

Matters of pride & precision





About Gayatri Control

Established in 1995, Gayatri Control and Automation Private Limited in a short span has taken giant strides and carved a unique niche for itself as a leader in the world of Control Panels. An ISO 9001:2000 company since 2003, GCAPL name is today a recognised and very well established name known in the Automation Industry for its top end quality Control Panels -- custom made as per the requirements and specification of different customers. Thanks to the approach of providing consistent, accurate and quality products, GCAPL has successfully developed a wide customer base not only in Gujarat and India but also overseas.

GCAPL manufactures Control Panels to meet the needs and requirements of different industries – from plastic machinery to road construction machinery, rolling mills to material handling equipments, air compressors to printing and packaging machinery. Also on the anvil are plans to further expand the scope to other manufacturing industries.

Other than our standard range, we have the highest technological capabilities to offer suitable tailor made system as per specific requirements of the customer. We have the skills to offer value addition at low development lead time and cost.

Infrastructure

At GCAPL we have ultra modern manufacturing unit with the latest infrastructure and testing facilities to supply the perfect quality product to our customers. The technologically advanced machinery serves as the backbone and plays a pivotal role in our technocrats' proficiency to deliver astonishing results. We have a team of highly qualified and self motivated professionals – both on the technology front and the sales and marketing side who set standards to meet the most rigid specifications. Customers get the necessary guidance and advice to choose the best option available form a wide array of choices. An option that is not only the best but which is cost effective and meets the specific requirements. Team GCAPL believes in keeping adaptability, productivity, quality and delivery on the forefront and this provides a holistic growth to every individual efforts.





GCAPL philosophy is total customer satisfaction because the belief here is CUSTOMER IS THE KING. At GCAPL it is the Customer who is important and not the size of the order! We strongly advocate the philosophy that each customer's specific need should be satisfied. Commitment to quality, competitive pricing structure, timely delivery and an all-round assurance for customer support has continuously added new customers to GCAPL customers list while retaining, strengthening and consolidating ties with the old. GCAPL boasts of long term relationships with most of its customers.

As a company whose success derives from its fully committed and close working partnerships with its customers, GCAPL believes a customer should be happy with the system performance and how GCAPL products help in overall improvement in work environment and reduction in labor inputs. A close working partnership with its customers, our focus at GCAPL is on providing a positive and flexible approach towards customer needs through our highly professional and cost effective comprehensive solutions and service capabilities.

Come to GCAPL for all your Control Panel needs and experience the difference!

At GCAPL we take this opportunity to extend our genuine and sincere thanks and gratitude to all our highly valuable and esteemed clients who has posed and invested immense trust in our company.

Quality

Our company has scrupulously followed one golden principle -- Never Compromise on Quality. And this has placed us as one of the front runners in the industry. Owing to this we have been ISO 9001:2008 certified for our quality standards and have also been recognized as per the German standards since 2003.

A constant and continuous approach to develop new products coupled with GCAPL unwavering focus on catering to the needs of the industry has reaped rich dividends. It has helped GCAPL business grow exponentially and prepare for the changes and challenges of future. All products of GCAPL rely on our own expertise and technological skills with much appreciated inputs from our valued customers without resorting to any collaboration and technical assistance from outside.

