KNOWLEDGE
For Training

1. Course Details:

Course Code : ICPE-016
Course Title : Programmable Logic Control (PLC)
Course Duration : 5 Days

2. Course Overview:

- In this course we will give the basic information of PLC, the automation systems, Maintenance and the configuration and parameterization of the hardware, handling with the STEP 7 Basis Software. This course introduces programmable logic controller (PLC) technology and industrial control devices used in automation. The focus is on PLC hardware configuration and programming methods using basic logic functions.

3. Learning Outcomes:

- Identify the components and performance characteristics of the SIMATIC S7
- Install a PLC system, including the communication cabling and wiring of I/O
- Use the various address types to edit, reload, structure and run a program
- Document, test, and basically troubleshoot the control system and its program
- Integrate and troubleshoot an HMI and Drive system within the control system
- Configure and troubleshooting

4. Course Contents:

- Need of PLC
- History of PLC
- Logic instructions
- Designing the basic switching systems
- Design of Industrial switching systems
- Design of Start/Stop Logics
- Design of Logic Gates
- Study on Latch and Unlatch instructions
- Designing the program in PLC for filling process
- Study and application of Timers
- Timer-On Delay
- Timer-Off Delay
- Retentive On-Delay Timer
- Designing a plc program on a Blinker
- Designing a plc program on a Bottle filler project in a factory

- Designing a plc program on a Traffic Light program
- Exercise and home assignment programs
- Study of Counters
- Up/Down-Counters
- Application and Programs on counters
- Study of Program Control instructions
- Jump & Label instructions
- Jump to Subroutine instructions
- Master Control Reset
- Section (6) Logic Gates instructions
- Applications and Exercise
- Scaling instruction
- To learn how to display field signal in the PLC
- Sink/Source concept of Wiring the PLC
- Practical Wiring demonstration and communication of PC & PLC

5. Our Methodology:

- Make coaching and monitoring innovative and using modern
- Media training also using on the go training by using interactive means and focusing on
- The exercises, practical applications and real situations study.
- Live delivery method, instructor-led training.
- Experienced consultant, trainers, and professional.
- Qualified trainer with high-level experience

6. Attendance Reports:

- Send daily attendance reports to trainingdep
- Send full attendance report to training dep. by the end of thecourse
- Attend 100 % from the course days also providedaily
- Issue attendance certificate for participant who attend minimum 80% from the course duration

7. Pre/Post Reports:

- Pre- assessment before starting training.
- Post assessment after finish training
- Full report for the deferent between Pre-& Post assessment

8. Who Should Attend?

- Instrumentation and control personnel including general maintenance personnel
- Control and instrumentation
- Technicians and engineers
- Automation engineers