



*m a k e s   s e n s e*



CUSTOMISED & ENGINEERED  
AUTOMATION SOLUTIONS

# / ABOUT VELOX

Velox Automation Pvt. Ltd., founded in 1997 is one of the leading companies with diversified offerings in the field of

## Industrial Automation

## Internet of Things (IoT)

## LV Switchboards

## Turnkey Projects

## Power Quality & EMS

## Smart City Solutions

We strongly believe in partnering with our clients and add value to their business with our expertise. Our long-term association with India's esteemed organizations is a testimonial of the same.

We have earned the credibility of being the most dependable partner in the industry with family of more than 150 motivated members. Our competent engineers with thorough process / product knowledge, proven track record across the industries, process driven approach, robust project management & adaption of latest technology in solution implementation, makes us a preferred partner of our valued clients.

Our state-of-the-art manufacturing unit is in Surat, Gujarat, India and we have successfully delivered customized solutions globally. Our Quality Management System is ISO 9001:2015 compliant and certified by DNV-GL.

We have proved our Mattel through successful implementation of reliable, innovative and cost effective solutions, in diverse industry segments like...

**METALS**

**POWER**

**PAPER**

**DAIRY, FOOD & BEVERAGES**

**CHEMICAL & PHARMACEUTICAL**

**MATERIAL HANDLING, PORTS & CRANES**

**GLASS**

**PACKAGING**

**CEMENT**

**WATER & WASTE WATER TREATMENT**

**ENERGY, OIL & GAS**

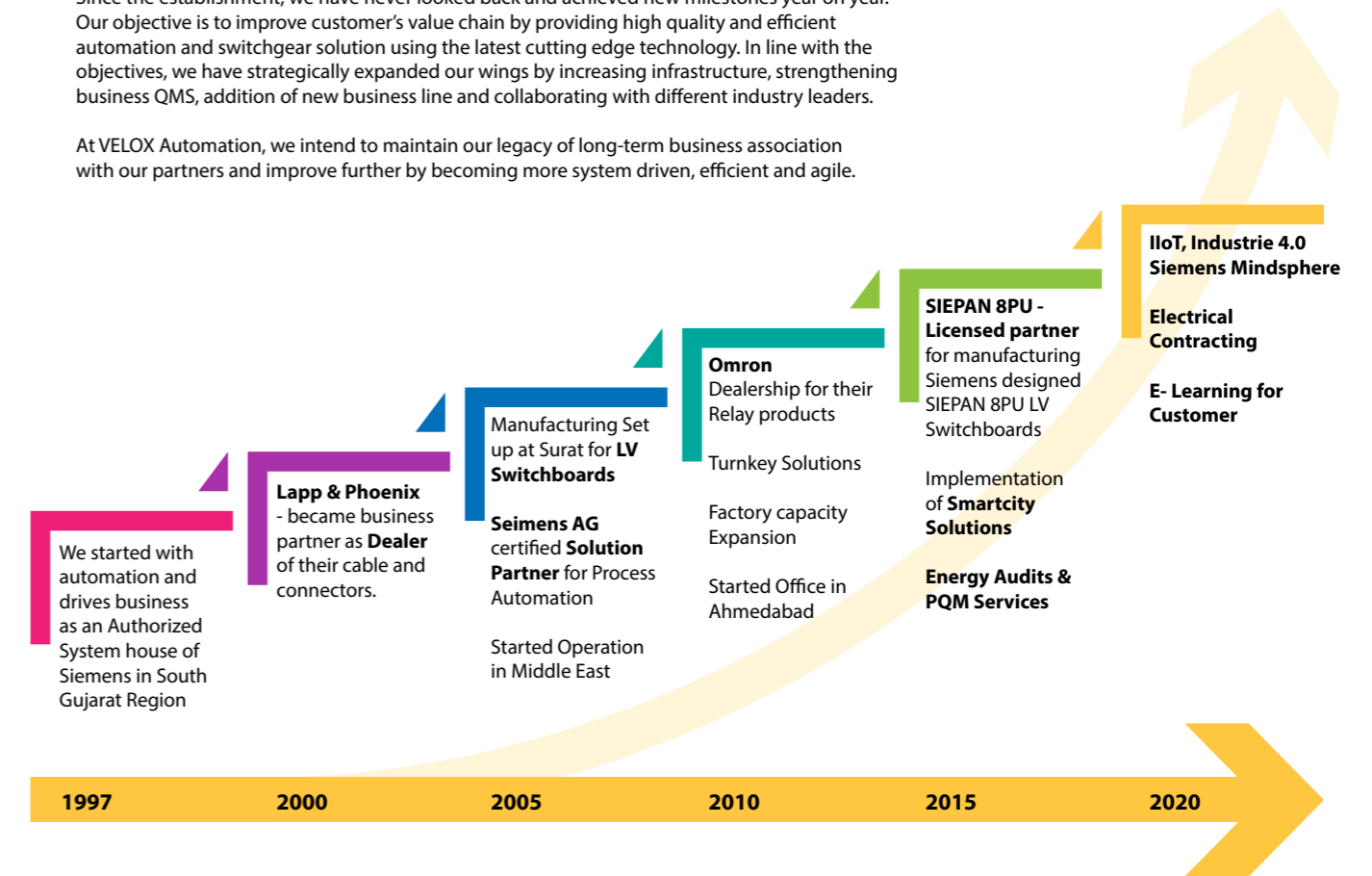
**TEXTILES**

Projects with diverse requirements from green field to retro fitment, turnkey solutions, migration / upgradation are catered with equal competence levels. Letters of appreciation from our valued customers speak for our achievements.