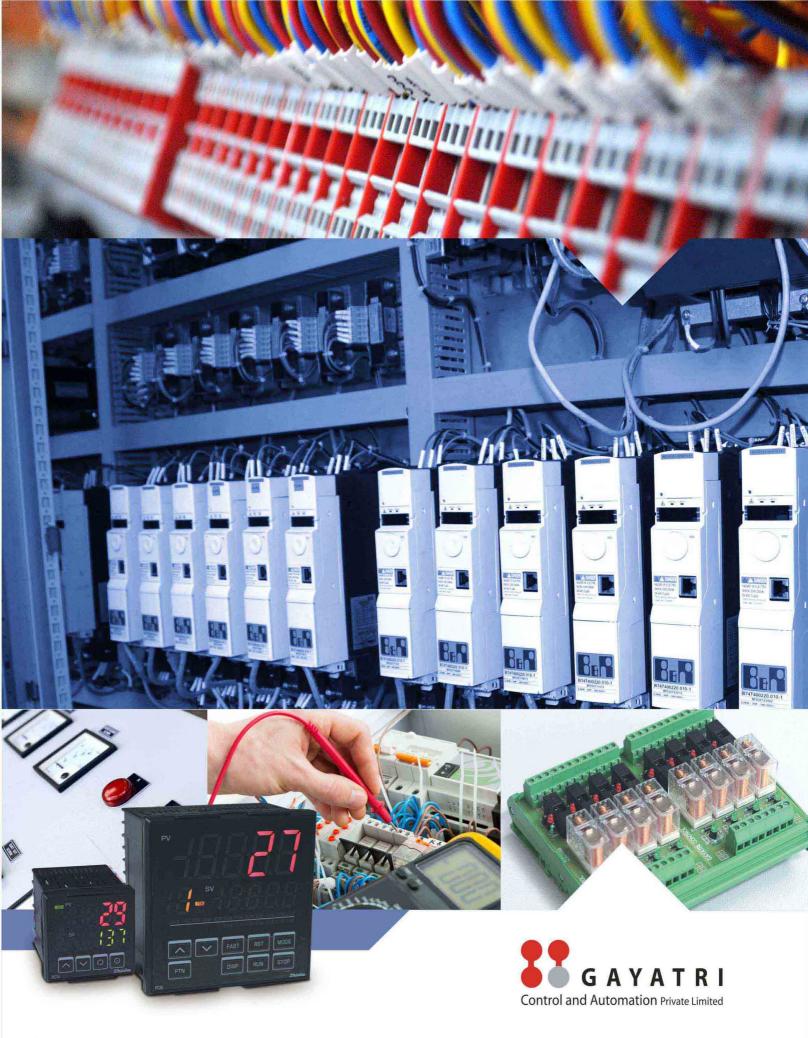
With total satisfaction to customers being of paramount importance to us, no wonder, GCAPL products have earned a name for giving optimum perform in the most trying of circumstances with unparalleled satisfaction levels.

GCAPL emphasis on Quality, Productivity, Delivery and HRD has further added to the company's fast track growth.

Quality Policy

At GAYATRI CONTROL & AUTOMATION PVT LTD we are committed to design, manufacture and supply digital instruments, drives and control panels with conceptualizing latest technologies to our customers in time and to their total satisfactorily. We will maintain market leadership in our business through continuous improvement in our product quality and providing our customers timely services through dedicated and trained employees.

Jignesh Pandya (Director)







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Control Panel Manufacturing

GCAPL offers a full array of control system manufacturing services, from industrial automation for large batch orders to custom fabrication for unique applications. Regardless of the product or service, our commitment to excellence in quality and service means that we'll deliver your panels to the right specification, when you need them, at the right value.

Engineering & Design

With the increasing intricacy of machinery and process systems, the importance of having well-designed, efficient and reliable control systems is essential. GCAPL offers a full array of engineering and design services with expert design software like EPLAN. Engineering staff is able to provide assistance on individual elements of the design and manufacturing process or on a turn-key system solution for design through installation.

System Integration

GCAPL approaches system integration systematically, viewing each step in the process as essential to creating a unified, well-designed control system. Our system engineers and manufacturing technicians have a long history in selecting, configuring and assembling components. Working together, they are able to work through the challenges of component connectivity and compatibility to create control systems that are functional, intelligent and able to stand the test of time.

System Architecture

Combining creativity and a sense of value, our engineers are experts at designing the right system for each application. GCAPL tailors the scope of each project to provide the level of design detail appropriate to the application. Our control system design package may include PLC and HMI platforms, Batch Control, SCADA, RTUs and Redundancy.

Installation & Start up

Without correct installation and testing, even the best-designed control systems risk not performing properly. Our installation department is staffed by highly qualified journeyman and master electricians who work onsite until the complete system — hardware and software — is operating to our customer's satisfaction. Services include Instrumentation, Testing, Training and Documentation.





