

PLC's for Industrial Maintenance Techs (PLC's)

- The 'look' of a PLC program – why PLC programs are structured the way they are – MOD-I-CON
- Ladder logic type programs
- Real world electrical signaling devices connected to PLC discreet (on/off) or analog inputs
- Interfacing vs. inverting inputs
- Real world working devices – 'loads' – the power (electrical strength) of PLC output modules
- Using outputs as internal programmed inputs
- Addressing of inputs and outputs
- Numerical registers and calling up numerical/register data
- The importance of program documentation
- Addressing and interpreting register data
- Comparing pressure, magnitude, velocity, position, temperature, etc. to stored 'set points'
- Motor control with PLC's
- Interfacing discreet input devices like photo eyes, proximity sensors, temperature switches, level detectors, pressure switches with various PLC input modules
- 'Sinking' vs. 'sourcing' devices and input modules
- Numerical scaling – ratio and proportion – understanding how numbers are converted from one value to another
- On-delay timers, off delay timers, on/off delay control, interval timers
- Up counters and down counters
- What is the PLC's "Status Register"? How is it used
- 'Read' and interpret PLC programs for use when troubleshooting machines and processes