# / EXPANDING THE HORIZONS

Since the establishment, we have never looked back and achieved new milestones year on year. Our objective is to improve customer's value chain by providing high quality and efficient automation and switchgear solution using the latest cutting edge technology. In line with the objectives, we have strategically expanded our wings by increasing infrastructure, strengthening business QMS, addition of new business line and collaborating with different industry leaders.

At VELOX Automation, we intend to maintain our legacy of long-term business association with our partners and improve further by becoming more system driven, efficient and agile.



# / VISION, MISSION & VALUE PROPOSITION

## VISION

To be a company at the forefront, offering the best solutions to industry, smart city projects, utilities and the services sector, at a reasonable price and adding value to all our stakeholders.

## MISSION

To be an industry leader & preferred partner of our customers by adding value to their business through our expertise in providing Customised & Engineered Automation & Electrical Systems based on the latest technology.

To promote conservation of resources, protection of the environment and encourage ethical business practices.

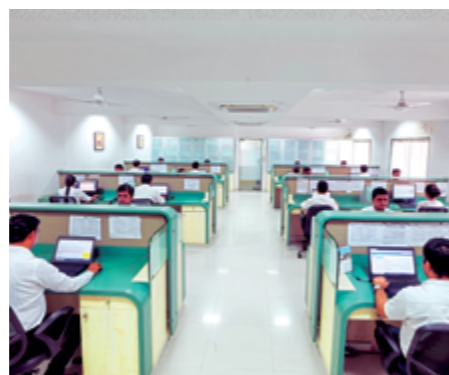
Contribute actively in development of our nation by promoting innovation and developing skilled workforce.

## VALUE PROPOSITION

We integrate our clients' businesses with efficient systems and the latest technology products, for higher productivity and profitability. The competition is tough and so are we, when it comes to enhancing our clients' businesses.



VELOX has its state-of-the-art manufacturing facility located at Surat, Gujarat. Facility is built over 45,000 sq. ft. area. Our engineering and design cells are housed with the project and execution team, for smooth coordination and quick results. A team of more than 150 energetic and efficient members makes us an able partner for our clients in meeting their goals. We also have our Sales & Support office at Ahmedabad & UAE. We have Resident Engineers in different area of Gujarat like Rajkot, Bharuch etc. and has plan to expand further on PAN India basis.



## IOT & AUTOMATION SOLUTIONS

- Internet of Things (IoT)
- DCS System
- PLC System
- SCADA Systems
- Instrument Control Panels
- Pneumatic Control Panels

## DRIVE SOLUTIONS

- AC Drives
- DC Drives
- Servo Drives
- Crane Drive Solutions

## LV SWITCHBOARDS

- Siemens designed Siepan 8PU – Totally Type Tested Panels (All ranges)
- Velox Designed Power Control Panels
- Velox Designed Motor Control Centers (Regular or Intelligent)
- Power & Lighting Distribution Boards
- APFC Panels
- Busducts

## SPECIALIZED OFFERINGS

- Smart City Solutions
- Turnkey Projects
- Trading of Engineering Products
- Engineering Services for LV Switchboards
- Power Quality & Energy Management Solutions

## TRADING PARTNER OF GLOBAL INDUSTRY LEADERS



## / IOT & AUTOMATION SOLUTIONS

The next big revolution for manufacturing sector is Industrie 4.0. Digitalization of the factories and processes is the core of Industrie 4.0. It is also referred as IIoT across different parts of the world. There is a buzz around the industries of BIG DATA Management, Machine Learning, Artificial Intelligence and all these going to change the way of production and business in general. So what exactly is this new revolution and how will it change our business?



Every business has enormous possibilities of improving the processes and optimising resources. The exponential advancement in semiconductors, communication, internet and IT as a whole in last few years has enabled a digital revolution to enter in the factories. If there is a system that can help in taking informed real-time decisions for better yield, reduced downtime, flexibility, agility and better profitability, everyone would take advantage of it. IIoT opens a wide spectrum of opportunities for all.

### Let's explore how it works !!

The system captures real time data from smart sensors, instruments, relays, meters, automation systems, etc. It monitors the plant operation and brings all these data to one location (cloud or designated server).

- This captured data is used for big data management, which
- Generates various reports to aid the user
  - Analyses the data and generates event based alarms and alerts,
  - Analyses multiple process cycles and suggests the best performance data,
  - Schedules and suggests the preventive maintenance schedule to avoid any failures and optimize the plant shutdown time.

The system derives findings from the big data and the desired output is made available in simplified form, to a group of people aiding them for the prompt and correct decision making.

