

AS Automation and Engg Services

9001:2015 Certified Company



www.asautomation.in

Business' Future Today

Why Automation?

In this fast-paced world, every factory plant is expected to increase its output to meet the rapidly growing demand. If you are also looking for ways to use your resources in a more effective way and improve your product quality while ensuring safety of your laborers, you need to revolutionize your system with the aid of industrial automation. Increased process control not only ensures higher productivity and output, it also ensures consistency in product quality and reduced scrap. At AS Automation & Engineering Services, we are here to help you achieve all that and some more.

Why AS Automation & Engineering?

Leaders In Plant Automation



Headquartered in Hyderabad, AS Automation & Engineering Services is one of the leading system integrators specialized in offering turnkey solutions for electrical products, process control and instrumentation, and automation systems. Our next-generation products and services help transform plants with the latest technological models. Using a unique time-tested efficient combination of PLC, DCS, SCADA, HMI, VFD, and other industrial automation products, we help businesses design, engineer, develop, test, and successfully commission a plant. Our advanced solution can be custom fitted into any industry. We have helped numerous companies from almost every sector.

Industries





Food & Beverages



Cement



Water & Waste Water Treatment



Paper Printing & Packaging



Power Generation and Distribution



Raw Material Handling



Infrastructure



Automobile



Steel



Oil & Gas



Building Technologies

Our vision

To provide quality products & services that exceed the expectations of our esteemed customers. We aim to delight our customers at every opportunity through exceptional customer service.

Our Mision

To become one of the top 5 leaders in automation by providing enhanced products and services, increasing profitability, and maintaining cooperative relationships with our customers.

We are authorised partners of:









Our Business Area

Revolutionize Your Business With AS Automation



At AS Automation & Engineering Services, we have in-depth domain knowledge and expertise in automation and instrumentation. We provide comprehensive solutions for your plant, automating every process by integrating them with IT systems. Our systems are built using hardware from OEMs like ABB, Siemens, Schneider Electric, etc. that guarantee at least 10-15 years of shelf life. as a leading system integrator, we design develop install and commission automation layouts and control systems. Furthermore, we create P & ID that includes piping, vessels control valves, instrumentation and other process components and equipment in the system. Our team of dedicated automation engineers are experts in installing customized PLCs, drives and DCS components designed for your plant. All our automation systems are time-tested.



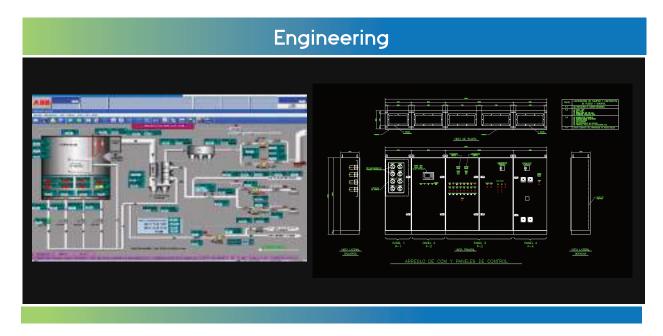


We specialize in designing and manufacturing electrical panels such as MCC and PCC for low voltage switchboards. Our hardware and spare parts are original and purchased directly from OEMs to ensure longevity and quality. We undertake turnkey projects that include everything from panel fabrication, wiring, software integration, creation of SLD, installation, commissioning and maintenance of an entire electrical automation system. Every product manufactured by us undergoes Flash testing to ensure safety. Every component used in our systems is ISI-approved.

Instrumentation



At AS Automation & Engineering Services, we use a methodical approach and innovative tools for designing, developing, and deploying automation systems and instrumentation. We supply sensors for temperature and pressure, and level and flow transmitters. We design and commission PID controllers for your floor. Our instrumentation service also include calibration and pre-adjustment of industrial systems



Engineering is an integral part of our society. Our primary engineering services include consultation and specification management. We also focus on delivering start-up support, field engineering, and cable scheduling, where you come to us with your vision for your dream plant and we engineer those dreams to come true. Our team of dedicated engineers create blueprints of your plant, fabricate the system, integrate the system with IoT, commission, maintain, and troubleshoot on your behalf. We also undertake basic designing and detail engineering at an economical budget.



We trade electrical, instrumentation, and automation products at extremely cost-effective prices. We have numerous products in our basket suited to various leading business houses engaged in the production of engineering goods, cement, steel, chemicals, pharmaceuticals, paper, printing, and other EPC companies. We are authorised resellers of ABB products. We deal in products from Siemens, Schneider Electric, Yaskawa, L&T, C&S Electric, Allen-Bradley, and Danfoss.

