# Fast Track Your Career with

# Automation Technology





- Software & Support
  - Test & Measurements
    - Training & Consultancy

Research - Innovate - Experience

The Power of Engineers

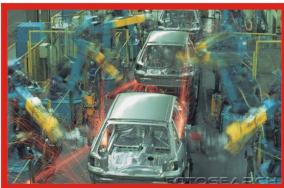
THE TECHNOLOGY LEADER



- → Automation & Controls Group
- > Training & Consultancy Group
  - > Test & Measurement Group
  - > Software & Support Group



# **Inspiring Engineers**



**TRAINING & CONSULTANCY GROUP** 







# Reasons why NCVT Automation & Engineering is the Ideal Education Service Provider in Automation & Engineering Training for students Global

- NCVT offers Engineers a wide range of Job Oriented Programs in Automation, Engineering, Process Industries, Machine Manufacturing, Research organization & more
- NCVT's Job oriented Programs are backed & Tackled by World-class infrastructure,
   The Latest Automation Techniques, Latest Technology & The Best Mentors
- NCVT Provides World-class Quality Engineering to the Students. Laboratory Teaching is supported with high quality learning aids, Engineers give assignments, attend workshops, have ample lab sessions, are guided on projects & get individual attention from mentors
- NCVT also conducts events regularly to challenge and encourage engineers. Engineers meet and
  interact with experts from the industry. They get an opportunity to go on Industrial Tours, attend master
  classes and Q & A Sessions and also attend seminars like Research engineering, Perspectives etc.
- NCVT Automation & Engineering is the ideal gateway for students looking for "Milestone Careers" In the new age Engineering & Automation industry, as the training & Certification offered by NCVT is well recognized by the Industry
- NCVT Bridges Gap between Theory & Industrial Orientation through Engineering Tools, software, Professional working within Required standards & removing Theory based Limitations
- NCVT programs Provides Job orientation, professional know-How, success strategies, Win-win Situations for uplifting Engineering standards

#### **NCVT - THE POWER OF ENGINEERS**

Technology Leader working with Different 4 Groups

- Automation & Controls Group
- Test & Measurement Group
- Software & Support Group
- Training & Consultancy Group



50 Man years of Experience and Virtues like Dedicated, Disciplined, Honesty with Pursuit for perfection are the Fundamental View of our Growth. Unlike Single Sector Growth NCVT is geared up to Cover Technology Sector through Tire Less, Sincere, and Skill full Efforts. Truly Neo Creative Vision Technologies represents "THE POWER OF ENGINEERS"

#### WHY SHOULD I GO FOR THIS TRAINING?

Global Competition and race to provide Quality, Quantity, and Safety & Economical Product to Customer Process Industries are in Heavy pressure to adapt only option of Automatic Process Control

Engineers are required to get this knowledge for Develop, Run and Maintain this all systems, only theory can not provide professional ability to work as Project / Application / Design / Application / System / Service / Integration Engineer

Even Passing Engineering through Reputed College, Industrial Requirement and Skill Perceived by Fresh or some time even Quite Experienced Engineers are struggling to get Break or to reach Destination with Higher Growth due to lack of synchronization of Theory and Practical Knowledge. NCVT poured that gap to making Engineers ready to lead in market through Practical Hands on Training for Erection, Commission, Integration Programming, Troubleshooting, Maintenance etc to be a Project / Service / Application / Design / System / Programmer Engineer for Process / Project Consultant / System Integrator Industry.

NCVT training is something like two people (Students) starts their Journey (Career) together, but one posses MAP and other don't. Even Experience People come to certain limitation due to Conflict with fundamental Exposure for Technology.

