

COMPANY PROFILE

Incepted in the year 2005, we "Creative Automation & Controls," are amongst the prominent companies dealing in automation equipment and software for manufacturing plants.

We also offer excellent services such as up-gradation of manual or semi automation plants, modules or systems; turnkey solution for automation engineering; PLC validation and execute projects for instrumentations and maintenance. The automation services offered by us can also be customized as per the specific requirements of our clients in various industries.

We offer services for instrument automation and installation to various industries. Our services include DCS, PLC, and HMI/ SCADA, PLC Control Panels, AC Drives Panels, DCS/PLC systems validation and turnkey automation projects.

Capitalizing on the industrial experience and expertise of our professionals, we are also able to offer services in data logging software development, protocol development. Our experienced team allows us to cater to various industries that demand instrumentation, industrial automation, repairs and retrofitting solutions

We have with us services of experienced industry professionals comprising of engineers, software personnel and quality personnel. They work in close collaboration with each other to ensure clients get reliable and timely automation and installation services as per their specific requirements.

Apart from the solutions delivered, we also offer operation's team at client's end requisite training that help them to keep themselves abreast of latest technology and industrial requirements.

Some of the main activities of our organization include:

- Up-gradation of manual/ semi automation plant images/ modules/ systems to fully automatic
- Providing turnkey process automation engineering, supply, erection and commissioning
- Installation & commissioning of field instruments makes yokogawa, ABB, Forbes Marshall, Krohne Marshall, Berthold, emerson, Hach-GLI,
- Supplying Allen-Bradley/Siemens PLC systems complete with application software
- Supply of control cabinet, designing, engineering, commissioning
- State of art training center for training of project and maintenance engineers on Allen-Bradley, Siemens PLC's, and plant instrumentation maintenance.
- Documentation like system architecture preparation from process P&ID to cable schedules, IO schedules, control philosophy of operation & implementing successful commissioning
- Sophisticated data logging software development, protocol development, on line gauging system development
- Supplying of instruments /spare parts required by our clients.

BEING FREE-LANCER WE HAVE HANDS ON EXPERIENCE ON FIOLLOWING BRANDS OF PLC, DCS, HMI & SCADA SYSTEMS FOR ITS PROGRAMMING, AND COMPLETE INSTALLATION & COMMISSIONING.

- Rockwell
- Siemens
- ABB
- GE Fanuc
- Yokogawa
- Honeywell
- Schneider
- Delta
- Omron, Idec
- TECO, LG, Samsung
- Unitronics
- Messung, Mitsubishi
- Renu Electronics
- Proface
- JK Finner
 - Erection, Installation, and commissioning of various make instruments for various Industries

Hands on Experience on following makes of Instruments

- Endress+Hauser
- Yokogawa
- Emerson
- Forbes Marshal
- Berthold
- Wika, Pune Techtrol

Hands on Experience on following makes of Equipment's

- Alfa Lavel
- Forbes Marshall
- MAN BMW
- Alstom
- Triveni
- Kirloskar Brothers
- Pepperl-Fuchs
- Uttam Sucrotech
- Shamraj

Successfully installed projects in following Industries using above mentioned makes of PLC systems and Instruments

- Atomic
- Automobile
- Oil & Gas
- Cement
- Infrastructure
- Power Generation
- Water Treatment
- Paper
- Food Processing,
- Agriculture & Pharma
- Sugar
- Dairy

LIST OF FEW SUCCESSFULLY COMMISSIONED AUTOMATIONS PROJECTS

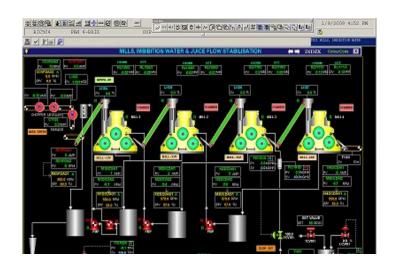
1) Auto Cane Feed Control in Sugar Plant.

- Carrier speed control using cane preparatory devices.
- Individual Mill speed Control
- GRPF & Mill speed Synchronization
- Inter Carrier interlock system
- Auto Imbibition water flow Control
- Auto Imbibition water temperature control
- Report Generation for day wise, operator wise, hourly crushing rate.
- Control using PID loops & controlling analog devices at discrete level.
- SCADA animation & remote devices interface on Modbus.
- Crushing rate control as per the juice requirement from boiling section
- Raw Juice flow stabilization system.

