HMI
 Base-Frame		








04 FILLING STATION



Technology

- Recircular conveyor for continuous filling
- PROFINET communication



 Feed tank	 Feed pump	 Filling tank
 Tank	 Valve	 Panel HMI
 Base-Frame		