#### WHO MUST ATTEND? [ELIGIBILITY CRITERIA]

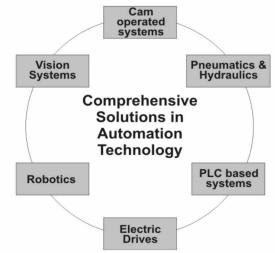
- Degree/ Diploma/ Msc. / Bsc. Students of Electrical, Electronics & Communication, Instrumentation & Control, Research & Development Kindling Hoping to Build their Career in Fastest Growing Totally Hybrid Industrial Automation Segment
- Engineering / Post Graduates Wanting to Go with Project Training / Vocational Training
   Professionals / Engineers / Operators from Production / Design / Integration / Application / Project / Maintenance Areas
- Companies / Organization Dedicated to Upfront Knowledge of their Technical Staff / operators / Supervisors
- Engineering institutes / Colleges needs to Arrange Technical workshops
- Engineering Last Year Students for Project plus Career orientation

#### **NCVT COMPRISES**

- \* 50 Man Years of Experience in Diversified Automation Field
- Fully Prepared Practical Training Laboratories with up to Minute Automation Amenities
- \* On Line & On Site Training By Engineers Only
- \* Only Engineering Faculty with Years of Experience with Latest Technology
- \* Technical up Gradation Only unlike Commercial Speeches & Fund Display
- \* Industrial Visit & On Site Training Disclosure Groomed to lead
- Concentrated Talent & Individuality Development to Float In Market as Being Young Blood
- \* 100% Placement Ratio with Job Satisfaction, after Passing NCVT Exam Certification
- \* Join Technology Group unlike Training Provider or Commercial Training Provider
- \* Individual Training no Mass Training Schedules

# HOW NCVT - THE POWER OF ENGINEERS IS DIFFERENT FROM OTHERS?

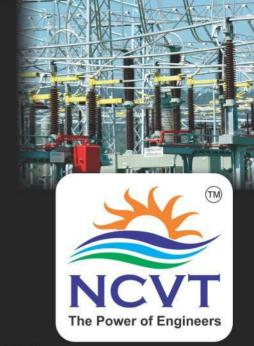
NCVT-THE POWER OF ENGINEERS, is the only Technology Knowledge base Group in India, Our Span of Knowledge is not bounded with Only Training or Commercial aspects. We don't look upon even our nearer Economy compared competitor for Knowledge front. We are aimed to spread for Switchgear, Automation, Robotics, Software, Embedded and Telecommunication through out world. What we do today other think of it tomorrow.



# Career

# Scope

India, as one of the world's fastest growing economies, has to technologies at a rather quick pace. India's growing foreign trade, rising internal consumer demand, growth in infrastructure growth as well as the revival from the economic slowdown has only given the entire financial set up a new lease of life. India has now realized the importance of developing its own strength with automation instead of being the smaller ally of the world. Automation is the answer to India's pursuit for being a world-class industrial competitor. This is a feeling that is contagiously spreading across all industry verticals and everyone wants to use automation from a student library to hospitals to manufacturing plants.



# **Job Oriented Programs**

Pharmaceuticals Industry Iron & Steel & Textiles Rolling Mills Glass & Ceramic Chemical & Fertilizers Emulsion Polymerization Heavy Engineering
Aerospace & OEM
Distillation Columns
Oil & Gas Applications
Automobile & Crane
Water Treatment

Energy & Power Plants
Tank Farm & Lube blending
Poster & Furnaces
Paper & Pulp
DG sets
LPG Bottling

### **Career Oriented**

- NCAP Certified Automation Professional
- PGDIA\_ Post Graduation Diploma in Automation
- ITI Electricians
- NCAP\_E Certified Automation Professional with Electrical Systems

#### **Short Terms Courses**

- NPSP PLC & SCADA Professional
- NAD\_ Electric Drive Professional
- NIP Instrumentation Professional
- NHP\_HMI/MMI Professional
- NPDP\_ Panel Designing & Auto cad
- NDD DCS Developer
- NAIN\_ Advance Industrial Networking with



# Growth

# of Automation & Engineering

## **Indian Automation Industry**

Automation is the answer to India's pursuit for being a world-class industrial competitor.