In a nutshell, it captures, computes, analyse and derives output. This is made available through App or appropriate User Interface on the go, to the respective team. All these in real time with immense possibilities of improvising present and even future on continuous ongoing basis.

We have partnered with Siemens to offer our solutions for Industrie 4.0. The Mindsphere from Siemens provides cloud based ecosystem for optimally analysing the captured data and even facilitates UI and app development. Another big area of digital twin is addressed by Comos and Mandix solutions from Siemens. They help customer's ideas to be conceived digitally. One can design, simulate and optimise operating conditions without actually building the real plant or machine saving big on time and costs.

So futuristic solution with endless possibilities awaits you... At your door step with Velox.... Welcome tomorrow....

## / AUTOMATION AND DRIVE TECHNOLOGY

Automation & Drive Solutions - DCS, PLC, SCADA & HMI, Drives

We are one of the leading system integrator in the country. Multi locational presence allows us to cater to various industrial verticals / domains. We have proven track record of successfully executed projects based on automation solutions. A competent & experienced team makes us an automatic choice as a solution provider for complex applications with high uptime.



### AUTOMATION

- DCS system with multiple automation & operating systems. OS with standalone, redundant & server client architecture. Automation system with standalone, redundant & fail safe configuration.
- PLC system starting from micro automation to mid & high range systems. Stand alone, hot redundant & fail safe systems.
- RTU / SCADA Systems.
- Panel mounted HMI solutions with keypad & touch screen
- System integration using various communication protocols including Profibus, Profinet, Industrial Ethernet, Modbus, Device Net, Foundation Fieldbus, etc.
- IIoT – Industrial Internet of Things for all applications enabling real time data based various process and business analysis to enable informed decision making.



### DRIVE TECHNOLOGY

- AC Drives from standard applications like Pump, Fan, Blower, Conveyer, Agitators, etc. to Complex Line / Machine Applications like Cut to Length, Metals, Paper Machine, Cranes, Textile Machines, Packaging Machines etc.
- DC Drives for high uptime applications like Cranes, Rolling Mills, Flying Shear etc.
- Simotion, Servo Motors & Drives for Machine Tools, Packaging, Robotics, Material Handling, Cranes, SPM etc.

## PROCESS AUTOMATION

Process automation projects are an integral part of our expertise. We engineer solutions that are tailor-made to suit the customer's needs. Our process automation solutions have been implemented in various industry sectors.



### AM/NS India

*CSP Mill Caster & Tunnel Furnace*

## Large scale & complex plant automation at a fractional cost of OEM

#### PROJECT BRIEF

This was a very unique project where the system was procured and lying idle for more than 6 years. Velox was roped in to perform a job actually to be done by the OEM of writing the process software and commission the system. This project was a mix of Siemens PLC and Drives, ABB Drives and Wonderware SCADA Software. One of the biggest project for Velox with more than 10000 PLC I/Os and 1200 Variable Frequency Drives.

#### SYSTEM OVERVIEW

The Caster System had around six S7-400 PLC with several ET-200S remote IO stations totaling to around 8000 I/Os. The Scada was Factory link. The Tunnel Furnace area had two S7-400 PLC with around 2000 I/Os and more than 100 Sinamics S120 special purpose Drives. The Tunnel furnace SCADA was Wonderware. There were plenty of Variable Frequency Drives of Siemens and ABB make across the plant which also needed to be hooked up.

#### BENEFITS TO THE CUSTOMER

Velox team was able to write the logic, test it offline and commission the system in a single shot without any re work. Total 10 engineers worked round the clock for 15 days. The system got commissioned without any support from the OEM at 5% of the cost compared to the OEM offer. The new plant enhanced the capacity by 35% and increased the flexibility of operation of all three lines enormously. The overall productivity increased by 50%. Local development means life long services will be available to the customer at a very low cost.

## INTEGRATED AUTOMATION

We are one of the rare system supplier who can imbibe both process and factory automation in a single homogeneous system. To achieve accuracy of process and match the performance required for factory using a single system is our hallmark. This combination works great for customers in fields like Glass, Chemical, Textile plant and many more.



### JAPANESE MULTINATIONAL

*Composite Manufacturing Line*

## High performance and accuracy for Chemical process and Textile factory

#### PROJECT BRIEF

The customer was an MNC setting up a plant in Dahej. They were looking for a Distributed Control System for their new plant which involved chemical as well as textile processes. There was also requirement of integration of third party PLCs, HMIs, Energy Management System, VFDs & SMS alert system. Plant wide single network with ring redundancy was expected. Central Redundant Server client architecture was intended for operator stations. They also wanted operator clients in the field and at few places field HMI.

#### SYSTEM OVERVIEW

Siemens make PCS7 control system was offered in hot redundant configuration. Hot redundant servers with 4 clients ( Siemens IPC) for operator stations were considered. Remote IO stations on redundant profibus network with redundant interface modules formed the I/O bus network. Redundant ring network over ethernet was created for the communication between DCS and all other PLC systems. All VFD feeders were connected over Profinet. The Energy Management System was connected over Modbus TCP protocol.