Listed below few clients or the end users where <u>auto cane feed control system</u> is designed /developed/installed

/commissioned/tested by us

- Rena SSK
- Athani Farmers
- Gurudatta Sugar
- Pandurang SSK
- Vishwasrao SSK
- Bhima SSK
- Kisanveer SSK
- Loknete Baburao Patil SSK
- Servodaya SSK
- Ramdev Sugar
- Narmada Sugar
- Indreshwar SSK
- Bhairavnath SSK



- Shankarrao Mohite SSK
- Sant Damaji SSK
- Lokmangal SSK
- Raitar Sugar
- Renuka Sugar, Hawalga
- Shambhu mahadev sugar factory
- Rajarambapu SSK
- White Nile Sugar Company, Sudan
- Fiji Sugar Corporation, Fiji
- Tendaho Sugar Factory, Ethieopia

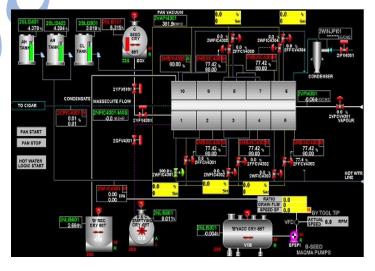
2) Continuous Pan Automation for Sugar Plant.

- Control using PID loops & controlling analog devices at discrete level.
- SCADA animation & remote devices interface on Modbus.
- Continuous Pan Automation for brix control.
- Grain feed control
- Vapor flow control
- Installation, commissioning & testing of smart Automatic Shift wise data logging & report making.
- Automatic data logging for online & historical trend view of various electrical, machine & process parameters.

Listed below few clients or end users where <u>continuous pan automation</u> system is designed/developed/installed/co mmissioned/tested by us

Kaktia Sugar

- Symbholi Sugar
- Modi Sugar
- Banari Amman
- Nira Bhima
- Kranti SSK
- Ashoka SSK
- Sadashiv SSK
- Krishna Athani
- Gangakhed Sugar
- Krung Thai Sugar, Thailand
- Hexa corporation, Thiland
- <u>Tendaho Sugar Factory</u>, <u>ehieopia</u>



3) Batch Pan Automation for Sugar Plant.

- SCADA animation & remote devices interface on Modbus.
- Batch Pan Automation for brix control.
- Batch type pan automation for brix control
- Installation, commissioning & testing of smart instruments.

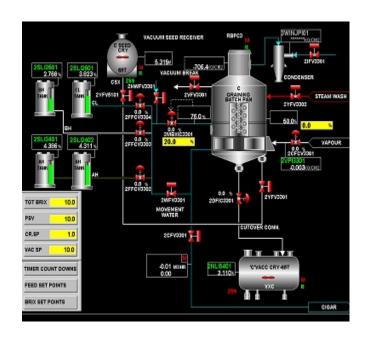
Listed below few clients or end users where <u>batch pan automation</u> system is designed /developed/installed/commissioned/tested by us

- Banari Amman
- Gangakhed Sugar
- Hexa, Thailand
- Dudhganga-Wedganga
- PT Labinta Sugar, Indonesia
- KTM sugar factory, Indonesia
- Wonji Soa, Ethieopia
- Tendaho Sugar Factory, Ethieopia

4) Melter & Molasses Conditioner, Centrifugal(Cont. & Batch type) Automation System.

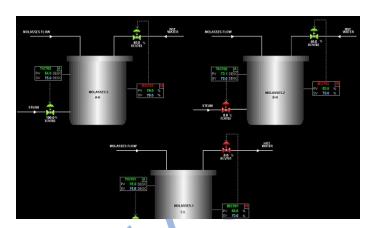
- Control using PID loops & controlling analog devices at discrete level.
- SCADA animation & remote devices interface on Modbus.
- Juice Sulphitation & chemical(mol) mixing in raw juice to achieve desire PH using PLC and PID based system
- Molasses conditioner brix control system.
- Molasses conditioner temperature control system
- Installation, commissioning & testing of smart instruments.
- Automatic Shift wise data logging & report making.
- Automatic data logging for online & historical trend view of various electrical, machine & process parameters (voltage, mill current, TRIL, mass flow, Water flow, PH, Brix etc).
- Centralized data monitoring & report making system for all sections.

Listed below few clients or end users where boiling house automation system is designed



/developed/installed/commissioned /tested by us

- Banari Amman
- Kaktia Sugar
- TKIL, Sukari Kenya
- West Kenya Sugar Co.
- Fincha Sugar Ethopia
- Wonji Ethopia
- Empee Sugar
- Nirani Sugar
- Terna SSK
- Rajarambapu SSK
- Servodaya SSK
- Nandi Sugar
- PT Labinta, Indonesia



5) Evaporator Condenser and Boiling House Automation System.