This is a feeling that is contagiously spreading across all industry verticals and

everyone wants to use automation from a student library to hospitals to manufacturing plants.





The Indian Industrial Automation market is seeing a robust growth driven by increasing demand in the automotive, textile, pharmaceutical, material handling, water & waste water, process and food and beverage industries.

The market has been growing at a fast pace over the last two years @12-15% p.a.

# Advantages

# **NCVT Automation**

- Program Designed as Per Industry Demands
- Certified Faculties
- Doubt Clearance & Lab Sessions
- Project & Assessments at Regular intervals
- Portfolio Development
- Industrial Seminars, workshops, Technical Papers & Interaction Sessions
- Pre Interview Preparation
- Holistic Career Support
- NCVT Designed Books, E Material & Highly Expert Learning Courseware\*\*

#### Through Engineering Guidance on

Erection - Commissioning - Integration - Programming - Maintenance - Troubleshooting Application Developments - Project Documentation and More



# Eligibility

# **Admission Eligibility & Process**

- Students Who have Passed Degree / Diploma with EE/EC/IC/PE/BM Inst. & Mechatronics
- Passed BSC/MSC With Physics, Electronics & Allied Subjects
- Fresh/ Experience Engineers from Above Branches
- Industrial Working Professionals from Operation, Maintenance, Production, Projects etc.
- Engineers wants to switch their Job Skill from Marketing, Sales or other limited Objective fields
- 10th Pass & Above for ITI



#### Requirements

- 5 Passport Size Photographs
- Photocopy of Bio Data
- Photo Copy of School Leaving Certificate
- Photocopy of Driving License
- Photocopy of Pan Card
- Photocopy Degree Certificate or Last Pass out Semester Mark sheet
- 1st Down Payment or Registration fees

