PID Tuning and Base Layer Controlling (FI11)

Objectivity	1. Understanding in principle of Control and property of each processes in order to easily control. 2. To learn how to select control method which apply for suitable process. 3. To be able to tuning PID by experimenting with actual Process in 4 control method there are Flow Control (Open Loop Method), Flow Control (Closed Loop Method), Level Control and Cascade Control By using simulation Model and Test by1 DCS System. 4. To be able to do Process identification which apply by Module Block Mathematical in process control.
Training period	2 Days
Time	9:00 a.m. – 4:30 p.m.
Avenue	Yokogawa (Thailand) Ltd. Bangkok Office (Rama 9) and Rayong Branch Office (Maptaphut).
Instructor	IAEC trainers, Engineer, Specialist experience instructor.
Participant	Technicians and Engineers who concerned about PID Tuning.
Requirement	Have knowledge basic about control and DCS.
Minimum no. of pax	4 - 10 Participants

Course outline detail

Day	Morning (09:00a.m. – 12:00 p.m.)	Afternoon (01:00 p.m. – 4:30 p.m.)
1st	**- Process Characteristic** - Number of I/O signal - Interactive/Non-Interactive process - Self-Regulation/Non-Self-Regulation - Linear/Non-Linear - Dead Time/Lag Time **- Control Action** **- Introduction to Proportional, Integral and Derivative Action (PID)** **- Control Mode Selection** **- PID Tuning** **- Control Application** - Flow Control - Flow Ratio Control - SISO Level Self Regulating Process Control - Cascade Control - Feed Forward plus Feedback Control	**Lab work: PID Tuning By DCS Simulator Software** - Learning for changes value of PV and MV When value increase or decrease of P, I and D **- Lab work: PID Tuning By using DCS and Process Simulation Model** - Open Loop Method - Flow Control
2nd	**- Lab work: By using DCS and Process Simulation Model** - Closed Loop Method - Flow Control	**- Lab work: By using DCS and Process Simulation Model** - (Level and Flow Cascade Control)