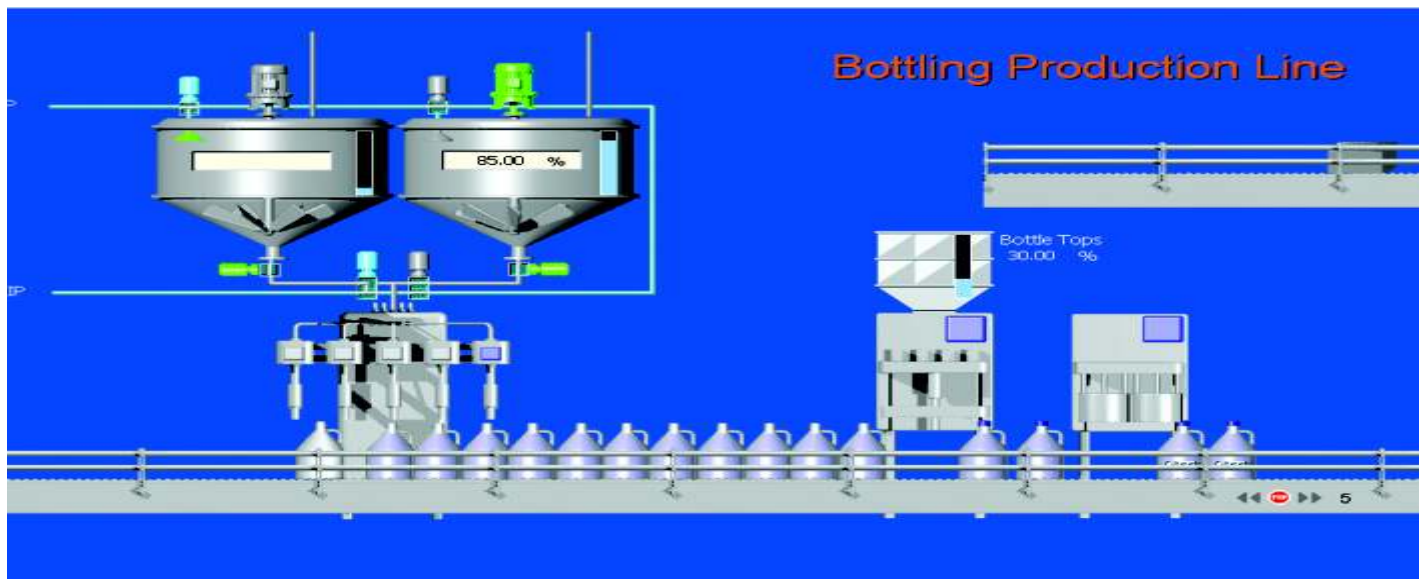




MAX CONSULTANCY & TECHNICAL INSTITUTE



Industrial Automation Training Institute

WE TRANSFORM KNOWLEDGE INTO COMPETENCE



MAX Group's new Venture:-

Max Group having already well established since 1989 in the field of Automation Industry as:

- Distributors of Industrial Electricals & Automation utility items.
- Control Panel designers and builders
- Designing, developing of systems and integrators

has now ventured into a Consultancy & Industrial Automation Training Institute at Delhi.

Why the need for an Industrial Automation Training Institute:-

The recent globalization of World Trade, has urged the manufacturing industry to produce quality products at the most competitive price. The industry has witnessed that application of automation systems in the manufacturing processes supports the market presence.

Thus a sustainable growth is taking place in Automation Industry. The advanced Countries were quick to equip their industry with sophisticated Automation systems which led to the supremacy. The Indian Industry lagged behind in adopting the Automaton technology. There are host of reasons including:-

- a) Lack of awareness to latest technology.
- b) Shortage of competent trained manpower on Automation systems. The Indian industry for its survival has no alternative but to adopt automation systems.

The MAX Group has identified these problems of the manufacturing industry. To help it out a well planned Technical Training Institute has been established. The recent survey shows that a huge demand exists for immediate employment in the industry.

ABOUT THE INSTITUTE

- Location: -

The institute is located in midwest area of Delhi known as West Patel Nagar, New Delhi 110008. The connectivity to the Institute is well maintained by road and metro rail.

- Facilities:-

Lecture / Class Room:- Furnished with modern classroom aids viz: Power Point Presentation, functional seating arrangement in good environmental condition.

- Laboratory / Workshop:-

Provides for a number of work stations. Individual station is fitted with computer programming facility & instrumentation, systems integration. Demonstration of working auto controlled models & simulations.

- Display Hall:-

Latest instruments, components & systems will be featured on display. The trainees will have exposure to the latest developments from across the world.

