DATA ACQUISITION SYSTEM

SPECIFICATION:

* S.S. measuring tank,
* S.S. sump tank,
* S.S. body pump,
* Four type of transmitter
(pressure,flow, temperature and level),
with data acquisition module hardware
* As well as software With fitting on stand.
* Industrial PID controller to ON/OFF,P,PI,PID
  for temperature.

EXPERIMENTAL FOR FLOW MEASUREMENT

SPECIFICATION:

* Valve with built in I/P converter ,
* S.S Pump tank,rotameter,
* PC Software with necessary fitting to run
  the setup with 10 bit controller device with
  analog & digital IOs,USB,
* PC Software for data monitoring ,
* Logging and control with current and historical
  data

LEVEL CONTROL SET UP WITH LEVEL TRANSMITTER

SPECIFICATION:

* Level transmitter,
* Auto- Manual PID controller (with three term
  facility),communication facility,
* Control valve, I/P converter, S.S. sump tank,
* Measuring tank of suitable height with sight glass,
* S.S. body pump, circular chart recorder,
* Software with necessary fitting to run the setup
  mounted on suitable frame structure

MULTI FUNCTION PROCESS CONTROL SYSTEM

SPECIFICATION:

* True distributed control system having
  dedicated redundant function controller,
  power supply, communication modules,
  and integrated software modules, algorithms
  for complex process control.
* With Level transmitter,pressure transmitter,
  flow transmitter, temperature transmitter,
  Control valve, I/ P converter,
* PC based PC Software for data monitoring,
  logging and control with current and historical
  data with intuitional practical setup

STATIC PRESSURE & AIR PURGE TYPE

SPECIFICATION :

* Static pressure and air purge Level Indicator with glass tube,
* SS purge pipe.Fixed on tank having minimum height of 1000 mm height.
* Static Pressure gauge air purge gauge with 6 inch dial and isolation valves.
* FR unit for air supply and reference bubble column used for air purge

EXPERIMENTAL SET UP FOR TEMPERATURE CONTROL AND MEASUREMENT

SPECIFICATION :

* Temperature transmitter,
* Auto- Manual PID controller (with three term facility),communication facility,
* Control valve, I/P converter, rotameter,
* S.S. body pump,
* S.S. sump tank,
* Water supply tanks, circular chart recorder, necessary fitting to run the set up

CALIBRATION TEST BENCH

SPECIFICATION :

* Complete test bench with selfpowered which produces and measures of Voltages, current and resistances.
* Calibrator for calibration and testing of A.C. Millimeters, Ammeters, Voltmeters and D.C. Millimeters, Ammeters, Millivolt meters, Voltmeters and Ohmmeters (Resistance)

REAL PID CONTROLLER TRAINING KIT

SPECIFICATION :

* Pump, sump tank, Heater tank,
* PC based PID controller module with all three (P+I+D) mode and
* Auto and manual mode facility to study the PID control action mounted on suitable frame structure.

PNEUMATIC TRAINER

SPECIFICATION :

* Pressure Gauge, Pneumatic Motor,
* Single Acting Cylinder, Double Acting Cylinder,
* Air Filter Regulator Lubricator with Pressure
* Gauge Hand Lever Operated Valves: 2 Nos,
* 5/2 way& 3/2-way, Solenoid Valve: 2 Nos,
* 5/2 way& 3/2 way, Pilot Operated Valve:
* 5/3 Spring Centered, 5/2Spring Returned,
* 3/2 Pilot Operated,Palm Operated Valve
* 3/2-way Valve,Shuttle Valve

HYDRAULIC TRAINER

SPECIFICATION :

* Equipment trays - 2nos., Pressure gauges, Hydraulic Motor, 4/2 & 4/3 (with different mid position) way hand lever valve - 3nos each,
* Pressure sequence valves & pressure reducing valve – 2 nos each, pressure relief valves,
* Flow control valves & Non-return valves-2 Nos *
* Each (one each sub plate type), Shut-off valves, Diaphragm accumulator, Weight up to 10kg- 1 no
* 2/2 way plunger /stem actuated – 2 nos.,
* Standard hoses with quick connectors

DEAD WEIGHT TESTER

SPECIFICATION :

* Range of 0.5 – 30 kg/ cm2,
* Step Size of 0.1 kg/cm2,
* Accuracy of 0.2 to 0.1 %, to
* To Study the calibration of pressure gauge.
* Comparator having standard gauge.