Our Products

Manufacturing Products of Tomorrow

Ac500 - Products Family PLC



ABB's powerful flagship PLC offers a wide range of performance levels and scalability within a single concept where most competitors require multiple product ranges to deliver similar functionality. Web server Integrated and EC 60870-5-104 remote control protocol for all Ethernet versions.

AC500-eC0 - Products Family PLC



Meets the cost-effective demands of the small PLC market whilst offering total interoperability with the core AC500 range. Up to 10 1/O modules connected to the CPU, fast counter onboard CPU up to 50 kHz, Web server, FTP server and Modbus-TCP for all Ethernet versions. A Pulse Train Output module is available for multi axis positioning.

AC500-S - Products Family PLC



A PLC based modular automation solution that makes it easier than before to mix and match standard and safety I/O modules to expertly meet your safety requirements in all functional safety applications. Extreme conditions version is also offered.

НМІ



Our control panels offer a wide range of touchscreen graphical displays from 3.5" upto 15". They are provided with a user friendly configuration software that enables tailor made customized HMIsolutions. Rich sets of graphical symbols and relevant drivers for ABB automation products are provided.

ABB Zenon



ABB Zenon software extends communications, machine to machine connectivity and application control possibilities for machine builders. The supervisory control and data acquisition (SCADA) software extends ABB's discrete automation portfolio which includes variable speed drives, motion control solutions, motor programmable logic controllers and human machine interface panels.

Drives and Motion Control



We offer an extensive range of motion and machine control solutions for diverse industrial applications. Our motion control products and low voltage AC drives include a choice of real-time Ethernet and high-performance multi-axis motion control. A broa d selection of capabilities includes communications options, drive-based functional safety features and programming tools to adapt to a wide range of applications. These products are focused on providing a complete motion solution for machine automation.

ACS880 Series Drives



These drives are customizable to meet the wide demands of various sectors. They can control a wide range of applications including cranes, extruders, winches, winders, conveyors, mixers, compressors, centrifuges, test benches, elevators, extruders, pumps and fans. Their features include coated boards and high enclosure classes, making the ACS880 suitable for harsh conditions. Additionally, every ACS880 drive is factory-tested at full load to ensure maximum reliability. It has all the essential features built-in reducing the time required for engineering, installation and commissioning.

ACS580 General Purpose Drives



ACS580 is built to simplify ordering delivery, and reduce commissioning costs. These drive can be used in multitudes of industries, namely: food and beverages, metal handling, printing, rubber and plastic, textile, sawmill, water handling, agriculture, automotive, etc. The best thing about ACS580 drives is that everything is provided in a single, compact, and ready-to-use package, so that you can take full control of your processes.

ACS560 General Purpose Drives



Engineered for general purpose applications, this range of drives can be effortlessly selected and are easy to commission. Their leading feature includes icon based display, energy optimizer, load analyzer, and built-in application macros. The highlight of these drives is their offerings constantly evolve to deliver more flexibility to meet your application needs. Therefore, they can be used in a wide range of industrial segments such as Plastic, Food and Beverage, Textile, Life science, etc.

ACS355 - Machinery Drives



For any system integrators, ACS355 range of drives from ABB are the holy grail. Being a highly cost-effective, versatile drive offering the best-in-class connectivity, this makes installation and commissioning extremely easy and saves labour time. Furthermore, it is especially designed to be space-saving, so that it can be easily fitted into cabinets. These drives have a wide range of fieldbus adapters that offer flexible connectivity. Its vector control enables seamless functioning of both asynchronous motors and permanent magnet motors.

ACS380 - Machinery Drives



ACS380 machinery drive comes in several variants ensuring seamless integration into machines and connecting perfectly to automation systems. With the integrated functional safety features, the ACS380 drive can also be part of the machine's safety system via PROFIsafe over PROFINET, which enables the motor to be stopped safely when required. The drive's software can be easily customized with adaptive programming to match any specific application requirements. Furthermore, it can be integrated into any industry machinery such as food and beverage, material handling and textile industry to name a few.