#### BENEFITS TO THE CUSTOMER

This was one of the most reliable solution having redundancy at AS, Power Supply, OS server, IO network, plant bus and terminal bus. This meant zero down time of system. Centralized Automation lead to good co-ordination between different steps of production leading to almost zero wastage. An SMS alert system was implemented which enabled the customer to know about any abnormality and to take corrective action in shortest possible time. The motor control centers were also controlled centrally. The energy management and process management working from a single system provided good synergy for calculating production and conversion cost ratio.

# / ENGINEERING SERVICES

## Our portfolio of industrial services include

- IIoT, Automation, Electrical System Design, Engineering, FAT, Pre-Commissioning, Commissioning, SAT, Training and Handover.
- System Coding / Software Development for DCS, PLC, SCADA and IIoT Systems.
- On-Site Commissioning of DCS, PLC, SCADA, Drive and IIoT Systems.
- Breakdown Maintenance Services and Preventive Maintenance Services.
- Annual Maintenance and Service Contracts.
- On-Site and Classroom Training for IIoT, DCS Systems, PLC, SCADA, Drives, LV Switchgear Components. E-Learning for Customers.
- Plant Engineering including Cable Layouts, Mechanical Layout Drawings for Cable Trays
- Cables and Termination Schedules on E-CAD
- Automation and LT Panel Engineering Drawings including General Arrangement, Control Schemes, Wiring Diagrams using Eplan.
- Field Instrument Loop Diagrams.
- Energy Audits and Energy Saving Solutions.

# / DOMAIN KNOWLEDGE

Organisation has 23+ Years of experience in providing automation solutions. Over the long journey, we have built strong knowledge base across the various industries for their different processes.

INDUSTRY	PROJECTS DELIVERED	
<b>Metals</b>	Hot Briquette Iron Making Process Automation Blast Furnace Boiler Coke Quenching System Sinter Plant Steel Making – Electric Arc Furnace Ladle Furnace Ladle Crane Automation Lime Plant HSM Reheating Furnace	Continuous Slab Casting Pickling Line Rolling Mill Roll Grinder Machines Cut to Length Machines Shearing Lines Flying Shear Copper Refinery Copper Casting CSP Mill Automation
<b>Power</b>	Turbine Automation Boiler Automation DM Water Plant	Diverter Dampers HP / LP Bypass System Heat Recovery Plant
<b>Pulp &amp; Paper</b>	Paper Machine Cutter Machine Board Machine	Winder Machine Re-Winder Machine
<b>Dairy, Food &amp; Beverages</b>	Veg Oil Refinery Dairy Brewery Food Packaging Machines	Can Filling Machines Bottling Systems Plant wide Central Automation MES Systems
<b>Chemicals &amp; Pharmaceuticals</b>	Reactor Automation Distillation Column Automation Spray Dryer Automation Process Energy Management Centrifuge System Automation	ANFD Automation Sterilizer Automation Fluid Bag Dryer Rapid Mixture Granulator Coater Machine Tablet Making Machines
<b>Material Handling &amp; Cranes</b>	Conveyers Stackers Reclaimers Ship Unloaders Level Luffing Cranes Barge Unloaders	EOT Cranes Gantry Cranes Ladle Cranes Dust Extinguishing Systems Fire-Fighting Systems
<b>Glass</b>	Furnace Automation Batch House Tempering Lines	Cutting Lines Packing Lines
<b>OIL &amp; GAS</b>	Off Shore Platform Applications On Shore Exploration Sites Air Compressors	Gas Compressors Thermic Fluid Heating Tank Farm
<b>Water, Waste Water &amp; Solid Waste</b>	Water Treatment Plants Tertiary Treatment Plants Desalination Plants Sewage Treatment Plants	Reverse Osmosis Plants Effluent Treatment Plants Incinerator Plants Centralised Monitoring of Water Distribution.
<b>Textile</b>	Extruder with Heater Control System Continuous Poly Coating Lines	Winders Printing Machines BOPET Film Lines Slitting Lines
<b>Automotive</b>	Foundry Machines Wheel Rim Plants	Paint Shop
<b>Others</b>	Battery Separator Manufacturing Unit Automation. Integration of all Package Units	Also successfully executed LV Panel Projects for all these industries as well as Schools, Malls, Hospitals, Airforce etc.

# / POWER QUALITY & ENERGY MANAGEMENT SYSTEM



We at Velox offer end to end solution in the field of power quality management. The solutions include steps like complete power & process energy audits by BEE certified auditors. Identifying the power quality improvement & energy saving areas in a well-structured audit report & offer sustainable solutions for the same.

Definite payback period is guaranteed before the project implementation!! State of the art energy management solutions on turnkey basis is one of the important offerings from the house of Velox. We have wide range of products from a simple energy meter to a Class A power quality analyser to offer as a part of the complete system.

Our Industrial networking expertise helps the customer to seamlessly integrate all power & energy monitoring points with a central software with various protocol conversions. The software offers the user, the most advanced features of monitoring & diagnostics. The system reporting is completely automated & it pin points the actual areas of concern at various organization hierarchy including top management, rather than just giving a bulk data report. The software helps the user in defining & keeping a close watch on the various cost centres within the organization. The software also helps in exactly working out the product costing for various customers!!