- Control using PID loops & controlling analog devices at discrete level.
- SCADA animation & remote devices interface on Modbus.
- Vapour feed control fro evaporator Systems based on density/Brix of final effect
- Juice Feed Contrrol For Evaporator System based on level feedback
- Falling Film Evaporator Automation System
- Plate Type Evaporator Automation System.
- Injection Water Control for condenser.
- Installation, commissioning & testing of smart instruments.
- Automatic Shift wise data logging & report generation.
- Automatic data logging for online & historical trend view of various electrical, machine & process parameters (voltage, mill current, TRIL, mass flow, Water flow, PH, Brix etc).
- Centralized data monitoring & report making system for all sections.

Listed below few clients or end users where <u>boiling house automation system</u> is designed/developed/installed/commissioned/tested by us

- Banari Amman Sugars Ltd.
- Kaktia Sugar
- TKIL, Sukari Kenya
- Fincha Sugar Ethopia
- Wonji Ethopia
- Empee Sugar

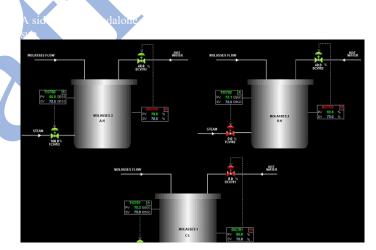
- Nirani Sugar
- PT Labinta, Indonesia
- Tendaho, Ethiopia

6) Boiler Automation System For Sugar Industry & Food Processing

- Automatic drum level control by analyzing water flow, steam flow & drum level
- Single & Cascade PID control & analysis.
- Bagas feeding control
- ID/FD Control
- Attempter temperature control
- PRDS
- Deareator level control
- Deareator pressure control
- SCADA Animation & PID set point control using SCADA.
- Data logging & report making.
- Online & historical trend view.

Listed below few clients or end users where <u>boiler automation system</u> is designed /developed/installed/commissioned/t ested by us

- Jawahar SSK
- Tirupati Sugar, Bagah
- Nandi Sugr
- Rajarambapu SSK
- Ratnaprabha SSK
- Sanjivani SSK
- Ashoka SSK
- Dudhganga-Wedganga
- Muhroni Sugar Factory, Kenya
- Golden Oil Ind., Nigeria
- TKIL Sukari, Kenya

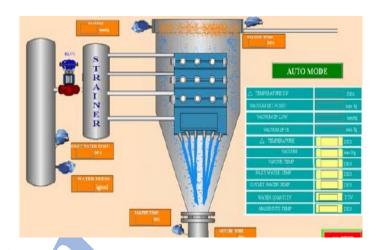


7) Condensor Automation for Sugar Industry

- Automatic water feed control & analysis on vacuum & delta temperature basis
- Monitoring of various process parameters
- Alarm & historical trends
- .Data logging & report generation on shift wise/ operator wise / daily basis

Listed below few clients or end users where <u>condensor automation system</u> is designed /developed/installed/commissioned/tested by us

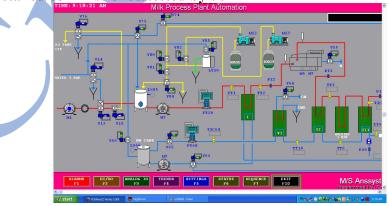
- Krishna Athani
- ICPL, Mudhol
- Saikrupa SSK
- FCKCPL
- Dhawangiri
- Godawari SSK
- Kamrej SSK
- Dharani
- Krishna Athani
- Saikrupa
- Wainganga
- FKCPCL
- Fincha Sugat Factory, Etheiopia
- <u>Tendaho Sugar Factory</u>, <u>Etheiopia</u>



8) Milk processing plants

- Milk process plant automation
- Sterilization, Homogenization & pasteurization process plant automation
- Centrifugal machine automation
- Tetra-pack process plant modernization using SCADA
- CIP system milk process plant & tankers
- Jar and pouch packing machines for bourn vita a Cadbury dairy product.

Listed below few clients or end users where <u>CIP system at Dairy Plants</u> is designed /developed/installed/commissioned/tested by us



- Warna Agro
- Warna Dairy
- Vrindavan Dairy
- Kanhaiya Dairy

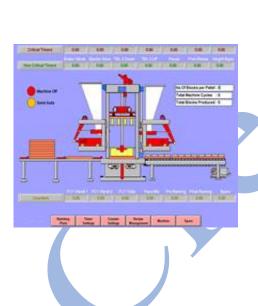
9) Water Treatment, Level Control & Management.