- Library reference and Internet:-

The Trainees will be able to avail these facilities to reinforce their potential.

STRATEGIC ALLIANCE

- With a premier Engg. Institute NSIT (University of Delhi)
- With L & T (LARSEN & TOUBRO) a world class company as an approved Training Centre.

RECGONITION BY PROFESSIONAL ASSOCIATIONS

- Institutional Membership by ISTE (Indian Society for Technical Education)
- Membership of Association of Automation Industry INDIA.

WHO NEED TO UNDERGO SPECIALISED TRAINING :-

- Engineering Graduates in Electrical, Electronics, Instrumentation, communication.
- B.Sc./ M.Sc. (Electronics), Instrumentation Graduates.
- Diploma holders in Electrical, Electronics Instrumentation disciplines.
- Employed Technical Personnel : Technical personnel working in the industry in instrumentation, Process control system and maintenance department.
- Engineering Students: For project work / summer training.
- Company sponsored training programmes.

MERITS OF MAX TRAINING INSTITUTE

- The promoters are qualified professionals in Elec. Engg. , Electronics & Automation disciplines.
- The group has sufficient experience on distributorship of branded Electricals, Automation utility items. Good lasting relations exist with the contracting firms, systems integrators and panel builders.
- Hands-on Execution of Turnkey projects on Automation systems / integration
- Designing and manufacturing of control panels.
- Experienced Faculty at the Institute
- Moderate Fee Structure.
- All these strong points put together make a reliable and an excellent training Institute.

Better Job Prospects & Placement Assistance

On successful completion of the training, the candidates will have an edge over the other candidates because of their professional orientation during training.

- Max group will assist in their placements.
- Wider job prospects in automation devices Mfg., Mktg., R&D, Systems Integration, Service/Maintenance Engrs., PSU's.



Class Room



ALPHA I - Step To Automation

- Introduction to Switchgear and Motors.
- Motor Starters, DOL, Star Delta, Auto Transformer, Soft Starter.
- Getting started with A.C. Drives Hardware Selection.
- Getting started with PLCs and HMIs.

ALPHA II - Basics of A.C. Drives and Motors

- Objective: - Understanding the concept of Speed Control and Motor.
- Topics: -
 - Principles of Induction Motors.
 - Principles of Variable Frequency Drive. (VFD).
 - Selection Criteria for VFDs.
 - Parameter programming.
 - Fault finding / Troubleshooting.

ALPHA III - Basics of PLCs and HMIs

- Objective: - Understanding the communicable concept of PLC and HMI.
- Topics:-
 - Introduction to PLC hardware and architecture.
 - Introduction to programming languages.
 - Basics of HMIs.
 - I/O's Concept Devices & Wiring.
 - Understanding analog and digital signals.
 - Basic programming instructions.
 - Programme simulation.

ALPHA IV - Basics of Panel Designing (Switchboard Concepts)

- Objective:- Understanding the concept of electrical panels.
- Topics:-
 - Switchgear solutions.
 - Basics of Control and Power wiring.
 - Designing of DOLs and Star Delta Starter, Drive Panels.
 - Classification of Panels.
 - Wire and Busbar selection.
 - Protection and wiring guidelines.
 - Knowledge of general accessories used in panel.
 - Hands on experience.

BETA I - Integrated Automation

- Objective:- Advance PLC, HMI and SCADA Designing
- Topics:-
 - Understanding PLC fundamentals Hardware and Architecture.
 - Programming Languages:-
 - a) Ladder Diagram
 - b) Sequential Function Chart
 - c) Function Block Diagram
 - d) Structured Text

- Advanced Instructions.
- Source and Sink concept.
- Memory Management.
- Understanding analog and digital signals.
- Field wiring concepts.
- Fault Finding and Troubleshooting.
- Addressing
- Knowledge of Pressure, Flow.
- SCADA (Supervisory Control and Data Acquisition)
 - Introduction and creation of SCADA Software.
 - Creating Alarms, Events, Trends, Reports.
 - Building tag data basis and expressions.
 - Creating and Testing runtime application.
 - Communication between PLC and SCADA.
 - Hands on experience.

BETA II - Practical Approach to A.C. Drives

- Objective:- Advance Concepts of Variable Frequency Drives & Induction motor.
- Topics:-
 - Principle of A.C. Drives.
 - Principle of Induction Motor.
 - Speed Control Methods.
 - Selection Criteria for Drives Speed / Torque Characteristics.
 - Advanced Parameter Programming.
 - Communication between Drives & PLC.
 - Designing of Drive Control Panels.
 - Remote and Local Operation of Drive.
 - Application Oriented Case Study.
 - Hands on Experience.
 - Various Types of Motor Starters DOL, SDS.