Our expertise in analysing harmonics in Power Systems and effective control of the same using Active/Passive Filters helps organisation to improve power quality resulting into the lower electricity bills/avoid penalty, lower maintenance/breakdown and higher equipment life.

## Power / EMS / PQ

Velox Automation offers end-to-end solutions in Power, EMS and PQ. Backed by our body of experience, we have executed a number of projects successfully in this sector.



## COLOURTEX

RTPFC Project

## System turnaround in 18 months

### Project Brief

The customer was facing many challenges like inadvertent failures of electrical components, frequent burnout in the power factor correction panels, penalty by the electricity board in lieu of the poor power factor, loss of production because of frequent breakdowns, line losses, etc. We took up this case as a challenge. The customer was briefed about the capability of Velox to handle all these challenges and given enough confidence about the confirmed payback against the investment.

### System Overview

We did the complete plant electrical system audit by one of the most respected auditor in the country. Submitted a detailed report on the poor quality of the power system. Suggested a complete solution for the system stabilization with a definite payback period. RTPFC panels in each plant area were designed & supplied. Implemented the complete RTPFC system of more than 4000 KVAR. The balance system study also pointed on other system issues which were sorted out with certain changes without investment and few with minor investment.

### Benefits to the customer:

The execution involved small system changes which were done during the audit study itself. This started delivering returns without any investment, immediately. The bigger system change of the RTPFC panels was completely overhauled in just five days of plant shut-down and the power factor was maintained to unity. Component failures were eliminated and the plant had zero down-time. Accident proof electrical panels ensured safety and efficiency. The client began to receive large incentives monthly, in the utility bill. The other system changes with minor investments also started giving good returns to the customer.

## / THE SMART CITY



At VELOX Automation, we are perfectly positioned to utilize our expertise in the field of automation to improve standards of living in both urban and rural parts of India.

- Automation and Centralized control of Water Treatment Plants.
- Central Monitoring and Control of City-wide Water Distribution Networks.
- Automation and Control of Sewage Treatment plants.
- Automation and Control of Tertiary Water Treatment plants.
- Intelligent street-lighting systems with central command centres.
- Intelligent traffic control systems.
- Electrical and automation for Metro trains.
- Power quality improvement projects.
- Automation of river cleaning projects.

Our Electrical Systems, Automation and Drive Solutions are a bench mark in all smart city projects around the country.

## SMART CITY

Clean water production and distribution is one of the biggest challenges. Our smart solutions for water treatment and distribution are a game changer for the utilities. Our solutions have been instrumental in bagging smart city awards for various cities.



### Surat Municipal Corporation

*SCADA & Telemetry for Citywide Water Distribution*

## Water conservation through intuitive information and controls

### Project Brief

SMC were looking for a composite automation and tracking system for monitoring the water pumped from the intake well to treatment plants and finally to the users. The water supply and usage data was to be monitored over GPRS communication. There were SCADA systems planned at all big local set ups and there was a central main SCADA receiving information from the whole city. The central SCADA was to share information with the central command centre of SMC. SMS and APP based alerts were to be sent to the SMC official in case of any abnormal activity.

### System Overview

Velox deployed S7 1200, S7 1500 based control systems at various locations with special dual SIM GPRS modems, which allowed redundancy of SIM for high availability. Local memory card ensured zero data loss. WINCC SCADA was used at all levels with Hot redundant SERVER client architecture at the central SCADA. An Android and IOS app was developed for alarm management. The information from the central SCADA was shared with the command centre. Many third party systems were integrated using protocols like Modbus RTU, TCP, etc.

### Benefits to the Customer

The system brought total transparency in the water management and usage in the city. There was an integrated alarm management clearly suggesting the issue during production or misuse by any user. The data management at central command centre ensured that SMC could predict the future actions for the production and distribution management. Redundant system ensured zero data loss. There was a tremendous rise in the water tax collection and penalties for the defaulters. The SMC was able to monitor any issue in their system, perform maintenance immediately and ensured non stop supply to the city.



# / LV SWITCHBOARD



PCC panels upto 6300A have been built & supplied with one, two and three incomers.

MCC panels fixed & drawout, single & double front with up to 200 feeders in a single panel have been built & supplied.

Specialists in Intelligent MCC panels using Siemens, ABB, Allen Bradley, Schneider, Softhard and C&S (Control and Switchgear) intelligent relays.

Semi intelligent MCC panels using Remote I/O stations for DCS / PLC.

Fixed type & drawout type enclosure constructions are offered with local fabrication, Rittal enclosures etc. as per the needs.

All reputed brands of switchgear like Siemens, Schneider, L&T, ABB & many others are offered in our panels.

Well engineered Busducts both indoor & outdoor type are offered. We have built busducts upto 6300A.

Panels are engineered for trouble free lifelong operation, easy to maintain as per IS norms. The panels supplied to global leaders like Siemens, ABB & L&T are well appreciated by them.

Documentation supplied with panels is of international standard.