ACS150 - Micro Drive



The ACS150 variable frequency drive has an extensive list of programmable drive parameters that are used to achieve high performance with maximum versatility in many applications. The drive includes a variety of predefined I/O configuration macros, including ABB standard, 3-wire control, digital input control, PID control, hand/auto control and a PLC interface, for easy setup and commissioning. These micro drives are compact with multiple mounting positions and options. The drive features an integrated control panel with LCD display and built-in speed potentiometer that saves time with quick setup and simple configuration. Rapid programming and commissioning are possible using the onboard setup macros.

Soft Starters



ABB's soft starters increase the motor's lifetime by protecting it from electrical distress by optimizing the starting currents with conventional starting methods that put immense stress on the motor. These soft starters are also installation-friendly and can cut the assembly and startup time by being easy-to-use. With everything that you need in one unit, from bypass contactor to overload protection, a single Softstarter makes for a compact and complete starting solution.



Servo Drives



Servo drives are a part of ABB's Servo range of products that provides an extensive range of the motion and machine control solutions for the diverse industrial applications such as packaging, textile, printing, food and beverage, electronics and electrical. It helps system integrators, OEMs and machine builders reduce the energy consumption, increase the equipment uptime, and thus minimize the maintenance and increase the productivity.

Masibus Products

Data Acquisition and Protection

- Scanners
- Controllers
- Indicators
- Signal Conditioners
- Transmitters
- Vibration Monitoring
- IR Sensors & Pyrometers
- Wireless Process Instruments
- Calibrator
- Power Monitoring
- Event & Fault recording
- Time Synchronisation

Process & Control Instrumentation

- Measurement Instrumentation Products
- Actuators, Valves & Regulators **Products**
- Pneumatics & Solenoids **Products**



UL Products

Lutze make

- Diode Module
- DC-DC Converter
- Load Monitoring
- SMPS—Single And Three Phase
- Signal Converters
- Micro Compact Solid State Relay
- Relay Module
- Relay For DC Loads
- UPS Battery Management
- Crimping Tools

Relpol

- Interface Relays
- Industrial Relays
- Time Relays
- Industrial Relays for Solar System
- Solid State Relays
- Programmable Relays

Stego

- Smart Thermostat
- Tamper Proof Thermostat
- CR 030 Foot Mount Fan Heater 950W
- Hazards Area Heater
- Compact PTC Fan Heater
- Touch-Safe PTC Fan Heater
- Electronic Hygrostat
- HG 140 PTC Heater
- Mechanical Hygrostat MFR 012
- Small Semiconductor Heater
- Roof Filter Fan
- **Dual Thermostat**















Profibus details

- 1 Channel RS485 Profibus Repeater
- 2 Channel RS 485 Profibus Repeater
- Profinet 1000 Mbps IP 20 Connector
- Profibus Cable
- Profinet Cable
- Signal Chip For Profibus
- Profinet I/O Serial Gateway
- Profibus Master-Ethernet/IP Adaptor Slave
- Profibus Master-CAN Open Slave
- Ethernet/IP Adaptor Slave-Profibus Slave
- Redundancy Link Module For Profibus DP/FMS
- Profibus Dp Active Terminator
- Analog Input/Output Modules
- Real Time Ethernet
 Communication Controller
- Antennas for GSM Modules
- Antennas for NETLink® WLAN and vi Blu
- Anybus Communication
- X-gateway[™] Modbus-TCP
- M12 B TypeT-Splitter Connector
- ProfiHub B2+R 3 Segment PROFIBUS DP Repeater
- Bar graph indicator
- Profibus Coupler/Repeater
- CAN Bridge, Connecting CAN networks
- Profibus Troubling Shooting Kit
- Diagnostic Tool For Profibus And Fieldbus
- Distributed Profibus Interface, PAS 153
- Profibus DP DP coupler
- Elesta Relay

- ERTEC 400-PROFINET ASIC
 WITH 4 PORT SWITCH
- INDUSTRIAL 5-PORT MINI TYPE UNMANAGED ETHERNET SWITCH WITH 5X10/100BASE-T(X)
- Profibus Fault Generator
- Foundation Fieldbus Cable
- Fieldbus Network Link: Ethernet / PROFIBUS Gateway
- FLEXtra twin Repeater, PROFIBUS Repeater
- FOUNDATION Fieldbus Diagnostics Module
- Gateways for HART & FF
- Handheld PROFINET Cable Tester
- HART MODBUS GATEWAY
- HART to Profibus DP Gateway
- HART to Profibus PA
- HART to USB Interface
- Profibus T Connector
- Micro Memory Cards
- MODbus to FF built-in module, T611
- Profibus-DP Serial Gateway
- Modbus TCP Master/Slave-Profibus Slave
- MPI-Programming Adapter USB
- OPC Server for ProfiTrace (software only)
- Bus Connector for PROFIBUS, 90°
- PROFIBUS ACTIVE TERMINATOR T1
- Profibus Analysis & Test Tools-NetTEST II
- PROFIBUS Cable for DP Network Multi-stranded
- PROFIBUS Connectors-H
- PROFIBUS Connectors-P
- Profibus Display-Module (DM 6)
- PROFIBUS DP Master Redundancy Switch
- PROFIBUS DP Training Device
- Profibus Interface Card
- PROFIBUS Optical Hub