Machine Automation

Since 2003, GCAPL has developed automated solutions for manufacturers around the Globe. Today, we positioned to provide you with the equipment, skills and resources for integrating the automated systems that can keep you ahead of the rapidly evolving global marketplace. We provide solution using Programmable logic controllers to integrate with Motion control and Variable frequency drives. We design and install the machine control with single stand control using HMI's to optimize efficiency and easy going operating in less time.

Process Automation

A process control or automation system is used to automatically control a process such as Chemical, Oil Refineries, Paper and Pulp factories. The DCS (Distributed Control System), which is traditionally proprietary. Process automation simplifies this with the help of sensors at thousands of spots around the plant that collect data on temperatures, pressures, flows and so on. The information is stored and analyzed on a computer and the entire plant and each piece of production equipment can be monitored on a large screen using SCADA (Supervisory Control and Data Acquisition) in a control room. GCAPL fulfills such needs with the required safety standard and process information.

Machine Vision System

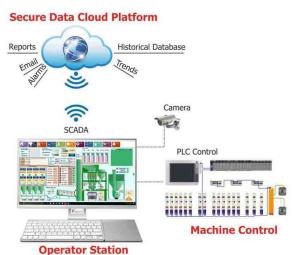
We provide vision inspection solutions for precision applications while offering a suite of intelligent inspection and quality assurance processes to the next level. Our learning-based technology transforms the quality assurance process by driving down operating costs, reducing risk and improving quality with unprecedented speed and accuracy. Our intelligent machine vision system improves quality control, reduce development time, drive down operating costs and increase productivity.

Industrial IoT from Gayatri Control Solutions

Our Industrial IoT solutions give your organization the power it needs to be more productive and the insight to help reduce safety risks. This allows you to better safeguard your personnel and communities, extends the life of your assets, and creates greater efficiencies across your operations.

Comprised of four different components, our Industrial IoT portfolio provides an end-to-end solution, customizable for a variety of





applications. SCADA remote terminal units (RTUs) help you operate more efficiently with powerful process automation and expansive communication capabilities seamlessly integrated across your organization. M2M modems expand your organizational view and control by enabling further operational technology connectivity and data communication. A Network of Networks integrates devices across a variety of communications systems for enhanced reliability, coverage and the ability to better leverage the networks you already have in place. And, Partner Solutions deliver the complete integration and development of intelligent control and monitoring solutions from the sensors at the edge, to the application interfaces in the control room.

Industries 0

Control and Automation Private Limited



Packaging

Today's solutions require more flexible automation with intelligent electronic systems to meet customers changing demands and synchronies multiple axes. You need to increase the performance of your machine and reduce changeover time. You must also speed up time-to-market & reduce commissioning time. GCAPL's innovative packaging solutions can save up to 30% time to market by intelligent control systems, increasing performance, modularity and flexibility while reducing wiring and panel space. Automation solution increases performance and flexibility through high production speed, fully automated changeover, easy customization at very low cost.

Construction

We have engaged experienced techno crafts to ensure the quality product and each and every of our panel are being closely monitored and tested for accuracy. Our panel's are also USER FRIENDLY. We provide totally CENTRALIZED CONTROL with latest microprocessor based technology, which gives easy function keys and sufficient display functions to enable the operators to work with ease. Its feather touch keyboard is so sophisticated that you will feel the operation of heavy machinery very smoothly. Our control panel is very sturdy in Design and it is equipped with output cable box for easy connections. We provide advance systems like SCADA and CCTV to improve productivity along with perfect report system and real time view.

Textile

GCAPL provides integrated automation solutions for all types of textile machines, making us the ideal partner for those seeking a complete solution. GCAPL developed specifically for multi-axis operation, brings together a whole range of advantages for textile machine manufacturing with the advance servo system and variable frequency drives and stubble communication. The devices can be equipped with various cooling systems, which mean that they can be cooled optimally no matter how or where they are installed – even in the toughest environments.