Multiple references of panels exported to Middle East, Africa, Far East Asia, USA, Europe & South America

UL & CE Certified Panels supplied per customer requirements

## / TESTING FACILITY

### Routine Test

- 1 Inspection of Assembly Including Wiring
- 2 Continuity Test
- 3 Insulation Resistance Test (Megger) 1000V DC
- 4 High Voltage Test by H V Tester 2.5 KV for 1 Min.

### Type Test

- 1 Short Circuit Test of 65 KA for 1 Sec upto 5000A. CERTIFIED BY CPRI BHOPAL
- 2 Temperature Rise Test as per IS 8623 (Part I) 8.2.1 -1993. CERTIFIED BY CPRI BHOPAL
- 3 Panel Enclosure Protection Level IP 55 Certificate. CERTIFIED BY ERDA VADODARA

### Special Test

- 1 Primary Injection Test
- 2 Heat Run Test



## POWER CONTROL CENTER

Power Control Center is used for distribution and control of various power sources used in industry. Normally Power Control Center is installed near power source hence the fault level is high. Panels are designed to withstand a fault level upto 80 KA for 1 sec. Bus bar system in Power Control Center is designed to suit the fault level as well as temperature rise upto 40°C above ambient. Ample space is provided for cable termination. Various protections viz short circuit; overload, earth fault, under voltage etc are provided to protect the source and the equipment.



## MOTOR CONTROL CENTER

Motor Control Center is suitable for operation of motors ranging from 0.5HP to 500 HP ratings. Motor Control Center contains various types of starting viz. Direct on Line (DOL), Star-Delta, Autotransformer, Soft starter etc. Local and remote operation facility, IMCC compatible to PLC/DCS based operation. Motor Control Center is properly ventilated in case of higher size of motor starter. Component layout is made so as to facilitate ease of operation and maintenance.



## POWER DISTRIBUTION PANELS

Power Distribution Panels are used for distribution of power on down streams. They are required in case of high concentration of loads other than motor starters. Advantage of using Power Distribution Panel is to clear fault locally hence it does not affect Upstream Switchgear.



## AUTOMATIC POWER FACTOR IMPROVEMENT SYSTEMS

Automatic Power Factor Control Panel is designed to maintain power factor of plant close to unity. Auto as well as manual mode is provided for power factor control. Various types of capacitors are used depending on load conditions. Typically MPP, APP or Mixed dielectric types of capacitors are used. In case of non-linear loads like VFD, UPS, etc thyristorized switching with suitable filtering is used for controlling the power factor.

## / SIEMENS PANELS



Licensed  
Partner

For  
SIEPAN 8PU

SIEMENS

### SIEPAN 8PU

Siemens 8PU design for low-voltage switchboard is the outcome of years of manufacturing experience with switchgear and control gear assemblies, backed by thorough investigation of current market requirements and practices. In the industry, it is now a benchmark for proven performance.

The standard design along with scalability ensures seamless future expansion.

It's modular nature, designed to operate in challenging conditions of high ambient temperature and dust, supported by modern manufacturing practices, stringent quality checks & thorough type testing makes these panels unique. They are widely used across various industries such as cement, steel, refinery, oil and gas, pharmaceuticals, chemicals, food and beverages, data centres, hotels, hospitals, airports, metro rail projects. More than 100,000 LV switchboards have been deployed in these industries for maximum reliability and performance.

VELOX Automation amongst the select few Licensed Partners for the Siemens SIEPAN 8PU totally type tested (TTA) low voltage switchboards. We offer panels with fixed as well as draw-out execution.

Our offerings include Power Control Centres, Motor Control Centres, Intelligent Motor Control Centres and PFC solutions.

These panels will be totally compliant and tested according to the latest IEC 61439-1 and 2 and are fully type tested for both Aluminium and Copper bus-bar systems.

## INTELLIGENT ELECTRICAL SOLUTION

Information and diagnostics are catching the imagination of electrical fraternity. We are always the leader in introducing Automation in the electrical foray. Smart PCC, Smart MCC and Integrated Energy Management brings a sea of opportunities for the users.



### Firmenich

*Siepan Intelligent PCC and MCC system  
with Energy management*

## Futuristic Electrical System

#### Project Brief

Firmenich, a Swiss Multinational, is one of the biggest producer of Aromatics in the world. They were coming up with a new plant at their existing Dahej facility. They were looking for the latest IEC standard Electrical Panels with Intelligent Monitoring and Controls. Energy Management was part of the project. Velox as a license partner of Siemens for Siepan 8PU latest LV switchboards was the obvious contender.