Toshniwal Products

PRESSURE TRANSMITTER (Absolute/Gauge/Differential/Remote Seal)

Applications - Water Industries ,Industrial Process Control,Power Generation, Integrated Steel plant...etc

FEATURES: Measuring Range Limits-

- \bullet -1 \sim 45 bar (Can customized as per pressure range) for DPT
- \bullet -1 ~ 600 bar(Gauge Type PT)
- 0 ~30 bar(Absolute Type PT)
- 0 ~1 to 200 mH2O(Submersible Type PT)



TEMPERATURE TRANSMITTER

Applications - Major use in Steel industry, Cement industry, Power etc.

FEATURES

- High accuracy (< 0.1% FS)
- 2 wire technology, 4 to 20mA analog output
- Universal Input (RTD, T/C. VDC,Pot) & Range with HART protocol
- Sensor head/ DIN Rail/ Field mounting



LEVEL TRANSMITTER

Pulse Radar Level FMCW Radar Level provides distance measurement

FEATURES

- Solid, Corrosive Liquid and Non Corrosive Liquid
- Standard HART /MODBUS protocol
- Application with moderate fuming and foaming conditions
- 4 ~ 20mA standard current output
- Supports mobile APP software/Bluetooth/WiFi
- Pole/Horn/Lens type Antenna
- Freq 26 GHz / 80 -120 GHz



FLOW TRANSMITTER

THERMAL MASS FLOW METER FEATURES

- Measuring the mass flow or volume flow of gas
- Wide range: 0.5Nm/s ~ 100 Nm/s for gas
- Easy installation
- Dual power (AC220V+DC24V) available
- High accuracy: $\pm 0.5\%$ of reading, $\pm 0.3\%$ and $\pm 0.2\%$ optional, velocity > 0.3 m/s



TURBINE FLOW METER

Applications - • Process Industries -Cement, Power and Chemical - Diesel, clean liquid (Low Viscous liquid)

• Liquid, water, diesel (Without Impurity, Low viscosity)

FEATURES

• Line Size: 4 to 300mm

• Accuracy: +/-1%

• For All Clean and Low Viscous Liquids

• Temperature: (-)40°C ~ 350°C

• Thread/Flange connection

• Output: 4-20mA,RS485/HART



VORTEX FLOW METER

Applications - Best solution for Saturated Steam, Superheated Steam

FEATURES

• The accuracy level: 1.0

• Nominal pressure: 1.6 MPa, 2.5MPa, 4.0MPa etc

• The pressure loss:resistance coefficient CD≤ 2.4

• Be measured medium temperature:-40 C~350 C

• Power supply:12~24VDC



OVAL GEAR FLOW METER

Applications - LDO HFO Oil flow measurement, High viscous oil flow measurement E

FEATURES

• Available line size: DN8 to DN200 mm

• Output/ Communication:Pulse, 4~20mA.DC, RS485

 Display: Accumulative Flow, Single Measurement (Mechanical Dial), Remote transmission of total and instantaneous flow



ULTRASONIC FLOW METER

Types - Portable Series Flowmeters, Clamp on series, Insertion type

Applications - • Power Plants & Generating Facilities (DM Plant, Open Channel, CW Lines)

• Water Service & ETP (mobile measurement, flow rate calibration, data comparing)

FEATURES

- Line size 15mm to 6000mm
- 4 to 20mA, RS485 & Data logger function
- Non-invasive transducers
- Wide bi-directional flow range of 0.01 m/s to 32 m/s
- Easy installation, No Pipe cutting and flange mounting is required





CORIOLIS MASS FLOW METER

Applications - Diesel, Petrol, clean liquid (Low Viscous liquid), LPG & CNG, Food Industry

FEATURES

- Meter size DN 10 ... DN 150
- Accuracy: ± 0.1~0.5%
- Measuring tube material: SS316L, housing material: SS304
- Operating temperature: -50~+200°C
- Power supply: 18~36VDC power >7W; 85~265VAC power:10W





ELECTROMAGNETIC FLOW METER

Applications - Water / slurry flow measurement in effluent treatment plant, Borewell water flow measurement etc.