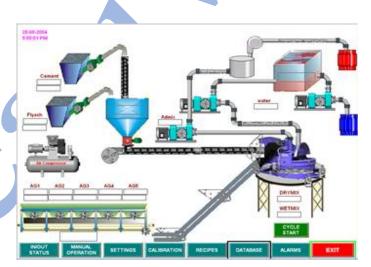
- Water level control using upper & lower tank level status

- Automatic Pump On/Off on time basis & day wise priority basis
- Automatic Pump changeover by priority or failure.
- Automatic Multi tank System with multiple No. Of pumps handling using centralize SCADA System.
- Flow measurement, data logging & Auto report Generation.
- Auto dosing control depends on water flow/Pressure for chlorination of water.
- Auto Sludge treatment & distribution of wastewater.

10) Paver Block Making Machines & Auto Batching Plant.

- Logic development for the SPM used for concrete block making
- Logic development for Batching Plant used to prepare concrete mixture for block making machine.
- Auto weighing, tarring, water mixing& block making.
- Recipe management for
- different batches for
- different quality/quantity production.
- Auto report generation & monitoring from remote place for indusial batch, day wise, week wise, monthly Production.





11) Reduce Roll, Induction Heating & Extractor control in Forging Industry.

- Logic Development for Reduce roll using breaks & clutch system.
- Three axis control & manipulation.
- Interfacing with central control & other devices on control net & profibus.

- Heating of ferrous material up set temperature, Auto conveying & extracting of scrape material.

12) Automatic Pipe Bending Machine

- Automatic Two Axis & 360-degree bend control.
- Stepper motor interface with PLC & SCADA System.
- Recipe management for different bend angles for different customers.
- Automatic Shift wise production reports generation.
- Auto job turning, clamping & bending for up to 15 nos. of successive cycles.





13) Capacitor making Machine.

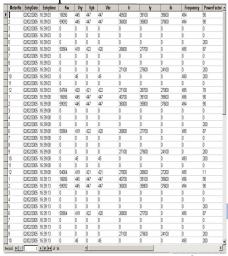
- Logic development for SPM used to manufacture a capacitor.
- HMI/SCADA interface for multi dropping system.
- Auto data logging & report making
- Alarms, online & Historical trending.
- Logic development of XY manifold used for capacitor foil painting.



14) Energy Management System

- Various Parameters monitoring of motor/Pumps using SCADA interface with energy meters.
- Data dumping into Microsoft Excel & Access for further analysis.
- SCADA Animation & auto report generation.

- Multi drop networking system for multiple numbers of energy meters on communication platform.



15) Fluid Filling Machines (Break oil, Clutch oil, Radiator solvent etc)

- Automatic Vacuumizing of dispenser in which fluid is being filled.
- Minor & Major leak detection.
- Fluid filling & Auto leveling.
- Auto report generation & data logging.

16) Drop Lifts, Power & free conveyors & Flat conveyor automation For Automobile Industry

- Logic development for drop lifts & power & free conveyor system.
- Pull cord & flat conveyor automation for assembly line of heavy vehicle manufacturing company.
- Remote IO controlling & SCADA interfacing.
- Shift wise production report generation & interface central control with Andon display boards for displaying production status/Line stoppage/breakdown.

17) PID Control system For Temperature/Flow/Pressure & Level Analysis

- Logic Development for PID's used to control temperature, flows, pressure & level for trainer kit of collage students.
- SCADA Interface & report generation.
- PLC & SCADA training.

18) Thermocol Molding Machine

- Logic development for different sequential cycles of Thermocol molding machine.

- HMI Interface for machine data feeding & data monitoring.

19) Centralize cooling System in gas rejection plant

- Logic development for centralized cooling system & SCADA interface.
- HT panel, LT Panel, Battery room temperature & humidity control
- Centralized SCADA Animation & remote process variable monitoring.
- Automatic air blower & cooling fan changeover depends on its running hour for getting maximum efficiency & avoiding breakdowns.
- Automatic changeover of fans on failure.

20) Pouch Packaging Machine

- Automatic weighing of material.
- User settable weight
- Automatic pouch packing.
- User friendly load cell & weighing bucket calibration to achieve accurate weighing.

21) CNC Machine Networking & Data Logging

- Multi dropping of 10 No of Fanuc CNC Machines on RS 485 network
- Interfacing with central computer for data logging & status monitoring.

22) Butter backing Machine in dairy plants

- 6 Axis servo driven packing machine
- Process includes cup forming, filling, sealing and cutting with each axis control by servo mechanism equipped with PLC system at central control panel
- SCADA system interface
- Report generation for daily basis, monthly basic, yearly and product wise production analysis.
- Recipe managements

23) Beverage packing unit

24) Food processing Units