# Integration & Turn Key Projects of Industrial Automation consists of various Components knowledge which are here below

### **PLC – Programmable Logic Controllers**

- Siemens
- · Allen Bradley
- Schneider
- · Ge Fanuc

- ABB
- Mitsubishi
- Omron
- · Delta



#### SCADA - Supervisory Control & Data Acquisition

- I Fix GF Fanuc
- Complicity GE FANUC
- Win CC Siemens

- Rs View Rockwell
- In Touch Invensys
- Vijeo Look Schneider



#### **HMI - Human Machine Interfaces**

- Siemens
- Rockwell
- Schneider

- BCH
- ABB
- Proface



# AC / DC / Servo Drives

- Power Flex Rockwell
- Altivar Schneider
- Micro Master Siemens
- ABB
- Yaskawa

- CGL
- BCH
- Panasonic
- Parker
- Baldor

#### **Process Instrument**

- Enders & Houser
- · Emerson.
- Siemens
- Autrol

- ABB
- Pepprl + Fuchs
- · Honeywell
- · Yokogawa



#### **Switch Gear & Heavy Electric**

- Siemens
- Rockwell
- ABB
- Baldor

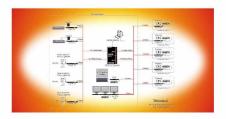
- GE Fanuc
- Yaskawa
- Baldor



### **DCS - Distributed Control System**

- Emerson Fisher Rosemount
- Invensys
- ABB

- Siemens
- Honeywell
- Yokogawa



**NCVT THE POWER OF ENGINEERS** 



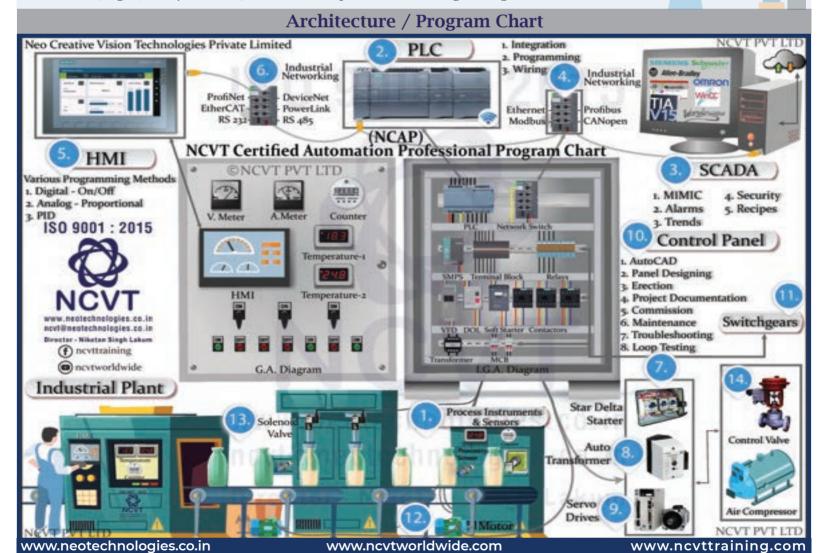
# **Process / Machine Automation**

# What is Industrial Automation?

Controlling, Managing, Supervising Industrial Process, Task, Machine via use of Electronic, Power Electronic, Instruments & Devices with Computerized, Networked Systems process of building such arrangement call doing art of Automatic. Control of Process, Machine, Task ensures Sensing, Taking Decisions via Programs and Pushing field devices to be act in accordance, those arrangements are called Industrial Automation Systems.

# Why Automation? What is the future?

Manufacturing Competition, Bulk Demands, Cost Cutting, Precise & Quality Products pushes everything to be come under one Roof. Either its Supervision or testing or controlling or anything associates within raw material to final product delivery involves Hardware, software and combination of evolving systems. Today getting a Job in industry without Knowledge of Industrial Automation isn't possible. Future is this hybrid Technology which involves and evolves over Instrumentation, Electronics, Power Electronics, Light / heavy Electrical, Embedded Computer & network Engineering.



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**NCVT Skill Development** 

**NCVT Industrial Services** 

# **Automation Applications**



































# **NCVT Core Values**

# **Dedication + Discipline + Honesty with pursuit for perfection**



# **Training Overview**

Erection, Commission, Integration, Maintenance, Troubleshooting, Application development, networking, switch gears & Heavy Electrical Devices



# **100% Placement Criterion**

NCVT, trained people are send to various sectors of industries are here below

Process Industry Project Consultant System Integrators OEM Suppliers Process operator



# **Designation after Training**

Project Engineer System Engineer Application Engineer Service Engineer Design Engineer Integration Engineer

Process Automation Sectors who	rocess Automation Sectors where Student will applicable				
Pharmaceuticals Industry	Heavy Engineering	Energy & Power Plants			
Iron & Steel & Textiles	Aerospace & OEM	Tank Farm & Lube blending			
Rolling Mills	Distillation Columns	Poster & Furnaces			
Glass & Ceramic	Oil & Gas Applications	Paper & Pulp			
Chemical & Fertilizers	Automobile & Crane	DG sets			
Emulsion Polymerization	Water Treatment	LPG Bottling Compressors			

# **Neo Creative Vision Technologies Private Limited (NCVT)**

# **Positions V/S Expected Skills**

Design Engineer Involves Designing Knowledge for specific industry, Hardware & Software Development

Application Engineer Specific Machine / Process Industrial Hardware & Software, Development

Project Engineer Integration, Erection, Commissioning, Site testing, Panels,

Service Engineer Troubleshooting, Wiring Panels, Testing, Communication, Program Editing

Maintenance Engineer Production Machine ad P & I Servicing, Aintainig, Running
Programming Engineer Computerized Scripring, Setting, Communication, Site testing
Jr. Engineer Site Visit, Learning off Site Task, Folloing Positioned Engineer

Sales Engineer - Technical Knowledge for Product, Specifications, Price, Customer negotiation

Marketing Engineer - Technical Campaigning, Meeting, Setting up Sales, Product promotion



# **Industries & Allied productions**

Pharmaceuticals Auto Mobiles Textiles

Power Plants Transmission Oil & GasRefinery

Glass & Ceramic Machinery Manufacturing Paper & Pulp
Iron & Steel Furnaces Water Treatments LPG Bottling

Cranes & Constructions Chemicals & Fertilizers DG Sets

Packing Rubber & Tires Plastic & Polymers

Cement Dairy Electronics Assembling

# **Program Ware**

Vocational Training Programs need Live Theory, hardware & software practices on site and with components. NCVT Help you to understand different associated Manuals, its weightage and scope.