FEATURES

- Measure forward and reverse direction flows
- Built-in reference electrodes
- High protection grade, IP65, IP68
- No moving parts, no pressure loss
- \bullet High accuracy: $\pm 0.5\%$ of reading, $\pm 0.3\%$ and $\pm 0.2\%$ optional, velocity > 0.3 m/s



OTHER PRODUCTS

ENVIRONMENT MONITORING















PYROMETERS













THERMAL IMAGING CAMERA















Electrical Products

CONTROL PANELS

- · Complete design & assembly capability
- Independent QC department
- In-house automation team
- Site commissioning team
- Schematic & Outline drawing
- Completely prewired, for easy installation

- CNC construction
- Safe and reliable operation
- Certified panels from IP42 to IP65
- Components from Tier 1 vendors
- Labelled and colour coded wiring
- 3D-CAD (E-plan & Auto CAD)
- We engaged in supplying and manufacturing a wide range of Control Panels.
- These panels are made using quality raw materials as these high performing control panels are used widely over in many industrial and other applications.
- The flawless design and superior framing of these panels have made it the first choice of the customers.

PCC (POWER CONTROL CENTER) PANELS



Owing to our expertise in this domain, we are engaged in offering a supreme quality PCC Panel that is used to supervise and control the voltage of power systems. Power Control Center panels for various industrial applications to provide reliable and effective distribution service. They are used to supervise and control the voltage and reactive power of the power system.

The panels will undergo pretreatment for Decreasing, Water rinsing & De-rusting/Phosphating, It will be painted with Powder Coated or Synthetic enamel as per the requirements. Bus Bars/Internal Wiring uniform cross section and supported by SMC/DMC bases. Earthing Bus Bars will be running all along the Panel. Some of the Applications of PCCs are Dairy, Plastic industry, Refrigeration plants.

MCC (MOTOR CONTROL CENTER) PANELS



We design & manufacture low voltage switchgear panels & motor control center. Our in house design & good engineering practices in manufacturing combined together forms the ideal solution to the most demanding motor control applications throughout the industrial market.

- CNC construction
- Safe and reliable operation
- Certified panels from IP42 to IP65
- Components from Tier 1 vendors
- Labelled and colour coded wiring
- 3D-CAD (Solid works & Auto CAD)
- Easy operation
- Controlling heavy starting currents.

LIGHTING PANELS



It allow the most cost effective ratings for the particular application. Two and three-pole breakers may be fitted with a range of internal accessories (shunt trip, undervoltage release, auxiliary switch, bell alarm). When fitted to the three-pole mounting base, the TEY family circuit breakers can be used in unit mount/lug-lug type installations.

APFC PANEL



Designed with the concept of modularity which allows upgrading of kVAR rating as and when required. Advanced microprocessor based relay used to ensure real time power factor correction in the installation. Current limiting contactors are used which are specially designed for capacitor switch.

- Modular to upgrade, up to 500 KVAR
- Capacitors : L&T, ABB, Epcos
- PF controllers : Epcos , L&T, Schneider
- Thyristorised or contactor based
- Designed with the concept of modularity.
- Easiness in operation, very low manual intervention.
- Avoid power factor penalty.

PLC PANELS



We are a reckoned organization engaged in manufacturing and supplying a comprehensive range of PLC Panels. These panels are highly appreciated for their longer functional life, easy installation and low maintenance. Our professionals make optimum utilization of the resources and develop excellent quality range of panels for the clients. Our professionals make sure to deliver effective range of panels at nominal prices to the clients.