Minerals & Cement

Rugged GCAPL solutions can optimize your Minerals & cement operation, from system design through maintenance, from quarry through packing and dispatch. Information-enabled solutions, motor control technologies and powerful operator workstations are key to reducing regulated emissions, reducing per ton production costs and achieving the functionality you need. You can span multiple control disciplines in a single, easy-to-use programming environment and access to the real-time information you need to maximize productivity and flexibility with our Automation solutions.

Rubber

Rubber production is based on a very complex process that requires control and coordination of different production stages. Compliance with top-quality standards is just one of many entrepreneurial challenges the sector has to face. Through the application of top-quality industrial components GCAPL provide ample computing power for sequential control and Motion Control on a single platform.

Material Handling

For general bridge and gantry cranes that adopt variable frequency speed control, it is recommended that special-purpose variable frequency motor be used. Our frequency inverter provides close-loop vector control way for hoisting mechanism, open-loop vector control way for big and small cart mechanisms, which ensure hoisting mechanism does not slip at low speed and full load, big and small carts mechanisms start and brake smoothly. It is highly integrated, and special-purpose function for crane can be realized without using PLC.

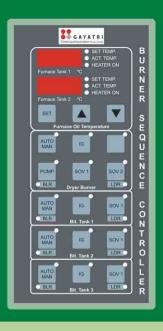
Furnace & Foundry

An electric arc furnace as equipment to smelt ore at high temperature, has the advantage of flexible techniques, easily controlled furnace temperature and small land area, and it has been widely applied in Furnace industry. GCAPL's system can meet strict technical requirements, supply reactive power current and stable bus grid voltage to electric arc furnace, increase metallurgic output of active power, improve production efficiency and reduce influence of flickering to maximum. We provide thyristor power controller which are up-graded with advanced digital technology. It may reliability and stability temperature control due to advanced digital technology.









Burner Sequence Controller

- High speed micro controller
- All in one controller compatible with various Plants
- Isolated Input / Output with on board indication
- Multifunction Display for all operation
- Easy to operate and calibrate with help of direct access of Keyboard
- Two Temperature control with Thermocouple open indication
- Temperature hysteresis function used for deviation settings to avoid frequent start and stop operation of burners.
- Auto / Manual selection for each burner sequence
- Isolated communication RS485
- Easily detachable wire connectors

Drum Mix Controller

- 32-bit Harvard architecture low-power microcontroller with Powerful arithmetic operations, Supply Voltage Sensor and Power ON Reset functions.
- All in one controller compatible with various Plants
- Isolated Input / Output with on board indication
- Multifunction Display for all operation
- Inbuilt Real Time Clock
- Easy to operate and calibrate with help of direct access of Keyboard
- 24 bit analog input for Load cell
- Temperature control with Thermocouple open indication
- Temperature hysteresis function used for deviation settings to avoid frequent start and stop operation of burners.



- No-flow indication for each bin
- Isolated communication for AC/DC Drives
- Moisture correction function
- On screen Temperature indication for Bitumen Tank 1 2, Aggregate and Mix Material
- Easily detachable wire connectors
- Long life battery backup for data protection
- SCADA / PC interface

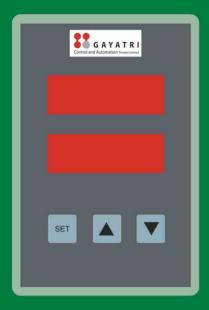


Controllers





GAYATRI
Control and Automation Private Limited



Wet Mix / Drum Mix Mobile Controller

- Display the aggregate weight & Water /
- bitumen weight
- Two 4-digit led display
- Navigation , and selection ENT keys
- Connect with Various Drives
- Compact Din Mounted design



THYRISTOR POWER REGULATOR



Self Loading Concrete Mixer Controller

- High speed micro controller
- All in one controller compatible with various Plants
- Isolated Input / Output with on board indication
- Thermal Printer Connectivity
- 24 bit analog input
- Easy to operate and calibrate with help of direct access of Keyboard
- Easily detachable wire connectors
- USB Data Storage

Thyristor Power Controller-Digital

- Micro-Controller based
- Digital Display & keys
- All types of protective functions
- RS 485 interface
- Operation by remote control
- Compact size

Control Input: Current: DC 4-20mA.