Software CDs, Manuals, syllabus, Index, Transcripts, Books, related information and catalogs are provided

# Methodology

NCVT Programs are Completely Professional and Position based Programs, attracts mature and individual approach to clear it successfully. We implement programs on individual basis or customized Workshop with similar knowledge clients

NCVT is Engineering Company, "WE ARE NOT THE INSTITUTE", Our Commitment is Client Based and methodology covers orientation to Architecture and Hardware, Software Practices to final Running & testing with Clear guidelines of INDEX, Transcript & Authorized Presentations.



# **NCVT Certified Automation Professional**

# **PLC - Programmable Logic Controllers**

- Introduction to PLC, Family & Applications
- PLC Fundamentals & Components
- Sink, Source, Types of Input, Output Flags
- Programming software addressing concepts
- Detailed Analog Programming Instructions
- Up Load, Down Load Monitoring of programs
- Forcing, Monitoring, Modifying I/Os
- Standard Procedure for writing LD, IL, STL, FBD, SFC
- Troubleshooting & Fault Diagnosis of PLC
- Documentation of Project Design
- OPC Drive & Communication to various SCADA
- ASCII Programming interface to Printer, Bar Code

#### **Switch Gears / Industrial Drives**

- Introduction to AC / DC / Servo Drives & Motors
- Motor & Drive Operation, Fundamentals, Limitations
- Selection of Motors & Drives
- Parameter Programming / Settings
- Control Panel Wiring with Drive Design
- Remote & Local Operation
- Communication with PLC, HMI, SCADA, DCS
- Different Operating Modes, RUN, STOP, JOG
- Mode Selection Design, Advantages, Load Calculation
- Case Study of Industrial Applications

#### **Instrumentation / Sensors**

- Sensors / Transmitters in Process Industry
- Temperature, Voltage, Kw, Transducers
- Type working principles of RTD TC etc.
- Flow, Level, Principles selection criteria
- Control Valves, AFC, DFC
- Process Control Fundamentals
- Erection commission installation calibration
- HART protocol details & communication
- Maintenance, preventive maintenance fault diagnosis and troubleshooting in application

# **DCS - Distributed Control Systems**

- Introduction to Application and DCS system
- Architecture Evolution of DCS Technology
- Hardware Architecture of DCS CPU Power Supply INPUT OUTPUT Modules BUS BARS Network
- Hot Redundancy & Comparison of PLC Vs DCS
- Introduction to Operating & Engineering console
- Practical revelation on leading DCS systems
   Fault Finding, Troubleshooting, wiring, Networking

#### SCADA - Supervisory Control & Data Acquisition

- Introduction to SCADA software
- Creating a new Project / Application in SCADA
- ODBC connectivity to MIMIC, Graphic Creation
- OPC Connectivity to various PLC, Animation Editing
- DDE configuration to Microsoft EXCEL
- Real & Historical time Trending, Events & Alarms
- Scripting in Visual basic, SQL, Oracle, RDBMS
- Commission of networked Nodes
- Fault Finding Troubleshooting of application
- Security layers to application
- Installation / uninstallation / OS Basics
- Communication Basics

### HMI / MMI - Human Machine Interfaces

- HMI Programming and Application Development
- Software configuration & Parameter setting
- Creating and Editing Animation and MIMIC
- ODBC connectivity and RDBMS attachment
- Up loading Downloading application project
- Events / Alarms / Security / Connectivity DDE
- Communication with PLC / DRIVE / DCS
- Fault Finding Troubleshooting
- Key Pad / Touch / Mono/ Color/ Alpha Numeric Learning
- SCADA V/s HMI & Merits & Demerits