INSTRUMENT TEST BENCH WITH CUPBOARDS

SPECIFICATION :

* 30 MHz Oscilloscope,
* Function Generator with Frequency Range of Sine wave 1mHz - 10MHz,
* Dual DC Power Supply, 0-32 V, 0-2 Amp with color LCD for Voltage and Currentreadout.,
* 4 ½ Digit LCD Large display
* Digital Multi meter,
* 1KHz LCR Meter with LCD Display,

DISSOLVED OXYGEN MEASUREMENT SETUP

SPECIFICATION:

* SS Measuring Tank,
* Dissolved oxygen Meter,
* Dissolved oxygen sensor,
* Mini air compressor,
* Hardware and electrical accessories on stand

PH METER

SPECIFICATION:

* Digital, with PH range of 0 – 14 pH,
* Millivolt Range of 0 - + 1999 mV,
* Temp.Compensation Auto /Manual
  with auto calibration facility and electrodes

CONDUCTIVITY METER AND TDS METER

SPECIFICATION:

* Conductivity meter Microprocessor based,
  auto ranging, Automatic End point function,
* LCD display, Accuracy ±1% F.S.,
  up to 3-point calibration, reset function,
  conductivity buffer option, Hold and Auto off
  function, temperature compensation.
* T.D.S. Analyzer: Microprocessor based,
  Auto ranging, Automatic End point function,
* LCD display, Accuracy ±1% F.S.,
* TDS factor 0.1 to 1.0, selectable TDS conversion
  factor and temp. units

POTENTIOMETER / THERMOCOUPLE TEST SET

SPECIFICATION:

* Resistance feeding For RTD transmitter
  with digital display
* Milli volt source for voltage feeding
  to thermocouple transmitter
* Measurement of milli volt and
  resistance of sensors
* Heating source with temperature change and
  display like muffle furnace or dry block type up
  to temperature range 6000 or above
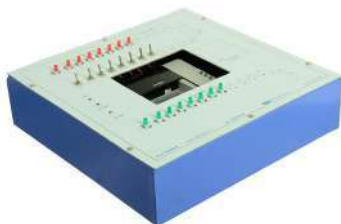
PRESSURE TRANSDUCER TRAINING KIT

SPECIFICATION:

All transducers having range such that change in output of each can be identify
* Potentiometer
* Capacitive
* Reluctive
* Strain gauge
* LVDT
* Load cell Servo type
* Piezo resistive

MICRO PLC TRAINER

SPECIFICATION:

PLC: with Digital Inputs/Outputs :
* 16/16 or 8/8 DC Powered brought on front panel on 2mm sockets
* Memory: 128 KB Application, 32 KB Data, 48 KB File Marker
* SCADA Port for SCADA application
* CoDeSys Software:
* Offline, Online, Debugging features & Auxiliary functions are available on the finger tip of the user.
* Password protection for projects & FB libraries
* Modular programming

SENSOR TRAINER KIT

SPECIFICATION:

* Arduino based programming
* Sensors are mounted on PCB
* RTD, NTC Thermistor,
* LM 35 ,Thermocouple,
* J,K Type and AD 590Photovoltaic ,
* Photoconductive,
* Photo transistor and Photodiode,
* Air Humidity and Temperature

HART / FIELD DEVICES (PRESSURE/FLOW/LEVEL)

SPECIFICATION:

* All Transmitters with HART / Field Bus compatable
* 4-20 mA output and mA indicator
* Necessary Power supply to operate