Contact : Zero Voltage

Output Voltage: 97% minimum. 50/60Hz of Input Voltage
Control Mode: Selectable: Phase Angle/Zero cross

Possible Load: All Resistance Load Transformer Primary

Current Rating: 35A,50A, 80A, 100A, 120A, 150A, 200A, 250A, 500A

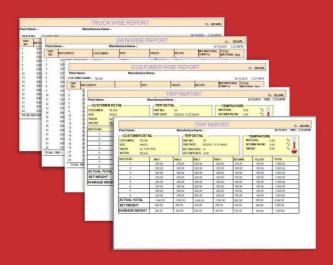
Voltage Range : 100, 220, 380, 415, 440, 460V AC-50 / 60Hz

Asphalt Batch Mix Control Panel & SCADA











Our Asphalt Batch Mix system uses touch screen PLC technology with Individual SCADA System to integrate all the batching functions into one integrated controller which provides real time batching control on a PLC and all in one PC. Windows based user-friendly system will inspire you with how quickly a new operator can learn the system. Asphalt Batch Mix Plant can be operate and monitor from two place, which allows you uninterrupted smooth production process. Alarms messages with history of fault warning. Total 99 Recipes can be configured according to batch requirement for fast production. Any part of the Asphalt Batch Mix plant can be run manually and controls are customized to your exact plant needs. Fully interlocked system complies with all safety standards for global market to prevent accidents and lost time GCAPL provides the precision necessary for today's increasingly sophisticated Asphalt batching control with latest technology.

Advantages of Asphalt Batch Mix SCADA

- Asphalt Batch Mix SCADA monitors and controls the processes which ensure to achieve the required performance consistently.
- All the operations can be controlled from a single central location.
- It reduces the dependency on labour force for operational requirements, as it is automated, improves the quality to high standards.
- Asphalt Batch Mix SCADA stores all the data in its database server, thus if required, the data can be accessed in the future to assess the performances.
- The site engineer or the construction manager has a control over all the processes at centralized location.
- It is difficult to monitor the temperature variation in bituminous mix during transportation from plant to site; However, Asphalt Batch Mix SCADA removed this difficulty.

Industrial Control Panels







Plastic

Extruder Machine
PVC Pipe Threading and Cutting Machine
PPTQ Film Plant
Compounding Plant
HM-HDPE\LDPE\LLDPE Blown Film Plant
Pipe Extrusion Lines

Packaging

Bag cutting and Stitching Panel Bag Closing Systems Woven sack Machine Belt Cutting Machine

Construction

Asphalt Drum Mix Panel Asphalt Batch Mix Panel Wet Mix panel Cement Concrete plant Crusher plant Stone Cutting Plant

Safety is Top Priority

marking is a mandatory marking for product safety. It is a must for all the products being placed in the market. At GCAPL the safety levels of all the products is attuned and raised during the process of harmonization. In most of the European countries, safety and health has already been the subject of directives for many years but the safety level is not always satisfactory.

Textile

Yarn twisting machine Ring Twisting Machine Con winder, Cop winders Lab Dyeing machine

Rubber

Reclaim Machinery Pin Barrel Extruders Mixing Mill

Material Handling

EOT Crane
Overhead crane
Tower Crane
Wall Travelling Cranes
Gantry Cranes
JIB Cranes

Furnace & Foundry

Thyristor Power regulator Furnace Controllers PID multi-loop Controllers Paperless Recorder Data Logger

Minerals & Cement

Electro Magnetic Vibratory Feeder Motorised Vibratory Feeder Multi Roller Magnetic Separator Weighing System Cement Feeding Plant



UL Listed Control Panel

What Is UL 508A?

UL 508A is the UL Standard for Safety of the construction of Industrial Control Panels. This includes proper component selection, wiring methods, and calculation of short circuit current ratings.

UL considers an Industrial Control Panel (ICP) an assembly incorporating two or more pieces of industrial control equipment or related control circuit devices, provided with interconnecting wiring and terminals for connections in the field.









Head Office & Factory





Control and Automation Private Limited Matters of pride & precision

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