#### **Panel Designing & Designing Software**

- Fundamentals of Electric & Control Drawing wiring
- Introduction to IP Ingress Protection NEMA
- GA arrangement Diagram with P & I
- Wiring & preparation of Power & Control Circuits
- General Arrangement of components wiring
- Switchgear & Heavy Electric Practices
- Troubleshooting in Electric & control live panels
- Selection of types of enclosure as per ambient
- MCC / PCC / APFC / AMF / Control PLC + Drive
- End to End Termination, Cabling, Junction Box Wiring

## **Industrial Networks**

- PC to Hardware RS 232 Standalone
- PLC + HMI + PLC Multi Node
- PLC + HMI + Drive
- SCADA PC + HMI + PLC + Drive
- Multi Drives
- Master Slave Master Slave
- Server Client
- Foundation Fieldbus / Profibus DP / Ethernet

Work Shop in Technical Skill Development in Process/ Machine Automation Techniques

NCVT Hr. Consultant @ www.ncvtworldwide.com

## **NCAP - Certified Automation Professional**

Covers all Hardware & Software Within Architecture

SCADA Supervisory Control & Data Acquisitions Software

PLC Programmable Logic Controller Electronics Hardware
HMI Human Machine Interface Electronics Hardware

AC Drive AC Motor Controller / Variable Speed Drive / Inverter Power Electronics Hardware

DC Drive Digital DC Motors Variable Speed Torque Drive Power Electronics Hardware

Servo Drive Servo Motor Controller Variable Speed Torque Drive Power Electronics Hardware

Panel Electric / Control Panels Electrical Assembly

CAD E Plan / Auto Cad - Computer Aided Design Software

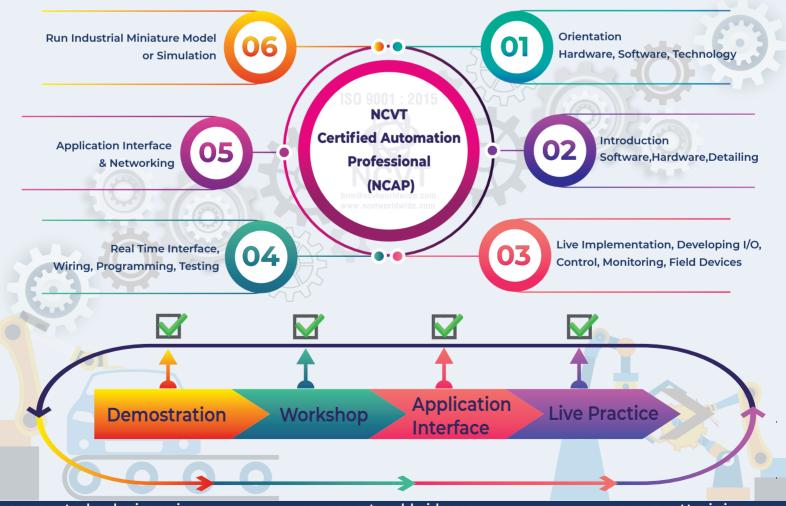
NetworkIndustrial Network ProtocolsSoftware Set upsDCSDistributed Control SystemsElectronics Hardware

Indicators Panel Instruments for Supervision & Control Instrument Electronics

Switchgear Electrical Contactors, Relay, Devices Electrical Hardware



# **Technical Skill Development Program**





# **Inbuilt Course Ware & Program Ware**

- ✓ NCVT Designed Programs are divided into Program Orientation, Component Hardware Software Introduction, Real time Programming/ Development, Site /Project Testing & Interface/ Communication.
- ☑ Our Programs follow Professional and clear SOP for Index, Course related Guidelines, NCVT Authorized Orientations, Question Banks, Examples, List of Laboratory Instructions and interfaces.
- ✓ All Kinds of Books Manuals, Catalogs, Demo Softwares, CDs will be Facilitate by NCVT.
- Soft Skills Program covers Portfolio development, Interview Preparation, CV Writing, Personality Development, Interview Tactics are the part of Guaranteed Result / Career Oriented Placement Programs and NJPS Services Job Placement Services.