- •SS / MS / FRP / FLP Panels
- Integrated with PLC, HMI, Barriers, VFD etc
- HMI's with screen size 3.5" to 22"
- PLC's from Siemens/ AB / FUJI / Mitsubishi ABB / Schneider / Delta, etc
- Desk type / Floor standing / Wall mount
- Customised as per requirement

VFD (VARIABLE FREQUENCY DRIVE) PANELS



- AHU / Chiller control
- Pump / Motor / Blower speed control
- Reactor control
- Conveyor / Crane system
- Remote / Local / Bypass control options
- 1-400 HP (0.7457 KW- 298.28 KW) drive panel
- Siemens/AB / Danfoss / Mitsubishi / ABB/Yaskawa / Delta

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



Test Report Number

: CPRINOAHVMISC23T0395

Name and Address of the Customer

M/s AS Automation & Engineering Services Private Limited

6-102, Incois Road, Kakatiya Hills Pragathinagar Medchal-Malkajgiri

Telangana-500090

Name and Address of the

Manufacturer

M/s AS Automation & Engineering Services Private Limited

6-102, Incois Road, Kakatiya Hills Pragathinagar Medchal-Malkajgin

Telangana-500090

Particulars of sample tested

Type

415 V. 4000 A L.T. Panel Main Electrical Panel

Description of test sample Serial Number

: Refer sheet 2 of 6 : ASA/2023 24/541

Number of samples tested

: One

Date(s) of Test(s)

: 19 July 2023

CPRI Sample code Number(s).

: NOAHVMISC23S0367 : Refer sheet 3 of 6

Particulars of tests conducted Test in accordance with

As per customer requirement & procedure generally followed as per

Standard/Specification

IS/IEC 61439-1: 2011 & IS/IEC 61439-2: 2011

Sampling Plan

Customer's Requirement

: Temperature rise limit 70 K (max)

Deviations if any

Nit

Name of the witnessing persons

Customers representative

: Mr. Srinivas Bodupalli

Other than customer's

representatives

* NR

Test subcontracted with address of

the laboratory

: Nil

: Six

Nil

Nil =

Documents constituting this report (in words)

Number of Sheets Number of Oscillogram(s) Number of Graph(s) Number of Photograph(s) Number of Test Circuit Diagram(s) Number of Drawing(s)

One : Nil Three

3

(Gangeshwar Singh) Test Engineer



(M.K. Jaiswal) **Head of Division** Reviewed and Authorized by



Companies that have trusted **AS Automation & Engineering**

Shaping Future

We consider our customers as family and we are constantly welcoming more members in this family.









































OEM

Infra







Steel









Food & Braverages

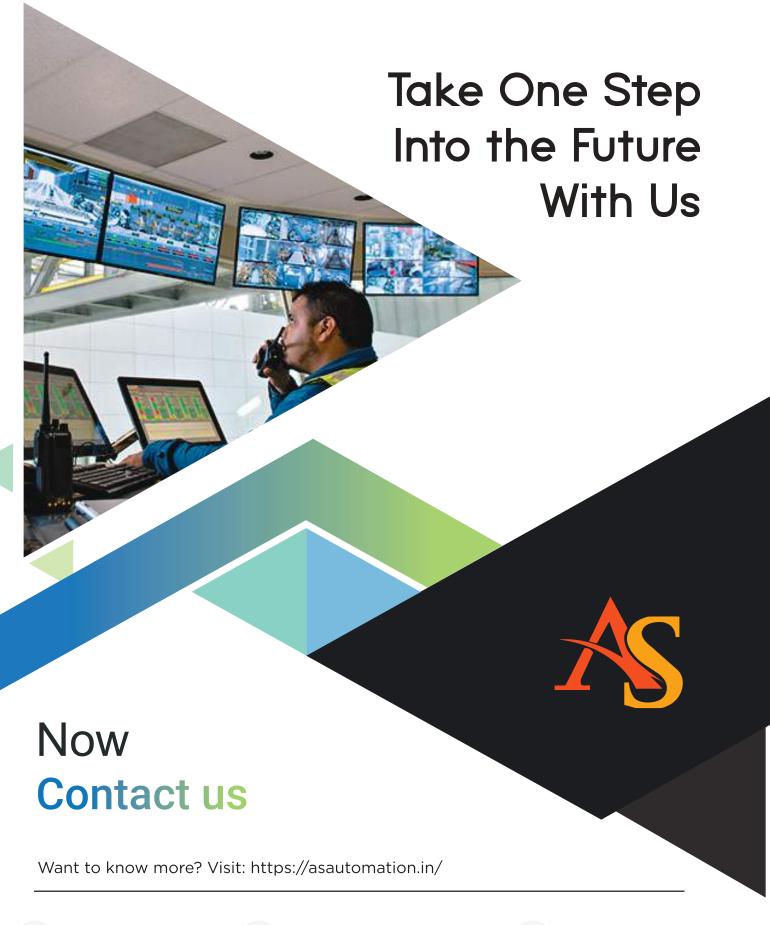














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