#### System Overview

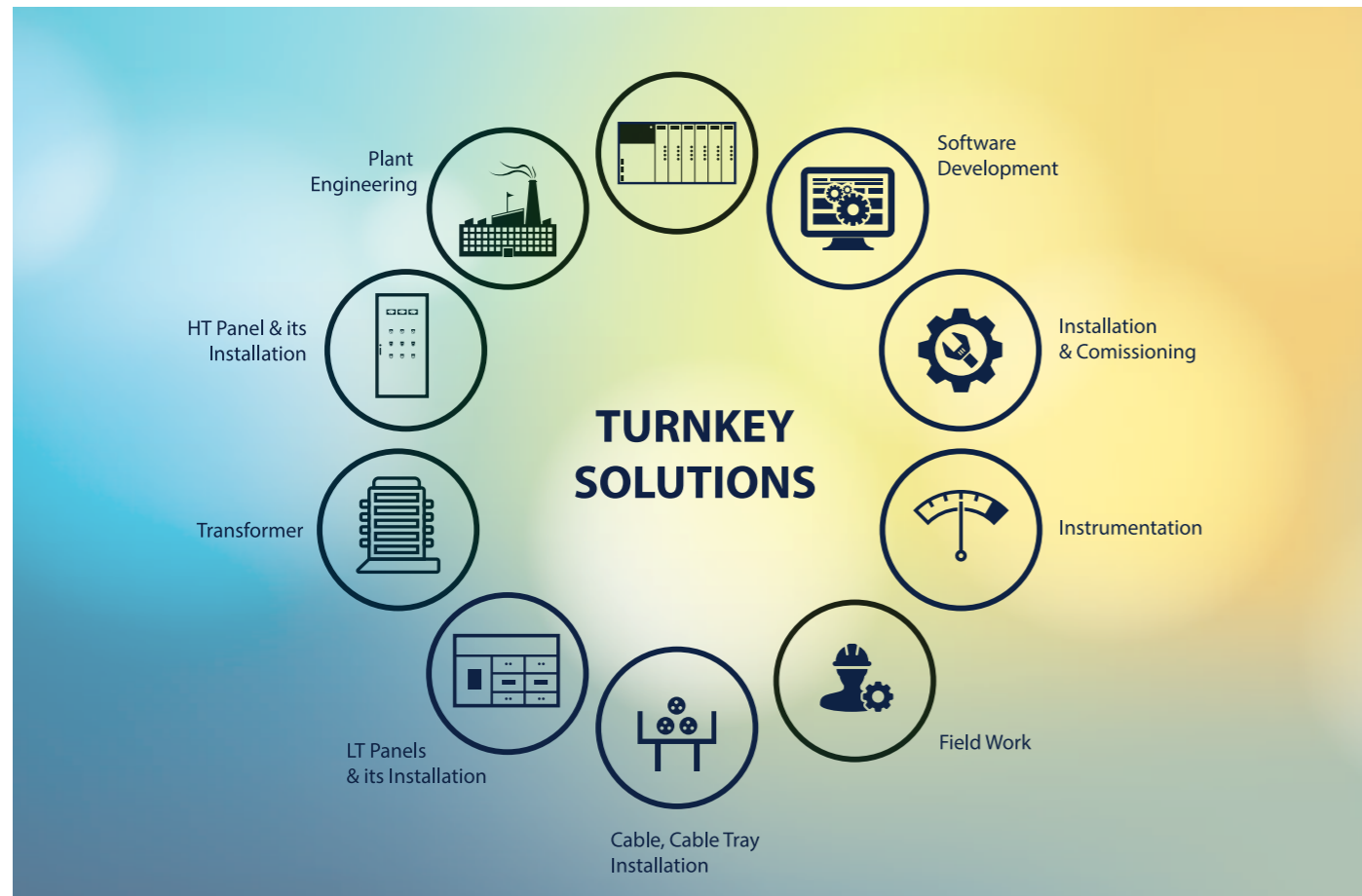
Panels complying to IEC 61439 - 1 / 2 were required. Siepan 8PU solution from Siemens was an ideal solution. The Power Control Centre was required to be fully intelligent with all ACB and MCCB communicating with the DCS over Profibus. The Motor Control Centres were also with intelligent motor protection and control relays Simocode on Profibus. There were certain critical loads wherein the customer required special dry run protection. All energy meters were communicating to a dedicated Energy Management System over Modbus TCP.

The complete integration required deep knowledge of Electrical Panels and Communication.

#### Benefits to the Customer

Complete electrical panel control and monitoring happened digitally over Profibus. Field cabling was avoided making the system really lean and digital. Standard panels with latest standards meant ease of future expansion, training of man power and zero downtime. Special modules of dry run protection with Simocode meant that no separate system was required to be implemented. Energy management system gave lot of intelligent data for customer to locate any leakages or losses in the system. For Firmenich the biggest advantage was to get the complete solution from a long term associate partner, Velox. This gave them peace of mind and confidence from the enquiry to execution time.

## / TURNKEY PROJECTS



VELOX Automation offers complete Turnkey Solutions for Electrical, Automation & Instrumentation across various industry sectors.

We partner with leading companies in the field to offer a comprehensive package of products, equipment and services that complete the arc from project concept to completion.

We consider the efficient handling of turnkey projects as our major area of expertise. Our experience extends into domains such as Oil and Gas, Metals, Utilities, Material Handling, Power Plants, Ports, Solid Waste Management, Water Treatment and Supply Management.

Our portfolio of projects includes Conveyor Systems, Utility Plants, DM Water Plants, Gas Detection Systems, Tank Farms, Incinerators, Water Treatment Systems, Effluent Treatment, Compressor Systems, Airport Baggage Handling, Desalination and Water Distribution Plants and ESD and F&S Systems in Oil and Gas.