# Career Opportunities In Industrial Sectors through Process/Machine Automation

Pharmaceuticals Industry

Iron & Steel & Textiles

**Rolling Mills** 

Glass & Ceramic

Chemical & Fertilizers

**Emulsion Polymerization** 

Heavy Engineering

Aerospace & OEM

Distillation Columns

Oil & Gas Applications

Automobile & Crane

Water Treatment

**Energy & Power Plants** 

Tank Farm & Lube blending

Poster & Furnaces

Paper & Pulp

DG sets

**LPG Bottling Compressors** 



# Representative / Executive, participated our Training Program

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Amtech Electronics	Torrent Power	Gujarat Samachar	Eeshaan Automation	Themis Automation	Masibus Automation
Apollo Tyres	Nirma Ltd	Vortex Electronics	NPS Drive Automation	Munjal Auto	Rotex Automation
General Motors	Zydus	Sanghi Cement	ICAM Technologies	Multispan Instruments	Manpasand Beverages
Videocon	Jindal Steel	Prima Automation	Permionics	Mehta CAD CAM	Bombardiar
Sandesh Press	ABB	Horizon Microtech	Electrotherm	Alidhra Machines	FAG Bearing
Cipla	Asian Paints	KHS Beverages	KVS Technologies	Hema Automation	Rexel India
Hindustan Unilever	Mother daily	Mamta Machineries	Kuna Impex	Jyoti	Prescience Automation
Arvind Mill	Whirlpool	Intas Pharma	Maharshi Udyog	Sai Technologies	Nish Automation
Amul Dairy	Kirlosker	Cimcon Software	Vinny Overseas	Alembic Pharma	Goyani Machines
Supack Industries	Godrej	Ranbaxy Lab	Sun Pharma	Lupin	Kolorrol Technologies
Balaji Wafers	Nestle	Reliance Refinery	Optimized Solutions	Pepsico	Relinquo Automation
Ford Motors	Maruti Suzuki	Mother Dairy	Kevin Technologies	Vadalia Foods	Singhal Power Presses
Hitachi Hi-Rel Power	Inductotherm	Asian Tiles	Powertech Systems	Suvik Electronics	Somet Machinery
Garden Silk Mill	Shay Alloys	Dishman	GEA Process Engg.	Cotmac Electronics	Pearlite Steel
TATA Nano	CEATTyres	Alstrom	Alteem Instruments	Iris Automation	Atman Solution



# **NCVT Automation & Controls Division Clients**



# Neo Creative Vision Technologies Private Limited





ISO 9001: 2015



www.ncvtworldwide.com





Research - Innovate - Experience



Skill Developments www.ncvttraining.com

Hr. Consulting www.ncvtworldwide.com

**Industrial Services** www.neotechnologies.co.in

**Industrial Process Automation** 

Electrical / Control Panel Systems

**Industrial Machine Automation** 





# **NCVT GUJARAT**

Visit us!



#### **AHMEDABAD**

606, Venus Benecia, Above NEXA showroom, Near Pakwan Circle, SG Highway, Bodakdev, Ahmedabad, Gujarat 380015 **4** 93273 66905 / 93273 66906

# **BARODA**

301, Shiv Shakti Complex, near sasuma restaurant, Sampatrao Colony, Alkapuri, Vadodara, Gujarat 390007 **1** 78170 89340 / 78170 89339

≥ baroda@neotechnologies.co.in

# **SURAT**

HG-11, International Trade Centre (ITC Building), Ring Road, Majura Gate, Surat, Gujarat 395002 **%** 78170 89346 / 78170 89341 

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