BETA III - Robotics

GAMMA - Automation Professional

- Integrated course on Advances & Research in Automation.
- All topics in ALPHA BETA courses alongwith advanced versions will be course of studies and practice.

ADDITIONAL TOPICS

- ISO quality management systems.
- Energy efficiency and management.
- Personality development and Presentation skills.



Our Laboratory

PROJECTS / APPLICATION JOBS EXECUTED

1	Automobiles	Material Handling (Conveyor Line) ,Product tracking and record ,Paint shop Automation
2	Plastic	Extruder ,Blown Film Plant , Injection Molding machine ,Blow mounding Machine
3	Packaging	Sleeving Machine for bottles , Pouch and Bag machines , Cement Bag filling plant
4	Cable Industry	Extruder (Take up & payoff, Caterpillar, Traverse, Heater & Blower control, AC Drive synchronisation – complete line automation. Laying Machine , Stranding Machine, Armouring Machine , Bunching Machine Wire Drawing (wet & dry wire drawings) with tension & speed control C.V. Line with AC Drives , Winding & Rewinding lines.
5	Process Industry	PLC based panel for water treatment plant AC Drive panels for pump & fan control (PFC).closed loop (pressure temprature) control with AC Drives & sensors Furnace automation with complete PLC & Drives Panel.
6	Machine Tools	CNC System - AC Drive control, X-Y Table servo based control system, Multi axis servo based control. Control Panel for Hydraulic & power press, Lathe Machine, Milling Machine
7	Food Processing Industry	Agitators , Pumps , Biscuit plant , Batch weighing Systems , Bottling Plant
8	Garments & Textiles	Carding Machine Blow room Machine Open end Machine - Drives Commissioning, Knitting Machine, Twisting Machine
9	Printing	Single, Double & four colour printing - Drives Operation, Flexo Machine - AC Drive operation., Offset Machine
10	Steel Industry	AC Drive based tension control system, Material Handlings, PDB & MCC Panels Furnace & cranes operations with AC Drive & PLC
11	HVAC	Pumps, Chillers, AHU's, Fans - operation in closed loop
12	Cranes & Elevators	Cross travel , Long travel , Main Hoist , Door movement , ARD system
13	Cement Industry	Mixer application , Grinding Machine
14	SPM's	Diesel Testing Machine Stress & tension Testing Machine, Industrial Oven & Furnaces, Conveyour & Hoisting lines for chemical Industry, Cement - lining machine Vibrators , Hydraulic Valve Testing machine
15	Sugar Mills	ID & FD Fans ,Pumps , Cane carrier Application
16	Medical	i) Tip forming M/C Wiring PLC System, ii) Needle fixing M/C using PLC System, iii) Sterilization Plant using SCADA & PLC, iv) Hydraulic M/C for Moulding, Cutting using PLC & HMI
17	Fitness	TreadMill
18	Copper Plant	DRC (Direct rivert charging system)
19	Hotels & Shopping Malls	Humidity Control System , AHU System , Compressor System , CO2 control System, Elevator System , Ovens and blowers , Water filling Plant using PLC & SCADA, Parking System , Automatic Store , DG Load Management , DG Synchronisation
20 Contd.	Traffic Control	Traffic Signal controlling through PLC and SCADA

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Industrial Automation Training Institute

Cottage No. 13A, West Patel Nagar, New Delhi-110008

Ph.: 011- 25876974, 011-25884332 E-mail:- mcti@maxgroup.co.in Website: www.mcti.org.in

GROUP COMPANIES

Max Engineering & Marketing Co.

Cottage No. 7, West Patel Nagar, New Delhi 110008, Ph.: 011-25884332, 25886756, Mob.: 9810048924 Fax: 011-25887026,
E-mail:- marketing@maxgroup.co.in

Max Engineering & Marketing Co.

9, Dahiya Complex HSIDC Kundli Distt.- Sonipat 131028 Ph:- 25886756, 25882099 Fax:- 25887026
Email:- marketing@maxgroup.co.in

Powertech Switchgear (i) Pvt. Ltd.

I-2262, DSIDC, Narela Indl. Area, New Delhi 110040, Ph:- 27781603, 27780396, Fax:- 27781603 Email:- Powertech@maxgroup.co.in

Max Engineering & Automation Pvt. Ltd.

I-47, West Patel Nagar, New Delhi 110008. Ph:- 25885543, 25886973 Email:- automation@maxgroup.co.in

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20 Years of
Excellence

**AUTHORISED STOCKISTS, AUTHORISED SYSTEM INTEGRATORS,
PANEL BUILDER & AUTOMATION TRAINING INSTITUTE**