We have supplied automation and drive systems, motors, electrical power and control panels such as HT Breaker Panels, LT PCC Panels, MCC Panels, DBS, JBS, Field Instruments, Field Control and Power Cables with accessories such as Cable Trays and Mechanical Structure Assemblies. In addition, we also provide supporting services such as Erection, Installation, and Commissioning of our supplied material. We count among our satisfied customers, well-known and established industry giants such as ONGC, L&T, ADANI, ESSAR, WELSPUN and APM TERMINALS, to name a few.

Turnkey solutions with best quality work backed by reasonable pricing – qualities that have earned us a good name in the industry.

## TURNKEY SOLUTIONS

Velox assumes Single point start-to-end responsibility for complete project ensuring excellent co-ordination and timely execution.



### Larsen & Toubro

*Utility Automation System*

## The Complete Turnkey Solution

### Project Brief

M/S L&T was looking to get complete utility automation solution on turnkey basis. The basic process required was Direct cooling as well as Indirect cooling in their Forging Process. We were presented the opportunity to execute the Whole Utility System using SIEMENS S7-300 PLC & various field devices/equipment. We won the order after a tough competition. Capability to handle high value jobs & local presence was a key to our selection.

### System Overview

The scope included supply of the new PLC system with SCADA software package. Engineering, supply, erection and commissioning of the PLC panels was also part of the turnkey requirement. PLC and SCADA Software development & commissioning was part of the project. Remote I/O stations were to be fixed at various locations in field. Field instrumentation for temperature, pressure & flow were required to be installed & connected to the control system. Calibration & onsite commissioning of the same was part of the scope. Design, Supply, laying & termination of field cable, cable trays, cable tray supports, end termination and glanding, field jbs was integral part of the scope. Supply, installation and commissioning of control valves was also a part of the project responsibility.

### Benefits to the customer

The resourceful support of Velox was answering all the questions posed by the project. The customer happily off loaded all the aspects which were possible to be handled by Velox. Single point responsibility helped customer with employing lesser man power from their end for this project. They were able to concentrate more on the super critical forging process & settling the plant faster. Local support was a peace of mind for the customer. Price benefit offered against the quality of services was a big plus point. The customer was so happy with the end result, they recommended Velox within the fraternity leading to lot of business addition for Velox.

## / CLIENTS' SPEAK

“

Velox is a regular & proven supplier to AMNSI (Erstwhile Essar) for our Automation and Electrical requirements for over 2 decades now. Their local presence, backed up by strong team has always helped AMNSI achieve faster project execution.

”

- **Mr. Subir Kumar**  
Head – Electrical and Automation.  
Arcelor Mittal Nippon Steel India Ltd.

“

Velox Automation has become synonymous with state of the art in Industrial Automation & Controls. The hard and soft skills acquired by the team, the depth of programming knowledge, the production capabilities are comparable with the best in the world. Velox has built a large client base based on the excellent cooperation they demonstrate with clients and suppliers.

”

- **Mr. Tanveer Jafri**,  
Jt. General Manager.  
Larsen and Toubro Ltd.

“

Our business with Velox started with very small value order. Over the years, they have become one of our biggest suppliers for L.V. Panels and PLC systems. It speaks for the trust we have in Velox.

”

- **Mr. Nirav Shah**,  
Sr. Manager – Purchase.  
Aarti Industries Ltd.

“

We have been entrusting Velox with many critical automation and drives projects over the years and are satisfied with their execution

”

- **Mr. P.K. Bhadora**,  
GM Electrical.  
J.K. Paper Ltd.

“

Velox is our trusted partner for Variable Frequency Drives and Intelligent Electrical Panels. Our association with them has helped us in executing various innovations in the field of electrical system.

”

- **Mr. Ajay Dodiya**,  
Head – Electrical.  
Firmenich Aromatics Prod.(I) Pvt. Ltd.

“

We are working with Velox for various Electrical and Automation projects. Their expertise in Intelligent Electrical Panels has helped us in reducing our maintenance efforts

”

- **Mr. Virendra Piludariya**,  
Head – Electrical.  
Meghmani Finechem Ltd.

## / CLIENTS



## / PROJECTS ACROSS THE GLOBE



### WORLDWIDE

USA  
Brazil  
UAE  
Kuwait  
Saudi Arabia  
Malaysia  
Nigeria

Morocco  
Bangladesh  
Sri Lanka  
Belgium  
Argentina  
Egypt  
Israel

### INDIA

Gujarat  
Maharashtra  
Delhi  
Himachal Pradesh  
Madhya Pradesh  
Uttar Pradesh  
Chhattisgarh  
West Bengal  
Orissa  
Andhra Pradesh  
Himachal Pradesh  
Assam  
Tamilnadu  
Karnataka  
Goa  
Telangana  
Jharkhand  
Punjab

Licensed Partner  
For SIEPAN 8PU



Solution Partner  
Automation





**Velox Automation Pvt. Ltd.**

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